New York Supreme Court

Appellate Division—Second Department

Docket No.: 2015-02317

In the Matter of the Application of

SIERRA CLUB and the HUDSON RIVER FISHERMEN'S ASSOCIATION NEW JERSEY CHAPTER, INC.,

Petitioners-Appellants,

For a Judgment Pursuant to Article 78 of the Civil Practice Laws and Rules

– against –

JOSEPH MARTENS, Commissioner, New York State Department of Environmental Conservation,

Respondents-Respondents,

– and –

TRANS CANADA RAVENSWOOD LLC,

Non-Party Respondent.

RECORD ON APPEAL

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(For Continuation of Appearances See Inside Cover)

Queens County Clerk's Index No. 2949/14

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Table of Contents

Statement Pursuant to CPLR 5531. 1

Notice of Appeal, dated January 7, 2015 3

Judgment, dated November 25, 2014, Appealed From, with Notice of Entry 5

Decision and Order of the Honorable Robert J. McDonald, dated October 2, 2014 10

Decision of the Honorable Robert J. McDonald, dated October 1, 2014 12

Notice of Petition and Verified Petition, dated February 18, 2014. 22

Administrative Record of the Attorney General of the State of New York, dated March 13, 2014 48

- Ravenswood Generating Station ("Ravenswood") Initial Water Withdrawal Permit ("Initial Permit") Application, dated May 31, 2013.....52
- New York State Department of Environmental Conservation ("DEC") Notice of Complete Application, dated August 1, 2013 87
- Environmental Notice Bulletin ("ENB") Notice of Public Comment Period on Ravenswood Application for Initial Permit, dated August 7, 2013 88
- ENB Notice of Extension of Public Comment Period on Ravenswood Application for Initial Permit, dated August 28, 2013.....97
- Cover Letter for Ravenswood Initial Permit, dated November 15, 2013 102
- Ravenswood Initial Permit, dated November 15, 2013 104
- DEC Response to Public Comments on Application for Ravenswood Initial Permit, dated November 15, 2013 108
- Ravenswood State Pollutant Discharge Elimination System ("SPDES") Negative Declaration, dated December 11, 2006 113
- Ravenswood SPDES Discharge Permit # NY-0005193, dated April 20, 2007 and effective May 1, 2007 117
- Ravenswood Technology Installation and Operation Plan, dated August 1, 2007.....138
- DEC Approval of Ravenswood Technology Installation and Operation Plan, dated August 29, 2007 143
- Ravenswood SPDES Industrial Fact Sheet, dated September 12, 2012 144

Ravenswood SPDES Discharge Permit # NY-0005193, dated October 1, 2012 and effective November 1, 2012 167

Ravenswood Letter Regarding Corrected Annual Water Withdrawal Reports, dated December 18, 2013 188

Ravenswood Professional Engineer Certification Regarding Maximum Water Withdrawal Capacity, dated December 17, 2013 190

Ravenswood Revised Water Withdrawal Reports, dated December 10, 2013 191

DEC Notice Regarding Correction to Ravenswood Initial Permit, dated February 19, 2014 203

DEC Cover Letter for Corrected Ravenswood Initial Permit, dated March 7, 2014 205

DEC Corrected Ravenswood Initial Permit, dated March 7, 2014 206

Memorandum of Law in Support of Verified Petition, dated March 21, 2014 210

Affidavit of Roger Downs in Support of Verified Petition, sworn March 21, 2014 248

Exhibit A to Downs Affidavit — Giant Fish Blenders: How Power Plants Kill Fish & Damage Our Waterways, Sierra Club Report, dated 2011 252

Affidavit of Gilbert Hawkins in Support of Verified Petition, sworn March 21, 2014 269

Exhibit A to Hawkins Affidavit — Photograph of Gil Hawkins and Son in New York Harbor with a Catch of Weakfish, taken in 2005. 274

Exhibit B to Hawkins Affidavit — Report on Ravenswood Generating Station Impingement Survival Monitoring Studies covering March 2005 – February 2006, dated August 2006 275

Exhibit C to Hawkins Affidavit — Final Report on Ravenswood Generating Station Impingement Survival Monitoring Studies covering June 2006 – February 2007, dated October 2007 286

Affirmation of Rachel Treichler, Esq. in Support of Verified Petition, dated March 21, 2014 300

Exhibit A to Treichler Affirmation — FOIL Request for Ravenswood SPDES Permits, dated August 13, 2013 302

Exhibit B to Treichler Affirmation — DEC Response to FOIL Request, dated August 27, 2013 303

Exhibit C to Treichler Affirmation — FOIL Request for Water Withdrawal Reporting Information, dated March 21, 2013 305

Exhibit D to Treichler Affirmation — DEC Response to FOIL Request, dated March 27, 2013 306

Exhibit E to Treichler Affirmation — Bill Jacket for 2012 Assembly Bill 5318-A 330

Verified Answer of Respondent Joseph Martens, dated April 24, 2014 395

Memorandum of Law in Support of Respondent Joseph Marten's Verified Answer and in Opposition to Verified Petition, dated April 24, 2014.....412

Affidavit of Roy A. Jacobson, Jr., in Support of Respondent Joseph Marten's Verified Answer and in Opposition to Verified Petition, sworn to April 24, 2014 440

Exhibit 1 to Jacobson Affidavit — DEC Letter to Consolidated Edison, dated October 17, 1974.....446

Affidavit of Kent P. Sanders, in Support of Respondent Joseph Marten's Verified Answer and in Opposition to Verified Petition, sworn to April 24, 2014.....452

Exhibit A to Sanders Affidavit — Ravenswood Generating Station Facility Highlights.....462

Notice of Motion to Dismiss of Trans Canada Ravenswood LLC, dated April 24, 2014.....464

Memorandum of Law in Support of Trans Canada Ravenswood LLC's Motion to Dismiss, dated April 24, 2014 466

Affidavit of Daniel O'Donnell in Support of Trans Canada Ravenswood LLC's Motion to Dismiss, sworn April 23, 2014 496

Exhibit A to O'Donnell Affidavit — Ravenswood SPDES Discharge Permit # NY-0005193, dated April 20, 2007 and effective May 1, 2007 (Reproduced herein at pp. 117-137) 505

Exhibit B to O'Donnell Affidavit — Ravenswood SPDES Discharge Permit # NY-0005193, dated October 1, 2012 and effective November 1, 2012 (Reproduced herein at pp. 167-187) 505

Exhibit C to O'Donnell Affidavit — ENB Notice of Ravenswood SPDES Permit Application, dated December 20, 2006.....506

Exhibit D to O'Donnell Affidavit — Response to Public Comments on Administrative Renewal of Ravenswood SPDES Permit, dated September 2012.....510

Exhibit E to O'Donnell Affidavit — Aerial View Showing Location of Ravenswood Facility.....513

Affirmation of Yvonne E. Hennessey, Esq. in Support of Trans Canada Ravenswood LLC's Motion to Dismiss, dated April 24, 2014.....514

Exhibit A to Hennessey Affirmation — Bill Jacket for 2012 Assembly Bill 5318-A
(Reproduced herein at pp. 330-394) 517

Exhibit B to Hennessey Affirmation — State Register Notice of Proposed Rulemaking, dated November 23, 2011 518

Exhibit C to Hennessey Affirmation — State Register Notice of Adoption of Water Withdrawal Permitting Regulations, dated November 28, 2012 524

Exhibit D to Hennessey Affirmation — Decision in *Wind Power Ethics Group v. Planning Bd of Town of Cape Vincent*, No. 2010-2882 (Sup. Ct., Jefferson County, January 26, 2011).....532

Reply Memorandum of Law in Further Support of Verified Petition, dated May 8, 2014 539

Reply Affirmation of Rachel Treichler, Esq. in Further Support of Verified Petition, dated May 8, 2014 573

Exhibit A to Treichler Affirmation — Slip Opinion in *Matter of the Association for a Better Long Island v. New York State Department of Environmental Conservation*, 2014 WL1280310 (April 1, 2014).....575

Exhibit B to Treichler Affirmation — Excerpts from NYSDEC, Adoption of Water Withdrawal Regulations, Assessment of Public Comments, dated November 2012.....586

Stipulation Waiving Certification pursuant to CPLR 5532 591

STATEMENT PURSUANT TO CPLR § 5531 [1-2]

New York Supreme Court

Appellate Division—Second Department

In the Matter of the Application of

SIERRA CLUB and the HUDSON RIVER FISHERMEN'S ASSOCIATION NEW JERSEY CHAPTER, INC.,

Petitioners-Appellants,

For a Judgment Pursuant to Article 78 of the Civil Practice Laws and Rules

– against –

JOSEPH MARTENS, Commissioner, New York State Department of Environmental Conservation,

Respondents-Respondents,

– and –

TRANS CANADA RAVENSWOOD LLC,

Non-Party Respondent.

---

1. The index number of the case in the court below is 2949/14.

2. The full names of the original parties are as set forth above. There have been no changes.

3. The action was commenced in Supreme Court, Queens County.

4. The action was commenced on or about February 18, 2014 by filing of a Notice of Petition and Verified Petition. Issue was joined on or about April 24, 2014 by service of a Verified Answer.

5. The nature and object of the action involves an Article 78 Proceeding.

6. This appeal is from a Judgment of the Honorable Robert J. McDonald, dated November 25, 2014, which denied the Verified Petition and Dismissed the Proceeding.

7. This appeal is on the full reproduced record.

NOTICE OF APPEAL, DATED JANUARY 7, 2015 [3-4]

SUPREME COURT OF THE STATE OF NEW YORK
COUNTY OF QUEENS

In the Matter of the Application of SIERRA CLUB and the HUDSON RIVER FISHERMEN'S ASSOCIATION NEW JERSEY CHAPTER, INC., Petitioners, For a Judgment Pursuant to Article 78 of the Civil Practice Laws and Rules -against- JOSEPH MARTENS, COMMISSIONER, NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION, Respondent, TRANS CANADA RAVENSWOOD LLC, Necessary Party.	NOTICE OF APPEAL Index No. 2949-14

PLEASE TAKE NOTICE that Petitioners Sierra Club and Hudson River Fishermen's Association New Jersey Chapter, Inc. hereby appeal to the Appellate Division of the Supreme Court, Second Judicial Department, from the attached Judgment of the Supreme Court, Queens County, Hon. Robert J. McDonald, Supreme Court Justice Presiding, dated November 25, 2014, and entered in the Queens County Clerk's Office on December 10, 2014.

DATED: Hammondsport, New York
January 7, 2015

Respectfully submitted,

Counsel for Petitioners

By: _____

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Counsel for Respondent, Joseph Martens, Commissioner , New York State Department of Environmental Conservation

5

JUDGMENT, DATED NOVEMBER 25, 2014, APPEALED FROM, WITH NOTICE OF ENTRY [5- 9]

At I.A.S. Part 34 of the Supreme Court, State of New York Held in and for the County of Queens, at the Supreme Court, 25-10 Court Square, Courtroom 304 Long Island City, New York, 11101 on the 25 day of November 2014.

Present: HON. ROBERT J. MCDONALD

SUPREME COURT OF THE STATE OF NEW YORK
COUNTY OF QUEENS
In the Matter of the Application of

SIERRA CLUB and the HUDSON RIVER FISHERMEN'S ASSOCIATION NEW JERSEY CHAPTER, INC.,

Petitioners,

For a Judgment Pursuant to Article 78 of the Civil Practice Laws and Rules

-against-

JOSEPH MARTENS, COMMISSIONER, NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION,

Respondent,

T.C. RAVENSWOOD L.L.C.,

Necessary Party.

Index No. 2949-14

PETITIONERS PROPOSED JUDGMENT

FILED & RECORDED
DEC 10 2014
COUNTY CLERK
QUEENS COUNTY

WHEREAS, petitioners SIERRA CLUB and HUDSON RIVER FISHERMAN'S ASSOCIATION, NEW JERSEY CHAPTER, INC., filed a notice of petition and verified petition pursuant to CPLR Article 78 on February 26, 2014, and served and filed in support of the petition a memorandum of law dated March 21, 2014, the affirmation of Rachel Treichler in support of the memorandum of law, with exhibits, sworn to on March 21, 2014, the affidavit of Roger Downs, with exhibits, sworn to on March 21, 2014, the affidavit of Gilbert Hawkins, with exhibits, sworn to on March 21, 2014; and

WHEREAS, respondent JOSEPH MARTENS, COMMISSIONER, NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION ("DEC"), opposed the petition by serving and filing a verified answer dated April 24, 2014, memorandum of law dated April 24, 2014, and an administrative record certified on March 13, 2014, and served and filed in support of the verified answer the affidavit of Roy A. Jacobson, Jr., with exhibits, sworn to on April 24, 2014, and the affidavit of Kent P. Sanders, with exhibits, sworn to on April 24, 2014; and

WHEREAS, necessary party TRANS CANADA RAVENSWOOD LLC, opposed the petition by serving and filing a notice of motion to dismiss dated April 24, 2014, and a memorandum of law dated April 24, 2014, and served and filed the affirmation of Yvonne E. Hennessey, Esq., with exhibits, sworn to on April 24, 2014 and the affidavit of Daniel O'Donnell, with exhibits, sworn to on April 23, 2014, in support of the motion to dismiss; and

WHEREAS, petitioners SIERRA CLUB and HUDSON RIVER FISHERMAN'S ASSOCIATION, NEW JERSEY CHAPTER, INC., filed in support of the petition a reply memorandum of law dated May 8, 2014, and the affirmation of Rachel Treichler in support of the reply memorandum of law, with exhibits, sworn to on May 8, 2014; and

WHEREAS, the Court, upon consideration of all the pleadings filed, issued a decision dated October 1, 2014, a copy of which is attached hereto and incorporated herein, denying the petition; and

WHEREAS, the Court, upon consideration of all the papers filed with respect to Necessary Party TRANS CANADA RAVENSWOOD LLC's motion to dismiss, issued a decision dated October 2, 2014, a copy of which is attached hereto and incorporated herein.

wherein it found, based upon the October 1, 2014 decision rendered on the petition, that the "branch of the motion which is deemed to be for summary judgment is granted;" and

NOW, THEREFORE, it is hereby

ADJUDGED that the verified petition is denied and the proceeding is dismissed on the merits according to the decision dated October 1, 2014 and the decision dated October 2, 2014, with no restitution, damages or costs awarded to either side.

DATED: Long Island City, New York
November 25, 2014

Honorable Robert J. McDonald, J.S.C.

Judgment entered this 10th day
of December, 2014

CLERK OF COURT

FILED & RECORDED

DEC 10 2014

COUNTY CLERK
QUEENS COUNTY

ENTERED
1:20 AM/PM
DEC 10 2014
COUNTY CLERK
COUNTY OF QUEENS

8

SUPREME COURT OF THE STATE OF NEW YORK
COUNTY OF QUEENS

In the Matter of the Application of

SIERRA CLUB, and HUDSON RIVER FISHERMEN'S ASSOCIATION, NEW JERSEY CHAPTER, INC.,

Petitioners,

For a Judgment Pursuant to Article 78 of the Civil Practice Law and Rules

-against-

JOSEPH MARTENS, COMMISSIONER, NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION,

Respondent,

TRANSCANADA RAVENSWOOD LLC,

Necessary Party.

NOTICE OF ENTRY
Index No. 002949/2014
Hon. Robert J. McDonald

PLEASE TAKE NOTICE that a Judgment, of which the attached is a copy, was issued by the Hon. Robert J. McDonald, on November 25, 2014, and entered in the Office of the Clerk of the County of Queens on December 10, 2014.

DATED: December 18, 2014

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Attorney for Respondent

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10

DECISION AND ORDER OF THE HONORABLE ROBERT J. MCDONALD, DATED OCTOBER 2, 2014 [10-11]

SHORT FORM ORDER

NEW YORK SUPREME COURT : QUEENS COUNTY

P R E S E N T : HON. ROBERT J. McDONALD Justice — IAS PART 34

- x

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HUDSON RIVER FISHERMAN'S ASSOCIATION, NEW JERSEY CHAPTER, INC.
P.O. Box 421
Cresskill, New Jersey 07626

Petitioners,

For a Judgment Pursuant to Article 78 of the Civil Practice Law and Rules,

- against -

JOSEPH MARTENS, COMMISSIONER, NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
625 Broadway Albany, NY 12233-1011,

Respondents,

TRANS CANADA RAVENSWOOD LLC
38-54 Vernon Boulevard
Long Island City, NY 11101,

Necessary Party.

- x

Index No.: 2949/14

Motion Date: 5/9/14

Motion No.: 92

Motion Seq.: 2

The following papers numbered 1 to 8 read on this motion by respondent Trans Canada Ravenswood, LLC for an order pursuant to CPLR 404, 406. 7804(f), and 3211(a) dismissing the petition

Papers Numbered

FILED

OCT 20 2014

COUNTY CLERK
QUEENS COUNTY

Notice of Motion - Affidavits - Exhibits	1-3
Answering Affidavits - Exhibits	4-6
Reply Affidavits Memoranda of Law	7-8

Upon the foregoing papers it is ordered that those branches of the motion which are for an order dismissing the petition on procedural grounds are denied. The court notes that petitioner Sierra Club and petitioner Hudson River Fishermen's Association have standing to maintain this Article 78 proceeding. (*See, Save the Pine Bush, Inc. v. Common Council of City of Albany,* 13 NY3d 297; *Protect the AdirondacksA Inc. v. Adirondack Park Agency,* 121 AD3d 63.) That branch of the motion which is deemed to be for summary judgment is granted. (See the memorandum rendered on the petition.) The court notes that "objections in point of law" referred to in CPLR 7804(f) are threshold objections of the kind listed in CPLR 3211(a) which can be dispositive of the case without reaching the merits. (*See, Matter of Hop-Wah v. Coughlin,* 118 AD2d 275, revd. on other grounds 69 NY2d 791; Siegel, New York Practice § 567, at 979 [4th ed.]). "CPLR article 78 proceedings are summary in nature (see CPLR 409 [b]; *Matter of Lakeshore Nursing Home v. Axelrod,* 181 A.D.2d 333, 340) and, thus, a motion for summary judgment addressed to the merits of the petition is unnecessary."

Dated: Long Island City, NY
October 2, 2014

ROBERT J. McDONALD
J.S.C.

FILED
OCT 20 2014
COUNTY CLERK
QUEENS COUNTY

MAILED
OCT 21 2014
COUNTY CLERK
QUEENS COUNTY

MEMORANDUM

SUPREME COURT - STATE OF NEW YORK
COUNTY OF QUEENS - **IAS PART 34**

- x

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Petitioners,

For a Judgment Pursuant to Article 78 of the Civil Practice Law and Rules,

- against -

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625 Broadway Albany, NY 12233-1011,

Respondents,

TRANS CANADA RAVENSWOOD LLC
38-54 Vernon Boulevard
Long Island City, NY 11101,

Necessary Party.

- x

BY: McDONALD, J.

Index No.: 2949/14

Motion Date: 6/6/14

Motion Cal. No.: 104

Motion Seq. No.: 1

FILED
OCT 21 2014
COUNTY CLERK
QUEENS COUNTY

This is an Article 78 proceeding brought to annul the September 7, 2013 determination of the Commissioner of the New York State Department of Environmental Conservation that, inter alia, the application of Trans Canada Ravenswood LLC for the withdrawal of water from the East River can be classified as a "Type II" action under the relevant laws and regulations.

Trans Canada Ravenswood, LLC (TC Ravenwood) owns Ravenswood Generating Station, an electric generating facility located in Long Island City, New York. Ravenswood began operating in the early nineteen sixties, and it produces electricity which is sold

through the New York State Independent System Operator for use throughout New York City. The Ravenswood facility can generate 2,480 megawatts of electricity, and it has at times produced up to 21% of the electricity used in New York City.

The Ravenswood facility borders on the East River, a tidal strait which links upper New York Bay with Long Island Sound and which connects to the Hudson River through the Harlem River and Spuyten Devil Creek at the north end of Manhattan Island. The East River, about sixteen miles in length and from 600 to 4,000 feet wide, separates Manhattan Island from Brooklyn and Queens.

For about fifty years, the Ravenswood facility has used a "once through" cooling water system which takes water from the East River, circulates it through a cooling system to cool three steam boiler turbine/generators known as Units 10, 20, and 30, and discharges the water back into the East River. The cooling system, the same as that originally installed in the nineteen sixties, has a maximum withdrawal capacity of 1,527.84 million gallons per day (MGD) which is needed to prevent Units 10, 20, and 30 from overheating when all three are operating at maximum capacity. The water use varies with the number of units in operation and their time of operation. In 2012, the Ravenswood facility made a daily average withdrawal of about 480 MGD and in 2013 made a daily average withdrawal of 363.1 MGD. In times of emergency, such as Superstorm Sandy, all three units have operated at full capacity with a corresponding need for the maximum withdrawal of water.

According to the petitioners, the use of a "once through" water cooling system requires Ravenswood to withdraw an excessive amount of water from the East River. A closed cycle cooling system would be better for the environment, the petitioners assert. A closed cycle cooling system recirculates the cooling water by passing it through the condenser system where it is heated in the process of converting steam back into water, then transported to cooling towers or similar equipment to be cooled, and then returned to the condenser system. The petitioners quote an article which states "[c]losed-cycle cooling is a proven technology that reduces power plant water intake by up to 98 percent, thereby reducing the damage to aquatic life by up to 98 percent."

When water is withdrawn for cooling purposes, fish and other aquatic life may be killed by becoming impinged on intake screens or by passing through screens (entrainment), if small enough, and entering the facility. Gilbert Hawkins, the President of petitioner Hudson River Fishermen's Association, alleges that

"the East River is one of the main fish migration routes between the Atlantic Ocean and both the Hudson River and Long Island Sound." There are tidal flows in the East River, and, according to Hawkins, "[m]illions of fish are riding on these flows in the migratory seasons." The petitioners allege that a study has shown that Ravenswocd's water cooling system entrains millions of young fish, eggs, and larvae each year, and kills or injures millions of larger fish by impingement.

The Ravenswood facility's cooling water system is subject to the federal Clean Water Act ([CWA], 33 USC § 1251 et seq.)) and state regulation which require the operator of the plant to use the best technology available (BTA) for cooling water intake structures. (*See*, CWA § 316[b], 33 USC § 1326[b] and 6 NYCRR § 704.5). The court notes that the federal Environmental Protection Agency may use a cost benefit analysis in its determination of the best technology available for intake water cooling systems, and the agency has not mandated the use of closed cycle cooling systems in all cases. (*See, Entergy Corp. v. Riverkeeper, Inc.*, 556 US 208.) Moreover, the Ravenswood facility is operated with permits issued pursuant to the CWA and the State Pollutant Discharge Elimination System (SPDES). (The Ravenswood facility discharges heat which is regulated as a pollutant.)

The Ravenswood facility is also subject to the New York State Water Resources Law, codified as Article 15 of the Environmental Conservation Law, which declares that "[i]t is in the best interest of the state that provision be made for the regulation and supervision of activities that deplete, defile, damage or otherwise adversely affect the waters of the state and land resources associated therewith." (ECL 15-0103[13].)

On or about February 15, 2011, Assembly Bill 5318-A was introduced as "AN ACT to amend the environmental conservation law, in relation to regulating the use of the state's water resources ***." The Memorandum in Support of Legislation stated that: "The purpose of this bill is to authorize the Department of Environmental Conservation (DEC) to implement a water withdrawal permitting program to regulate the use of the State's water resources." The summary of provisions stated in relevant part: "Specifically, ECL §15-1501 would be amended to: *** (3) provide that existing water withdrawals would be <u>entitled</u> to an initial permit based on their maximum water withdrawal capacity reported to DEC on or before February 15, 2012 pursuant to existing law ***." (Emphasis added.) After passage by the New York State Legislature, Governor Cuomo signed the bill into law.

The act required operators of all water withdrawal systems

capable of withdrawing 100,000 gallons per day (gpd) or more to obtain a permit from the New York State Department of Conservation (DEC). (*See*, Environmental Conservation Law §15-1501 et seq.) The old law had not applied to the Ravenswood facility. After passage of the act, DEC could issue two types of permits for water withdrawal systems that did not need permits before the 2011 amendments: (1) initial permits for most systems that existed as of February, 2012 and reported their maximum capacity to DEC and (2) new permits for all other systems.

On or about May 31, 2013, TC Ravenswood submitted a water withdrawal application to DEC for an initial water withdrawal permit. The Ravenswood facility received an initial permit to which the DEC decided that it had an automatic entitlement. ECL §15-1501, "Water Withdrawals, permit," provides in relevant part: "9. The department shall issue an initial permit, subject to appropriate terms and conditions as required under this article, to any person not exempt from the permitting requirements of this section, for the maximum water withdrawal capacity reported to the department pursuant to the requirements of title sixteen or title thirty-three of this article on or before February fifteenth, two thousand twelve." (Emphasis added.)

In its response to public comments invited on the Ravenswood application for an initial water withdrawal permit, DEC explained the basis of its action: "As provided by ECL §15-1501.9 the Department has no discretion but to issue 'initial permits' for the amount of water withdrawals for users that were in operation and properly reported their withdrawals to the Department as of February 15, 2012. Under these circumstances, the issuance of the water withdrawal permit here is covered by the Type II category for ministerial actions set out in section 617.5(c)(19) of the Department's SEQR regulations. *** Here, above and beyond the amount of the permitted withdrawal (which is prescribed by statute), the Legislature has restricted the Department's discretion to the standard form permit and the imposition of sound water conservation measures." (Emphasis added.)

Operators of water withdrawal systems who did not meet the standard for an initial permit had to apply for a new permit pursuant to ECL §15-1503, and the DEC does not regard them as having an automatic entitlement to the permit. When issuing a new permit, DEC may take into consideration the numerous environmental criteria specified in ECL §15-1503, "Permits."

DEC adopted regulations pertaining to water withdrawal to implement the new law (*see*, 6 NYCRR Part 601), and these regulations reflected the restrictions on its discretion

expressed in ECL §15-1501(9) such as on withdrawal volumes. DEC regulation 6 NYCRR 601.7., "Initial permits," provides in relevant part: "(d) An initial permit that is issued by the Department under this subpart is for the withdrawal volume equal to the maximum withdrawal capacity reported to the Department on or before February 15, 2012."

On August 7, 2013, DEC issued a notice stating that it had made a tentative determination to issue an initial permit to TC Ravenswood allowing a water withdrawal of approximately 1.5 billion gallons per day. The notice stated further that the "[p]roject is not subject to SEQR because it is a Type II action" and that no SEQR lead agency had been designated. There are three types of actions under SEQRA - Type 1, Type 2, or unlisted. The distinction between Type 1 and Type 2 actions is essentially that the former require environmental review while the latter do not. 6 NYCRR 617.5, "Type 2 Actions," provides in relevant part: "(a) Actions or classes of actions identified in subdivision (c) of this section are not subject to review under this Part. These actions have been determined not to have a significant impact on the environment or are otherwise precluded from environmental review under Environmental Conservation Law, article 8. The actions identified in subdivision (c) of this section apply to all agencies. *** (c) The following actions are not subject to review under this Part: ***(19) official acts of a ministerial nature involving no exercise of discretion ***."

On or about November 15, 2013, DEC issued an initial 601 WW permit to TC Ravenswood for water withdrawals from the East River at a maximum capacity of 1,390 MGD, and on or about March 7, 2014 DEC issued a revised Initial 601 WW permit with a maximum capacity of 1,527.84 MGD. The initial permit expires on October 31, 2017.

The New York State Environmental Quality Review Act ([SEQRA] ECL art 8) was enacted in 1975, and its "fundamental policy is to inject environmental considerations directly into governmental decision making ***." (*Coca-Cola Bottling Co. of New York, Inc. v. Board of Estimate of City of New York*, 72 NY2d 674, 679.) ECL § 8-0103, "Legislative findings and declaration," provides in relevant part: "Social, economic, and environmental factors shall be considered together in reaching decisions on proposed activities." SEQRA mandates an environmental impact statement (EIS) for any "action" proposed or approved by a governmental agency that may have a significant effect on the environment. ECL § 8-0109, "Preparation of environmental impact statement," provides in relevant part: "2. All agencies (or applicant as hereinafter provided) shall prepare, or cause to be prepared by

contract or otherwise an environmental impact statement on any action they propose or approve which may have a significant effect on the environment. ***."

However, SEQRA expressly exempts actions of a ministerial nature from environmental review. ECL §8-0105, "Definitions," provides in relevant part: "5. 'Actions' do not include: ***(ii) official acts of a ministerial nature, involving no exercise of discretion ***." (*See, Incorporated Village of Atlantic Beach v. Gavalas*, 81 NY2d 322; *Fisher v. New York City Bd. of Standards and Appeals*, 71 AD3d 487; *220 CPS "Save Our Homes" Ass'n v. New York State Div. of Housing and Community Renewal*, 60 AD3d 593.) 6 NYCRR 617.2, "Definitions," provides: "(w) 'Ministerial act' means an action performed upon a given state of facts in a prescribed manner imposed by law without the exercise of any judgment or discretion as to the propriety of the act, such as the granting of a hunting or fishing license."

"While the issuance of a permit may constitute an 'action' within the purview of the statute (*see*, ECL 8-0105[4]), SEQRA provides an express exemption from its application for 'official acts of a ministerial nature, involving no exercise of discretion' (ECL 8-0105[5] [ii]; 6 NYCRR 617.5 [c][19])." (*Ziemba v. City of Troy*, 37 AD3d 68, 73.)

"Where, as here, an administrative agency takes action without an evidentiary hearing, the standard of review is not whether there was substantial evidence in support of the determination (see CPLR 7803[4]), but rather, whether the determination had a rational basis, and was not 'arbitrary and capricious' (see CPLR 7803[3] ***. (*Ball v. New York State Dept. of Environmental Conservation*, 35 AD3d 732, 733; *Gramando v. Putnam County Personnel Dept.*, 58 AD3d 842.) "Further, in a proceeding seeking judicial review of administrative action, the court may not substitute its judgment for that of the agency responsible for making the determination ***." (*Ball v. New York State Dept. of Environmental Conservation, supra*, 733; *Gramando v. Putnam County Personnel Dept., supra.)* "[I]n a proceeding seeking judicial review of administrative action, the court may not substitute its judgment for that of the agency responsible for making the determination, but must ascertain only whether there is a rational basis for the decision or whether it is arbitrary and capricious ***." (*Flacke v. Onondaga Landfill Sys.*, 69 NY2d 355, 363; *Fogelman v. New York State Dept. of Environmental Conservation*, 74 AD3d 809.)

In the case at bar, DEC determined that the issuance of an initial permit for the Ravenswood facility was a ministerial act

not requiring SEQRA review. In determining whether an act is merely ministerial in nature, "the pivotal inquiry ***is whether the information contained in an EIS may form the basis for a decision whether or not to undertake or approve such action ***." (*Incorporated Village of Atlantic Beach v.* Gavalas, *supra*, 326 [internal quotation marks and citations omitted]; *Filmways Communications of Syracuse, Inc. v. Douglas*, 106 AD2d 185, affd, 65 NY2d 878; *see, Island Park, LLC v. New York State Dept. of Transp.*, 61 AD3d 1023; *Ziemba v. City of Troy*, 37 AD3d 68.)

"It is well settled that the determination of whether a particular action is ministerial depends on the underlying regulation or municipal code authorizing the action ***. The pivotal inquiry does not turn on a mechanical distinction between ministerial and discretionary acts, however, but requires us to consider whether the underlying regulatory scheme invests the authorizing agency with discretion to act or refuse to act based on the type of information contained in an EIS ***." (*Ziemba v. City of Troy, supra*, 73-74; *see, Island Park, LLC v. New York State Dept. of Transp., supra.*)

In *Filmways Communications of Syracuse, Inc. v. Douglas* (*supra*), an applicant for a building permit brought an Article 78 proceeding in the nature of mandamus to compel a building inspector to issue the permit. The Appellate Division, Fourth Department, whose decision was affirmed by the Court of Appeals for the reasons stated by the lower court, held that the applicant was not required to comply with SEQRA and that the building inspector's granting or denying of a building permit for a 500-foot communication antenna tower was a ministerial act, not a discretionary act. "There is no provision in the building code," the Appellate Division wrote, "that gives the building inspector a latitude of choice." (*Filmways Communications of Syracuse, Inc. v. Douglas, supra*, 186.) The building inspector did not need information about the effect of the project on the environment because he had no discretion concerning the permit.

In *Incorporated Village of Atlantic Beach v. Gavalas (supra)*, The Court of Appeals held that the issuance of a building permit there was not the type of agency action which required an EIS because an underlying ordinance did not give the municipal building inspector the type of discretion which would allow permit grant or denial to be based on environmental concerns detailed in an EIS. In holding that the issuance of a building permit under the relevant regulatory scheme was a ministerial act, The Court of Appeals stated: "Logically, where an agency is empowered to 'act' by granting or denying a permit based only on compliance with a conventional Building Code or

fire safety regulations, it makes little sense to require preparation of an EIS. Such a requirement would certainly not advance the Legislature's clear intent that an EIS be used as an informational tool to aid in the planning process (see, ECL 8-0109[2])." (*Incorporated Village of Atlantic Beach v. Gavalas, supra,* 326.)

In *Island Park, LLC v. New York State Dept. of Transp.* (*supra*), The Appellate Division, Third Department, held that the Department of Transportation's issuance of an order for the closure of a private rail crossing was a ministerial act not subject to SEQRA because its determination had to be based upon consideration of the safety issues presented by the particular crossing and was unrelated to the environmental concerns that might be raised in an environmental impact statement. The issuance of the closure order was a ministerial act "because the Commissioner is 'vested with discretion in only a limited area' and could not, upon finding that the public safety could only be insured by closing a crossing, refuse to order such closure 'on the basis of SEQRA's broader environmental concerns' ***." (*Island Park, LLC v. New York State Dept. of Transp., supra,* 1028.)

In *Ziemba v. City of Troy (supra)*, The Appellate Division, Third Department, held that the issuance of a demolition permit for historic buildings was a ministerial act pursuant to SEQRA, since the discretion allowed by the city code in issuing a demolition permit was limited to a narrow set of criteria that were unrelated to environmental concerns that an EIS statement would address. The issuance of the demolition permit was based on an applicant's compliance with predetermined statutory criteria concerning safety and was not based on the potential impact of the demolition on the environment.

Filmways Communications of Syracuse, Inc. v. Douglas (*supra*), *Incorporated Village of Atlantic Beach v. Gavalas* (*supra*), *Island Park, LLC v. New York State Dept. of Transp.* (*supra*), and *Ziemba v. City of Troy (supra)* guide this court to the conclusion that DEC had a rational basis in fact and law for classifying the issuance of an initial permit to TC Ravenswood as a ministerial act not subject to SEQRA review. While ECL §15-1501(9) does state that DEC "shall issue an initial permit, subject to appropriate terms and conditions as required under this article," the statute does not give the agency the type and breadth of discretion which would allow permit grant or denial to be based on environmental concerns detailed in an EIS. (*See, Incorporated Village of Atlantic Beach v. Gavalas, supra; Island Park, LLC v. New York State Dept. of Transp., supra.*) The statute

left DEC with only one course of action regarding Ravenswood - the issuance of a permit allowing the facility to withdraw water from the East River at existing volumes. The statute does not vest DEC with the discretion to in effect compel TC Ravenswood to switch to a closed cycle cooling system using lower water volumes because of information contained in an EIS.

In the case at bar, the 2011 amendments to the Environmental Conservation Law and the implementing regulations did not leave DEC with the discretion to refuse TC Ravenswood an initial permit. The Memorandum in Support of Assembly Bill 5318-A made it clear that the statute " would be amended to: *** (3) provide that existing water withdrawals would be entitled to an initial permit ***." (Emphasis added.) ECL §15-1501, "Water Withdrawals, permit," provides in relevant part that "The department shall issue an initial permit *** for the maximum water withdrawal capacity reported to the department pursuant to the requirements of title sixteen or title thirty-three of this article on or before February fifteenth, two thousand twelve." (Emphasis added.) The statute even denied DEC the discretion to change the "maximum water withdrawal capacity," and DEC regulation 6 NYCRR 601.7, "Initial permits," is consistent with the statute on that point. Whatever information DEC could have obtained from conducting an environmental review could not have affected its decision to issue or deny an initial permit to TC Ravenswood. (See, *Filmways Communications of Syracuse, Inc. v. Douglas, supra.*) The Environmental Conservation Law and implementing regulations did not leave leave DEC with a "latitude of choice." (*See, Filmways Communications of Syracuse, Inc. v. Douglas supra*, 186.) The DEC had to issue the initial permit to TC Ravenswood on the basis of statutory specifications regardless of environmental concerns (*see, Ziemba v. City of Troy, supra)* which, if met, as TC Ravenswood did, established that it was "entitled" to the permit. (*See, Incorporated Village of Atlantic Beach v. Gavalas, supra.)*

The petitioners argue that DEC had broad discretion to specify the terms and conditions of all water withdrawal permits, including initial permits, pursuant to ECL §15-1503, "Permits," which establishes various criteria for the issuance of permits such as "2f. the proposed water withdrawal will be implemented in a manner to ensure it will result in no significant individual or cumulative adverse impacts on the quantity or quality of the water source and water dependent natural resources ***." However, ECL §15-1501(9) is the more specific and applicable statute, and it is a rule of statutory construction that a general provision yields to a specific provision. (*Ford v. New York State Racing and Wagering Bd.*, 107 AD3d 1071.) Furthermore,

DEC did not interpret the ECL as authorizing it to issue initial permits based on broad environmental concerns, and the interpretation that an administrative agency with expertise places upon a statutory and regulatory scheme is entitled to judicial deference. (*See, LMK Psychological Services, P.C. v. State Farm Mut. Auto. Ins. Co.*, 12 NY3d 217; *Samiento v. World Yacht Inc.*, 10 NY3d 70; *Nestle Waters North America, Inc. v. City of New York*, - AD3d -, 990 NYS2d 512;) "It is well settled that the construction given statutes and regulations by the agency responsible for their ***administration, if not irrational or unreasonable, should be upheld." (*Howard v. Wyman*, 28 NY2d 434, 438; *Samiento v. World Yacht Inc., supra.*)

Contrary to the petitioner's contention, the issuance of an initial permit to TC Ravenswood by DEC without conducting an "assessment" did not violate New York State's Waterfront Revitalization of Coastal Areas and Inland Waterway Act (Executive Law, Article 42) and related acts. The issuance of an initial permit to TC Ravenswood was a Type II action, not a Type I action. The regulations issued under SEQRA and the Waterfront Act provide that an action is not subject to review under the Waterfront Act if it is not subject to review under SEQRA. (*See,* 6 NYCRR 617.6[a][5]; 19 NYCRR §600.2[b].) The issuance of an initial permit is a ministerial act not subject to review under either SEQRA or the Waterfront Act.

Accordingly, the petition is denied.

Settle judgment.

FILED
OCT 21 2014
COUNTY CLERK
QUEENS COUNTY

Dated: Long Island City, N.Y.
October 1, 2014

ROBERT J. McDONALD
J.S.C.

FILED
OCT 21 2014
COUNTY CLERK
QUEENS COUNTY

SUPREME COURT OF THE STATE OF NEW YORK
COUNTY OF QUEENS

SIERRA CLUB
85 Second Street, 2nd Floor
San Francisco, California 94105,

HUDSON RIVER FISHERMEN'S ASSOCIATION,
NEW JERSEY CHAPTER, INC.
P.O. Box 421
Cresskill, New Jersey 07626

Petitioners,

For a Judgment Pursuant to Article 78 of the
Civil Practice Law and Rules,

–against–

JOSEPH MARTENS, COMMISSIONER,
NEW YORK STATE DEPARTMENT OF
ENVIRONMENTAL CONSERVATION
625 Broadway
Albany, NY 12233-1011,

Respondent,

TRANS CANADA RAVENSWOOD LLC
38-54 Vernon Boulevard
Long Island City, NY 11101,

Necessary Party.

NOTICE OF PETITION

Index No. 2949-14

To the above-named Respondents:

PLEASE TAKE NOTICE that upon the accompanying Verified Petition of Sierra Club and Hudson River Fishermen's Association, New Jersey Chapter, through its

QUEENS COUNTY CLERK
RECEIVED

attorneys, duly verified on the 18th day of February, 2014, the undersigned will move this Court at an I.A.S. Part to be held at the Queens County Court, located at 88-11 Sutphin Blvd., Jamaica, New York, on the **2nd day of May, 2014, at 11:00 A.M.** of that day or as soon thereafter as counsel may be heard, for a judgment annulling the September 7, 2013 determination of the Commissioner of the New York Department of Environmental Conservation ("Commissioner"), that the Commissioner's determination that the application of Trans Canada Ravenswood LLC for approval to withdraw 1.5 billion gallons of water per day from the East River can be classified as a "Type II action" under the State Environmental Quality Review Act, Environmental Conservation Law ("ECL"), Article 8, and the regulations promulgated pursuant thereto; and annulling that determination for failure to comply with the New York State Water Resources Law, (ECL Article 15), as amended by the Water Resources Protection Act of 2011, and the regulations promulgated pursuant thereto, the Coastal Zone Management Act, (16 U.S.C.A. § 1453), the Waterfront Revitalization of Coastal Areas and Inland Waterways Act of 1981, (Exec. L., Art. 42), the New York State Coastal Management Plan and the New York City Waterfront Revitalization Program; and for such other and further relief as the Court may deem just and proper.

PLEASE TAKE FURTHER NOTICE, that answering papers, if any, are to be

served upon the undersigned no later than seven (7) days before the return date herein and you are directed to include the administrative record in this matter.

DATED: February 18, 2014
Allegany, New York

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TO: Joseph Martens, Commissioner
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Eric Schneiderman, Attorney General of New York State
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c/o Laura Heslin, Assistant Attorney General
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Trans Canada Ravenswood LLC
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80 State Street
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SUPREME COURT OF THE STATE OF NEW YORK
COUNTY OF QUEENS

SIERRA CLUB
85 Second Street, 2nd Floor
San Francisco, California 94105,

HUDSON RIVER FISHERMEN'S ASSOCIATION,
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P.O. Box 421
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Petitioners,

For a Judgment Pursuant to Article 78 of the
Civil Practice Law and Rules,

–against–

JOSEPH MARTENS, COMMISSIONER,
NEW YORK STATE DEPARTMENT OF
ENVIRONMENTAL CONSERVATION
625 Broadway
Albany, NY 12233-1011,

Respondent,

TRANS CANADA RAVENSWOOD LLC
38-54 Vernon Boulevard
Long Island City, NY 11101,

Necessary Party.

VERIFIED PETITION

Index No. _____

ORAL ARGUMENT
REQUESTED

Petitioners, by their undersigned attorneys, respectfully allege as follows:

I. PRELIMINARY STATEMENT

1. This proceeding is brought pursuant to Article 78 of the New York Civil Practice Law and Rules ("CPLR") to compel the Respondent to comply with the New York State Environmental Quality Review Act ("SEQRA"), Environmental Conservation Law

("ECL"), Article 8, and the regulations promulgated pursuant thereto, the New York State Water Resources Law, (ECL Article 15), as amended by the Water Resources Protection Act of 2011, and the regulations promulgated pursuant thereto, the Coastal Zone Management Act, (16 U.S.C.A. § 1453), the Waterfront Revitalization of Coastal Areas and Inland Waterways Act of 1981, (Exec. L., Art. 42), the New York State Coastal Management Plan and the New York City Waterfront Revitalization Program in connection with Respondent's review of the application of Trans Canada Ravenswood LLC on behalf of its Ravenswood Generating Station located in Queens County ("Ravenswood") for a permit to withdraw up to 1.5 billion gallons of water per day from the East River in New York Harbor.

II. PARTIES

2. Petitioner Sierra Club is a national grassroots nonprofit conservation organization formed in 1892. Its purposes include practicing and promoting the responsible use of earth's ecosystems and resources, and protecting and restoring the quality of the natural and human environment. The protection of water resources is a key aspect of Sierra Club's work. The Sierra Club has approximately 600,000 members nationwide, with approximately 37,000 members in New York State and approximately 16,000 members in New Jersey, including members whose conservation, aesthetic, and recreational interests are injured by the environmental damage caused to the East River, the Hudson River, Long Island Sound, the New York Harbor and the New York Bight by Ravenswood's water usage for its cooling water intake structures. Sierra Club and its members further

suffer informational injury and injury to its public participation rights as a result of DEC's failure to conduct a full environmental assessment of Ravenswood's water withdrawals.

3. Petitioner Hudson River Fishermen's Association, New Jersey Chapter ("HRFA") is a regional non-profit conservation organization founded in 1966 and incorporated in 1988. HRFA's mission is to encourage the responsible use of aquatic resources and protection of habitat. HRFA has approximately 325 members. HRFA's members are recreational fishermen who make active use of the Hudson River and its watershed, including the East River and the New York Harbor. HRFA members are fishing in Hudson-Raritan Estuary every day, with three to six members out in their boats on the East River each day during the fall and spring migration seasons. The conservation, aesthetic, and recreational interests of HRFA's members are injured by the environmental damage caused to the East River, the Hudson River, Long Island Sound, the New York Harbor and the New York Bight by Ravenswood's water usage for its cooling water intake structures. HRFA and its members also suffer informational injury and injury to its public participation rights as a result of DEC's failure to conduct a full environmental assessment of Ravenswood's water withdrawals.

4. Respondent Joseph Martens is Commissioner of the Department of Environmental Conservation, ("DEC"), an administrative agency of the State of New York, with its principal office in Albany, New York. The DEC was established by chapter 140 of the Laws of 1970, and administers the water withdrawal permit program pursuant to article

15, title 15 of the New York Environmental Conservation Law. Respondent's Region 2 Office, the office administering the Ravenswood permit application, is located in Long Island City, Queens County, NY. DEC is the governmental body responsible for environmental protection in the state of New York and for the protection of New York's natural resources, including New York's waters and the aquatic life within.

5. Ravenswood is a corporation authorized to do business in New York with offices and facilities at 38-54 Vernon Boulevard, Long Island City, New York, in Queens County. Ravenswood is a necessary party in this matter because the determination challenged in this Petition may affect the way in which it conducts its operations.

III. FACTS

6. The following is a summary of the facts relevant to this petition.

7. On May 31, 2013, Ravenswood applied to DEC on behalf of its Ravenswood Generating Station in Queens for a permit to withdraw up to 1.5 billion gallons of water per day from the East River in New York Harbor.

8. On August 7, 2013, DEC invited by a public notice published in DEC's Environmental Notice Bulletin ("ENB") comments by the public on DEC's "tentative decision" to issue an "initial permit" to Ravenswood to withdraw up to 1.5 billion gallons of water from the East River and, on August 28, 2013, DEC published notice in the ENB that the deadline for public comments would be extended to September 11, 2013. Sierra Club members, among others, submitted timely comments, including comments challenging the manner in which DEC classified its proposed action pursuant to the State Environmental Quality

Review Act ("SEQRA"), so as to avoid a full environmental assessment of its proposed action. DEC responded to the comments on November 15, 2013, affirming its classification of the action as "Type II" pursuant to SEQRA.

9. Under SEQRA, an action classified as Type II does not require further environmental review.

10. The Ravenswood application is the first application considered by the DEC under the DEC's new water withdrawal permitting regulations, which became effective April 1, 2013. *See* 6 N.Y.C.R.R. Part 601.

11. To put the size of the proposed permit amount in perspective, 1.5 billion gallons per day is 150% of the water used by the entire New York City water supply system, which provides nearly half the population of all New York State with drinking water.

12. As calculated by the U.S. Geological Survey ("USGS"), 1.5 billion gallons of water per day is approximately 20% of New York State's total average freshwater usage of 7.1 billion gallons per day in 2000.

13. Paragraph 11 of the engineer's report attached to Ravenswood's application describes the estuary from which the water will be taken as follows:

> The Hudson-Raritan Estuary System is a coastal plain estuary dominated by the drowned river valley of the Hudson River estuary. The estuary system extends 170 miles from the dam at Troy, NY to Sandy Hook, NJ. The freshwater tributary to the estuary system drains a total of about 16,300 square miles. Seasonal and inter-annual variation of stream now of the Hudson River recorded at Green Island, New York, near Troy (USGS gage 0 1358000) is characterized by high flow during March through May, with monthly mean peak now of 32,719 cubic fect per second (CFS). The mean oscillating tidal flow in the East River reaches about 240,000 CFS. The estuary system is comprised of all tidally inundated areas

within these drainage basins including tidal straights; Harlem and East Rivers. The East River extends 16 miles from the battery to Throgs Neck and Willets Point at the Long Island Sound. The tidal straight is divided into distinct hydrological sections. The East River is narrow and bulk-headed along most of the length, and is divided into east and west channels where it passes Roosevelt Island. The [Ravenswood] station is located on the east channel from which the station withdraws its cooling water. Maximum river velocities are high, reaching 5.0 ft/sec.

14. The engineer's report also describes the intake structures used in Ravenswood's "once through" cooling system:

The station utilizes a once through cooling water system. The intake structures are recessed 60 feet inside the bulkhead line. Units 10 and 20 each have four water intake bays that measure 11.2 feet wide and by 17 feet deep at mean low water (MLW). Unit 30 has six intake bays that each measure 11.2 feet wide by 24 feet deep (MLW). The existing technology includes 14 vertical continuous traveling screens outfitted with 3/8 inch square mesh and high pressure wash to remove impinged material.

15. Studies of fish entrainment by the Ravenswood plant establish that Ravenswood's water intake system sucks in and kills hundreds of millions of eggs, larvae and young fish each year.

16. Millions of larger fish are injured or killed annually when they are trapped on Ravenswood's intake screens.

17. In 2010, DEC refused to issue a Clean Water Act section 401 water quality certificate to the Indian Point nuclear power plant on the Hudson River, on the ground that the taking of short-nose sturgeon by the operation of Indian Point's once through cooling system by the Indian Point facilities is unlawful and impairs the best usage of the waters of the Hudson River for propagation and survival of sturgeon.

18. The East River is part of the Hudson-Raritan Estuary and the Hudson River watershed.

19. Sturgeon live in the East River and use the East River as a migratory path to the Hudson River.

20. Ravenswood's operations rely on a once through cooling system, similar to that used at Indian Point.

21. "Closed-cycle" cooling, by contrast, which is not used at Ravenswood, is a proven technology

22. Closed cycle cooling can reduce power plant water intake by up to 98 percent, thereby reducing the damage to aquatic life by up to 98 percent.

23. DEC's new water permitting regulations are being implemented on a staggered schedule. Under the regulations, existing users withdrawing 100 million gallons per day or more are required to apply for a permit in 2013. 6 N.Y.C.R.R. § 601.7. Upon information and belief, the only existing users that meet this threshold and are not exempt from the new permitting requirements are 16 large power plants, including four taking water from New York Harbor.

24. These sixteen power plants were each required under the regulations to have submitted their applications for a water withdrawal permit by June 1, 2013, or 180 days before their existing State Pollution Discharge Elimination System ("SPDES") permit is scheduled to expire, whichever occurs later. 6 N.Y.C.R.R. § 601.7 (b).

25. Of the 16 large power plants, the combined maximum water usage of the four power plants taking water from New York Harbor is 3.2 billion gallons per day ("BPD").

26. The remaining 12 facilities use almost 7.9 billion GPD of fresh water. Thus the maximum daily freshwater usage of these 12 facilities is 111% of New York State's average total daily freshwater usage fresh water usage of 7.1 billion GPD as estimated by USGS for 2000.

27. The revised notice of the Ravenswood application given by the DEC on August 28, 2013 states: "NYSDEC has determined that the issuance of 'initial permits' under ECL section 15-501.9 as implemented by 6 N.Y.C.R.R. § 601.7 is a ministerial action and therefore subject to the Type II exemption set out in 6 N.Y.C.R.R. § 617.5(c)(19)."

28. The Ravenswood power plant is also located in a coastal area.

29. Section 617.6(a)(5) of the SEQRA regulations provides: "For state agencies only, determine whether the action is located in the coastal area. If the action is either Type I or Unlisted and is in the coastal area, the provisions of 19 N.Y.C.R.R. Part 600 also apply. This provision applies to all state agencies, whether acting as a lead or involved agency."

30. The provisions of 19 N.Y.C.R.R. Part 600 implement the Waterfront Revitalization of Coastal Areas and Inland Waterways Act of 1981.

31. These provisions require that projects located in a coastal area be reviewed for consistency with the applicable local waterfront revitalization program approved by the New York State Secretary of State. *See* 19 N.Y.C.R.R. § 600.4. *See also* Exec. L. Art. 42.

32. On November 15, 2013, DEC responded to public comments on its tentative determination to issue an initial water withdrawal permit to Ravenswood by stating in part that, while the Ravenswood power plant is located in a coastal area, as a Type II

action, DEC is not required to consider whether the plant's operations are consistent with New York City's approved local waterfront revitalization program.

33. The manner in which DEC is processing the Ravenswood water withdrawal application is setting a precedent for how future water withdrawal permit applications will be handled under the new permitting program.

IV. STATUTORY AND REGULATORY FRAMEWORK

34. The Water Resources Protection Act of 2011 ("WRPA") was signed into law by Governor Cuomo on August 15, 2011 with the support of many of New York's largest environmental and conservation organizations. The Act amended the state's Environmental Conservation Law ("ECL") to require that any person taking 100,000 gallons or more per day from any of the state's waters obtain a withdrawal permit (certain categories of users such as agricultural users are exempted from the permitting requirements). ECL Article 15, Title 15, 15-1501 *et seq.*

35. The Act provides that the new permitting requirements do not become applicable until DEC promulgates implementing regulations. ECL § 1501(4).

36. The new law is the first statutory provision in New York law to require that users other than public water supply systems obtain water withdrawal permits. Water withdrawal permits have been required for public water supply systems since 1905. The new law requires that all users taking 100,000 gallons per day or more from the waters of New York obtain a water withdrawal permit

37. DEC's implementing regulations were promulgated in November 2012, and became

effective April 1, 2013.

38. The regulations provide an expedited permitting process for existing water users. *See* 6 N.Y.C.R.R. Part 601.

39. At the time the Act was signed into law Governor Cuomo and other officials emphasized the protections offered by the WRPA. A press release issued by the Governor's office at the time states: "The preservation and protection of New York's water resources is vital to the state's residents, farmers and businesses," Governor Cuomo said. "This law will enhance the state's ability to manage its water to promote economic growth and address droughts while protecting the environment." Assemblyman Bob Sweeney, Chairman of Assembly Committee on Environmental Conservation said, "New York State is fortunate to have an abundant supply of water. This law will help the state to remain vigilant in the preservation and protection of this resource. Water is vital to New York's residents and businesses, for drinking, agriculture, commerce and recreation. The measure will help ensure that future generations of New Yorkers can enjoy a vibrant, healthy environment and a healthier and more prosperous future."

40. The WRPA represents a significant change in New York's water rights laws as the Act moves New York from a largely riparian rights system in which the rights of most users are determined by application of common law principles to a regulated riparian system of water rights law, in which permits are added to the existing riparian system. Accordingly, the issuance of permits to certain users and not to other users may give permit holders an advantage over non-permit holders should disputes over scarce water resources occur.

41. Section 601.7 of the regulations provides that persons who operated a water withdrawal system with a capacity equal to or greater than the threshold volume and reported their water withdrawals to DEC by February 15, 2012, qualify for an "initial permit" at their maximum reported capacity.

42. Existing users withdrawing 100 million GPD or more are required to apply for a permit in 2013. 6 N.Y.C.R.R. § 601.7(b)(2). As described above, the only existing users meeting the threshold for application this year (and not otherwise exempt from the permitting requirements) are 16 large power plants, including Ravenswood.

43. Section 601.11(c) of the regulations provides: "In making its decision to grant or deny a permit or to grant a permit with conditions, the Department shall determine whether:"

> (1) the proposed water withdrawal takes proper consideration of other sources of water supply that are or may become available;
>
> (2) the quantity of supply will be adequate for the proposed use;
>
> (3) the proposed project is just and equitable to all affected municipalities and their inhabitants with regard to their present and future needs for sources of potable water supply;
>
> (4) the need for all or part of the proposed water withdrawal cannot reasonably be avoided through the efficient use and conservation of existing water supplies;
>
> (5) the proposed water withdrawal is limited to quantities that are considered reasonable for the purposes for which the water use is proposed;
>
> (6) the proposed water withdrawal will be implemented in a manner to ensure it will result in no significant individual or cumulative adverse impacts on the quantity or quality of the water source and water dependent natural resources, including aquatic life; this determination may include an evaluation of whether all withdrawn water that is not lost to reasonable consumptive use will be returned to its source New York major drainage basin;

(7) the proposed water withdrawal will be implemented in a manner that incorporates environmentally sound and economically feasible water conservation measures; and

(8) the proposed water withdrawal will be implemented in a manner that is consistent with applicable municipal, state and federal laws as well as regional interstate and international agreements. . . .

44. Section 601.10(e)(3) of the regulations requires that the engineer's report included with an application "shall contain . . . an evaluation of all practicable alternatives to the proposed source, which shall include an analysis of increased water conservation measures as a means to reduce or eliminate the need for the proposed source."

45. Importantly, the Ravenswood application fails to consider the alternative of closed-cycle cooling.

46. Section 601.10(f) of the regulations states that information required in a water withdrawal permit application must also "demonstrate[ ] the applicant's water conservation and efficiency measures that are environmentally sound and economically feasible and that minimize inefficiencies and water losses. Such measures must include but are not limited to: source and customer metering; frequent system water auditing; system leak detection and repair; recycling and reuse; and ability to enforce water restrictions during drought." This section provides that the required information may be provided by completing a form made available by DEC.

47. Ravenswood's completed Water Conservation Program ("WCP") form provided by DEC and included in Ravenswood's Part 601 application shows the following:

1. In response to the question on the WCP form, "Are all sources of supply

including major interconnections equipped with master meters?" Ravenswood's response is "No."

2. In response to the question, "How often are they calibrated?" Ravenswood's response is "Meters are not calibrated at this time."

3. In response to the question, "Do you regularly survey your facility for leakage?" Ravenswood's response is "No."

4. In response to the question, "Do you regularly survey underground piping for water leakage?" Ravenswood's response is "No."

5. In response to the question, "Do you conduct a water audit at least once each year?" Ravenswood's response is "No."

48. Section 601.16 of the regulations lists circumstances under which a permit, including an "initial" permit, may be denied, suspended or revoked.

49. Section 601.16 (a) provides: "The Department may deny an application for a water withdrawal permit if the Department determines that: (1) the water withdrawal will result in contravention of water quality standards or guidance values; [or] (2) the water withdrawal will exceed or cause to be exceeded the safe yield or sustainable supply of the water source . . ."

50. Information required by section 601.10(e)(11) of the regulations on upstream water withdrawals, safe yield analyses, and passby flow calculations is not provided in Ravenswood's application.

51. The WRPA contains no definition of an "initial permit."

52. The WRPA requires DEC, when making a decision whether to grant or deny a water withdrawal permit, or grant such a permit with conditions, to determine whether "the

proposed water withdrawal will be implemented in a manner that incorporates environmentally sound and economically feasible water conservation measures." ECL § 15-1503(2)(g).

53. The Act defines the phrase "environmentally sound and economically feasible water conservation measures" in broad terms, as measures to reduce water use that "(i) are environmentally sound; (ii) reflect best practices applicable to the water use sector; (iii) are technically feasible and available; (iv) are economically feasible and cost effective based on an analysis that considers direct and avoided economic and environmental costs; and (v) consider the particular facilities and processes involved, taking into account the environmental impact, age of equipment and facilities involved, the processes employed, energy impacts and other appropriate factors." ECL § 15-1502.

54. The only provision in the WRPA identifying an "initial permit" provides, in relevant part: "The department shall issue an initial permit, subject to appropriate terms and conditions as required under this article, to any person not exempt from the permitting requirements of this section . . ." ECL § 15-1501(9).

V. FOR A FIRST CAUSE OF ACTION:

FAILURE TO COMPLY WITH SEQRA

A. DEC Violated SEQRA When It Failed to Consider Potentially Significant Adverse Environmental Impacts of Issuing the Proposed Ravenswood Permit

55. Petitioner repeats and realleges the prior paragraphs as if fully set forth here.

56. Respondent designated itself as the "lead agency" to make SEQRA determinations for

the Ravenswood water withdrawal application.

57. As lead agency, it is DEC's responsibility to ensure that all laws and regulations pursuant to SEQRA are carried out whenever DEC takes action subject to SEQRA.

58. According to the SEQRA regulations:

> The basic purpose of SEQRA is to incorporate the consideration of environmental factors into the existing planning, review and decision-making processes of state, regional, and local government agencies at the earliest possible time. To accomplish this goal, SEQRA requires that all agencies determine whether the actions they directly undertake, fund or approve may have a significant impact on the environment, and, if it is determined that the action may have a significant adverse impact, prepare or request an Environmental Impact Statement.

6 N.Y.C.R.R. § 617.1(c).

59. Further, the SEQRA regulations indicate that:

> In adopting SEQRA, it was the legislature's intention that all agencies conduct their affairs with an awareness that they are stewards of the air, water, land and living resources, and that they have an obligation to protect the environment for the use and enjoyment of this and all future generations.

6 N.Y.C.R.R. § 617.1(b).

60. The SEQRA regulations require that a lead agency determine whether or not a proposed project is a "Type I action", which is an action presumed to require an environmental impact statement, or an "Unlisted action". As indicated in the regulations:

> The purpose of the list of Type I actions in this section is to identify, for agencies, project sponsors and the public, those actions and projects that are more likely to require the preparation of an EIS than unlisted actions. All agencies are subject to this Type I list. (1) This Type I list is not exhaustive of those actions that an agency determines may have a significant adverse impact on the environment and requires the preparation of an EIS. However, the fact that an action or project has been listed as a Type I action, carries with it the presumption that it is likely to have a significant adverse impact on the environment and may require an EIS . . .

6 N.Y.C.R.R. § 617.4(a).

61. An environmental impact statement must be prepared if a proposed action "may include the potential for at least one significant adverse environmental impact." 6 N.Y.C.R.R. § 617.7(a)(1).

62. Conversely, to determine that an EIS will not be required for an action, "the lead agency must determine either that there will be no adverse environmental impacts or the identified adverse environmental impacts will not be significant." 6 N.Y.C.R.R. § 617.7(a)(2).

63. In the instant action, it is apparent that there will be at least one significant adverse environmental impact, since Ravenswood will be permitted for the first time to withdraw up to 1.5 billion gallons of water per day from the East River into the plant's cooling mechanisms. This water will contain fish, fish eggs and other aquatic life. Passage through the cooling systems will destroy most of these organisms and will damage the aquatic life of the East River, a tidal estuary, and the entire harbor estuary of which the East River estuary is a part, and the entire Hudson River watershed because of the fish that migrate seasonally through the East River into the Hudson River.

B. DEC Violated SEQRA When It Improperly Claimed a Type II Exemption from SEQRA for Its Action in Issuing a Permit

64. Petitioners repeat and reallege the prior paragraphs as if fully set forth here.

65. Respondent DEC violated SEQRA when it failed to classify the Ravenswood initial permit determination as a Type I action, and determined instead that permitting

Ravenswood's water withdrawals is a Type II action, which is exempt from environmental review under SEQRA.

66. The SEQRA regulations provide that "a project or action that would use ground or surface water in excess of 2,000,000 gallons per day" is a Type I action. 6 N.Y.C.R.R. § 617.4(b)(6)(ii).

67. The water withdrawal permit DEC plans to issue to Ravenswood permits withdrawals 750 times the amount identified in Section 617.4(b)(6)(ii).

68. Type II actions include "official acts of a ministerial nature involving no exercise of discretion, including building permits and historic preservation permits where issuance is predicated solely on the applicant's compliance or noncompliance with the relevant local building or preservation code(s)." 6 N.Y.C.R.R. § 617.5(c)(19).

69. A "ministerial act" is defined in the SEQRA regulations to "mean[ ] an action performed upon a given state of facts in a prescribed manner imposed by law without the exercise of any judgment or discretion as to the propriety of the act, such as the granting of a hunting or fishing license." 6 N.Y.C.R.R. § 617.2(w).

70. In the public notice announcing its tentative determination to issue an initial permit for Ravenswood under the WRPA implementing regulations, DEC stated: "NYSDEC has determined that the issuance of 'initial permits' under ECL section 15-501.9 as implemented by 6 N.Y.C.R.R. §601.7 is a ministerial action and therefore subject to the Type II exemption set out in 6 N.Y.C.R.R. §617.5(c)(19)."

71. The action of issuing an initial permit under the new water withdrawal permitting

regulations does not constitute a ministerial action "involving no exercise of discretion."

72. Section 601.11(a) of the regulations states: "The Department may grant or deny a permit, or grant a permit with conditions."

73. The WRPA regulations further provide that, when making a decision to grant or deny a permit or to grant a permit with conditions, DEC must determine whether several enumerated environmental and conservation factors are specifically met. 6 N.Y.C.R.R. §§ 601.11(c)(1)-(8).

74. DEC's determination that the issuance of an "initial" water withdrawal permit constitutes a non-discretionary action violates the mandate of ECL § 15-1501.9, which makes clear that "initial" permits are subject to "appropriate terms and conditions."

75. Respondent's obligations under SEQRA are mandatory, not discretionary.

76. So long as DEC maintains its pattern and practice of non-compliance with SEQRA, Petitioners are profoundly hindered in their ability to advocate on behalf of their members and serve the public.

77. Because Respondent DEC erroneously categorized the permitting of Ravenswood's water withdrawals as a Type II action, the Respondent is in violation of the requirements of SEQRA and the regulations promulgated pursuant thereto, and it is respectfully requested that the improper Type II determination issued by the Respondent be annulled, (*see* CPLR § 7803.3), and that the Respondent be directed to complete a full environmental assessment of Ravenswood's water withdrawal permit application and that an injunction against issuance of a water withdrawal permit to Ravenswood be entered

until such time as the Respondent has fully and completely complied with the requirements of SEQRA.

78. Petitioners have no other remedy at law.

VI. FOR A SECOND CAUSE OF ACTION:

VIOLATION OF THE NEW YORK WATER RESOURCES LAW

79. Petitioners repeat and reallege the prior paragraphs as if fully set forth here.

80. The failure of DEC to apply the "appropriate terms and conditions as required under [Article 15 of the state Water Resources Law]" when determining the Ravenswood water withdrawal permit violates the Water Resources Law, section 15-1501(9).

VII. FOR A THIRD CAUSE OF ACTION:

VIOLATION OF THE PUBLIC TRUST DOCTRINE

81. Petitioners repeat and reallege the prior paragraphs as if fully set forth here.

82. The failure of DEC to consider the impact that withdrawal of 1.5 million gallons of water per day from the East River will have on other water users and on the environment violates its public trust responsibilities under the common law and under Article XIV, Section 4 of the New York State Constitution.

VIII. FOR A FOURTH CAUSE OF ACTION:

VIOLATION OF THE NEW YORK STATE COASTAL MANAGEMENT PLAN AND THE NEW YORK CITY WATERFRONT REVITALIZATION PROGRAM

83. Petitioners repeat and reallege the prior paragraphs as if fully set forth here.

84. Pursuant to the Waterfront Revitalization and Coastal Resources Act of 1981, (Executive L., Art. 42) ("WRCR Act"), a coastal consistency review of Ravenswood's water withdrawal permit application is required because the Ravenswood Generating Station is located in a coastal management area.

85. Because DEC's determination of Ravenswood's water withdrawal permit application is a Type I action under SEQRA, compliance with the WRCR Act is required, but this was done not in this case.

86. The consistency review required in this case under the WRCR Act requires DEC to determine whether Ravenswood's water withdrawals are consistent with the state and city waterfront revitalization programs adopted pursuant to the Act.

WHEREFORE, Petitioners respectfully request that the Court enter an Order in this proceeding:

(1) Annulling the DEC's Type II determination for the Ravenswood water withdrawal permit application;

(2) Requiring DEC to wait for and consider the required local coastal area reviews before making a determination of environmental significance pursuant to SEQRA;

(3) Requiring DEC to perform a full environmental assessment in compliance with SEQRA with respect to the Ravenswood permit application;

(4) Requiring DEC to comply with the requirements of the Water Resources Law, as amended by the Water Resources Protection Act of 2011, prior to determining the permit application submitted by Ravenswood;

(5) Requiring DEC to comply with its public trust obligations;

(6) Enjoining Respondent DEC from approving the Ravenswood permit application until Respondent shall have complied with all applicable laws; and

(7) Awarding costs and disbursements and attorney fees of this proceeding;

(8) And ordering such other and further relief as the Court may deem just and proper.

The relief requested herein has not been previously requested from this or any other court.

DATED: February 18, 2014
Allegany, New York

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VERIFICATION

STATE OF NEW YORK)
COUNTY OF CATTARAUGUS) s.s.:

GARY A. ABRAHAM, being duly sworn, deposes and says:

1. I have read the foregoing petition and state that the content of the petition are true to my personal knowledge and based on my review of the pertinent documents and conversations with persons with knowledge.

2. I am an attorney for the petitioners in this proceeding. I am not a petitioner in this proceeding. I am signing this verification pursuant to Rule 3020(d)(3) of the CPLR because petitioner Hudson River Fishmen's Association, New Jersey Chapter, is not located in the county where I have my office.

Gary A. Abraham

Sworn to before me this
18th day of February, 2014

NOTARY PUBLIC

MARY M. PECK
Notary Public, State of New York
Qualified in Cattaraugus County
Registration #4971535
Commission Expires 09/04/2014

48

ADMINISTRATIVE RECORD OF THE ATTORNEY GENERAL OF THE STATE OF NEW YORK, DATED MARCH 13, 2014 [48-51]

SUPREME COURT OF THE STATE OF NEW YORK
COUNTY OF QUEENS
----------x
In the Matter of the Application of

SIERRA CLUB, and HUDSON RIVER FISHERMEN'S ASSOCIATION, NEW JERSEY CHAPTER, INC.,

Index No. 002949/2014

Hon. Robert J. McDonald

Petitioners,

For Judgment Pursuant to Article 78 of the Civil Practice Law and Rules,

-against-

JOSEPH MARTENS, COMMISSIONER, NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION,

Respondent,

TRANS CANADA RAVENSWOOD LLC,

Necessary Party.
----------x

ADMINISTRATIVE RECORD

ERIC T. SCHNEIDERMAN
Attorney General of the
State of New York
Attorney for Respondent
120 Broadway, 26th Floor
New York , NY 10271
(212) 416-6091

LAURA HESLIN
Assistant Attorney General
Of Counsel

TABLE OF CONTENTS OF ADMINISTRATIVE RECORD

Document	Pages
Ravenswood Generating Station ("Ravenswood") Initial Water Withdrawal Permit ("Initial Permit") Application, dated May 31, 2013	1-35
New York State Department of Environmental Conservation ("DEC") Notice of Complete Application, dated August 1, 2013	36
Environmental Notice Bulletin ("ENB") Notice of Public Comment Period on Ravenswood Application for Initial Permit, dated August 7, 2013	37-45
ENB Notice of Extension of Public Comment Period on Ravenswood Application for Initial Permit, dated August 28, 2013	46-50
Cover Letter for Ravenswood Initial Permit, dated November 15, 2013	51-52
Ravenswood Initial Permit, dated November 15, 2013	53-56
DEC Response To Public Comments on Application for Ravenswood Initial Permit, dated November 15, 2013	57-61
Ravenswood State Pollutant Discharge Elimination System ("SPDES") Negative Declaration, dated December 11, 2006	62-65
Ravenswood SPDES Discharge Permit, dated April 20, 2007	66-86
Ravenswood Technology Installation and Operation Plan, dated August 1, 2007	87-91
DEC Approval of Ravenswood Technology Installation and Operation Plan, dated August 29, 2007	92
Ravenswood SPDES Industrial Fact Sheet, dated September 12, 2012	93-115
Ravenswood SPDES Discharge Permit, dated October 1, 2012	116-136

TABLE OF CONTENTS OF ADMINISTRATIVE RECORD CONTINUED

Document	**Pages**
Ravenswood Letter Regarding Corrected Annual Water Withdrawal Reports, dated December 18, 2013	137-138
Ravenswood Professional Engineer Certification Regarding Maximum Water Withdrawal Capacity, dated December 17, 2013	139
Ravenswood Revised Water Withdrawal Reports, dated December 10, 2013	140-151
DEC Notice Regarding Correction to Ravenswood Initial Permit, dated February 19, 2014	152-153
DEC Cover Letter for Corrected Ravenswood Initial Permit, dated March 7, 2014	154
DEC Corrected Ravenswood Initial Permit, dated March 7, 2014	155-158

CERTIFICATION PURSUANT TO CPLR § 7804(e)

I, Kent Sanders, the Deputy Chief Permit Administrator of the Division of Environmental Permits of the New York State Department of Environmental Conservation, do hereby certify, pursuant to CPLR § 7804(e), that, to the best of my knowledge, information and belief, the foregoing documents constitute the record of the proceedings under consideration.

Dated: Albany, NY
March 13, 2014

Kent Sanders

Sworn to before me this
13 day of March, 2014

Notary Public

LAWRENCE WEINTRAUB
Notary Public, State of New York
No. 02WE6149806
Qualified in Schenectady County
Commission Expires July 17, 20 14

New York State Department of Environmental Conservation

Water Withdrawal Application Supplement WW-1

Pursuant to 6 NYCRR Part 601

READ THE INSTRUCTIONS ON PAGE 2 BEFORE COMPLETING THIS FORM

FOR DEPARTMENT USE ONLY
Application No.
WWA Number

1. APPLICANT NAME TC Ravenswood LLC

2. FACILITY NAME Ravenswood Generating Station

3. PROJECT TYPE ☑ Water Withdrawal ☐ New Public Water Supply Service Area or Extension ☐ Land Acquisition for Public Water Supply ☐ Change in Use of Existing Water Withdrawal

4. WATER USE TYPE ☐ Public Water Supply ☐ Bottled/Bulk Water ☐ Commercial ☐ Cooling ☐ Industrial ☐ Institutional ☐ Mine Dewatering ☐ Oil/Gas Production ☑ Power Production ☐ Recreational ☐ Other:

5. WITHDRAWAL TYPE ☑ Existing ☐ New If this is an existing public water supply, provide the most recent WSA or WWA Number:

If other than public water supply, list other existing or pending related DEC permits (e.g., SPDES, Mining, Dam):
SPDES NY 0005193

6. WATER WITHDRAWAL SOURCE ☑ Surface Water Water Body Name(s) East River ☐ Groundwater Nearest Surface Water Body Distance From Well (in feet)

7. WATER SUPPLY TO OTHER STATES Does this project involve the transport of any fresh water of NYS through pipes, conduits, ditches or canals to any other state?
☑ No ☐ Yes, describe:

8. TRANSPORTATION OF WATER BY VESSEL Does this project involve the transport by vessel of more than 10,000 gallons per day of surface water? (Excludes ballast water necessary for normal vessel activity. A vessel is defined as any floating craft propelled by mechanical power.) ☐ Yes ☑ No

9. WATER WITHDRAWAL AMOUNTS This project involves the withdrawal of up to: 1,534,752,00 gallons per day Source Name East River

Does the project include a MAJOR DRAINAGE BASIN TRANSFER of water? See map at http://www.dec.ny.gov/lands/56800.html ☑ No ☐ Yes

If yes, ☐ Existing ☐ New From Basin To Basin

10. *REQUIRED EXHIBITS (6 NYCRR Part 601.10)* *Provide the names of the required exhibits applicable to this withdrawal:*

601.10(a) *PROJECT AUTHORIZATION FOR PUBLIC WATER SUPPLY SYSTEMS (e.g. Resolutions, Ordinances)*	Not Applicable	***601.10(h)*** *ACQUISITION MAPS (Map of any lands to be acquired as part of project)*	Not Applicable
601.10(b) *GENERAL MAP (e.g. Project Location, For Public Water Supplies - water service area boundary)*	See Figure # 1	***601.10(i)*** *WATER ANALYSES (Public Water Supplies should submit chemical & bacterial analysis directly to NYSDOH)*	Not Applicable
601.10(c) *WATERSHED MAPS (Topographic map with location of withdrawal and any return flow or interbasin diversions).*	See Figure #'s 1 & 2	***601.10(j)*** *TREATMENT METHODS (Public Water Supplies - proposed methods to meet NYSDOH standards)*	Not Applicable
601.10(d) *CONTRACT PLANS (Public Water Supplies should submit directly to NYSDOH for review and approval)*	Not Applicable	***601.10(k)*** *PROJECT JUSTIFICATION (Provide summary statement of answers to the eight justification questions)*	See Section (K)
601.10(e) *ENGINEER'S REPORT (Signed by NYS PE, includes project description, water source yields and demands, etc.)*	See Appendix A	***601.10(l)*** *CANAL WITHDRAWAL APPROVALS (If applicable, provide adequate proof of approval from Canal Authority)*	Not Applicable
601.10(f) *WATER CONSERVATION PROGRAM (Completed Water Conservation Program Form)*	See Appendix B	***601.10(m)*** *TRANSMITTAL LETTER (Include all contact information for applicant, attorney, engineer, etc.)*	See Section M
601.10(g) *ANNUAL REPORTING FORM FOR EXISTING WITHDRAWALS (Most recent submitted annual report)*	See Appendix C	***601.10(n)*** *GREAT LAKES-ST. LAWRENCE RIVER WATER RESOURCES COMPACT PROCESS REQUIREMENTS (Only applicable to Public Water Supply diversions from Great Lakes Basin - no other diversion types are allowed).*	Not applicable

Applicant Signature

Name Kenneth Yager Date 5/31/2013

Title Compliance Manager

NYCRR Part 601
Water Withdrawal Permit Application
601.10 Requirements

(a) Project Authorization
The existing water withdrawal system was commissioned in 1963 and is currently used to supply once through cooling water for an electric generating facility. The current facility holds a valid SPDES permit for discharge of cooling and process water from permitted outfalls. The water withdrawal system is not a public supply system and is not applicable to the requirements set forth in subpart (a).

(b) General Map
See Drawing # 1-Ravenswood Generating Station General Map.

(c) Watershed Maps
See Drawing # 2- Watershed maps

(d) Contract Plans
No contract plans exist for the water withdrawal system. The existing water withdrawal system was commissioned in 1963 and is currently used to supply once through cooling water for an electric generating facility.

(e) Engineer's Report
See Appendix A- Engineer's Report

(f) Water Conservation Program
See Appendix B-Water Conservation Form

(g) Annual Water Withdrawal Report
See Appendix C- 2012 Water Withdrawal Report

(h) Acquisition Maps
The water withdrawal system is an existing system that was commissioned in 1963 and is currently used to supply once through cooling water for an electric generating facility. Land acquisition maps are not required for the existing water withdrawal system.

(i) Water Analyses
The water withdrawal system is not a public supply system and chemical and bacteriological analyses are not performed. Therefore, Ravenswood is not applicable to the requirements set forth in subpart (i).

(j) Treatment Methods

The water withdrawal system is not a public supply system required to meet Department of Health standards and is therefore not applicable to the requirements set forth in subpart (j).

(k) Project Justification

The Ravenswood Generating Station is located in Long Island City, New York and is situated along the east bank of the upper East River, directly across from Roosevelt Island. The facility is comprised of three conventional steam electric generating units (Units 10, 20 & 30), a combined cycle unit (unit 40), and simple cycle gas turbine units. Cooling water for Units 10, 20 & 30 is currently withdrawn from the East River through intake structures and is routed through steam surface condensers.. Low pressure steam is exhausted from the low pressure turbines and is directed to the condenser where it passes over the tubes and is condensed to back to water. The cooling water is then returned to a common discharge canal, which is returned to the East River The siting of the electric generating facility along the East River is ideal due to the plentiful surface water supply for once through cooling. The East River's mean tidal flow is about 240,000 cubic feet per second (1.79 million gallons per second) allowing for Ravenswood to adequately and reasonably withdraw and return the necessary water for cooling.

The installation of variable frequency drives (VFD) on the circulating water pumps (CWP) has allowed for vast conservation improvements and an overall reduction in water withdrawn from the East River. The installation of VFDs has reduced electricity consumed by the CWP while in VFD operation due to the slower motor speeds. More importantly, the installation of VFDs has led to a considerable overall reduction in the volume of surface water withdrawn from the East River. The upgrades performed on the CWPS have directly made the water withdrawal system an environmentally sound and economically feasible project. In addition to the conservation of water withdrawn from the East River, the VFDs installed on the CWPs have also helped reduce the overall adverse environmentally impact associated with the impingement and entrainment of marine organisms. The volume of water withdrawn is directly proportional to the number of organisms impinged and entrained. A flow reduction achieved by the use of variable speed pumps has a proportional reduction to impinged and entrained organisms. The installation and implementation of VFDs is projected to reduce impingement mortality and entrainment of organisms by 90% and 65% from baseline, respectively. The current water withdrawal system utilized at Ravenswood complies with the various federal, state, and local laws.

(l) Canal Withdrawal Approval

The water withdrawal system is not located on a canal and is therefore not applicable to the requirements set forth in subpart (l).

(m) Transmittal Letter

(1)

Applicant:
TC Ravenswood LLC
Kenneth Yager
38-54 Vernon Blvd.
Long Island City, NY 11101

Engineer:
Erwin Schaub, P.E.
38-54 Vernon Blvd.
Long Island City, NY 11101

(2) If required, a public venue will be determined at the appropriate time.

(3) Publications in local newspapers for facility permits are published in the 'Daily News'.

(n) Great Lakes-St. Lawrence River Basin
The water withdrawal system is not located within the Great Lakes or St. Lawrence River basin and is therefore not applicable to the requirements set forth in subpart (n).

Apper.dix A

NYCRR Part 601
Water Withdrawal Permit Application
Engineer's Report

Professional Engineer's Certification

Name: Erwin Schaub
Firm: TC Ravenswood LLC
Address: 38-54 Vernon Blvd
Long Island City, New York 11101

Signature: _____

NYCRR Part 601
Water Withdrawal Permit Application
Engineer's Report

1. **General description of the project and the engineering features of the existing water withdrawal system.**

The Ravenswood Generating Station is located in Long Island City, New York and is situated along the east bank of the upper East River, directly across from Roosevelt Island. The facility is comprised of three conventional steam electric generating units (Units 10, 20 & 30), a combined cycle unit (unit 40), and simple cycle gas turbine units. Cooling water for units 10, 20, and 30 is withdrawn from the East River through intake structures and is routed through steam surface condensers. Low pressure steam is exhausted from the low pressure turbines and is directed to the condenser where it passes over the tubes and is condensed back to water. The cooling water is then returned to a common discharge canal, which is returned to the East River. Unit 40 and the simple cycle gas turbines do not utilize a once through cooling water system.

Condenser cooling water and service water for units 10, 20 and 30 is drawn into a protected embayment and intake structure. Units 10 and 20 each have four water intakes bays; two bays provide water to each circulator. Unit 30 has six intake bays; three bays provide water to each circulator. Wooden debris skimmers (ice breakers) are located at the entrance to each intake bay to prevent floating material from entering the bays. The continuous traveling water screens (3/8 inch square mesh) are equipped with high pressure (screen wash) spray systems to wash off impinged fish, crabs, and debris from the riverside of the screen. The wash water and impinged material is then diverted back to the East River though low stress fish return piping.

Each of the three units is equipped with two motor driven circulating water pumps. At Units 10 and 20; each pump has a rated capacity of 107,000 gallons per minute (GPM). Unit 30 pumps are rated at 268,500 GPM. Each motor has been retrofitted with variable frequency drives (VFD). A VFD is a device that rectifies 60 cycle AC current to direct current. Then using insulated gate bipolar transistors (IGBT's), converts the DC supply to a square wave alternating supply at adjustable frequency. This causes the motor to operate at variable speeds. The VFD allows the facility to decrease the circulating water pump motor speed and consequently proportionately decrease the circulating water flow. Operation at less than full flow capacity directly relates to conservation.

A service water system (Low Pressure Salt Water Pumps) also provides water from the East River for cooling small equipment throughout the facility and

E.S.

turbine-generator cooling. Units 10 and 20 each have a Low Pressure Salt Water Pump with a shared spare and unit 30 has three Low Pressure Salt Water Pumps.

2. **A listing of all existing sources of water supply, including wells, surface withdrawals, and any purchases sales or transfer of water.**

Existing Source	Water Supply
11 Circulating Water Pump	Surface-East River
12 Circulating Water Pump	Surface-East River
21 Circulating Water Pump	Surface-East River
22 Circulating Water Pump	Surface-East River
31 Circulating Water Pump	Surface-East River
32 Circulating Water Pump	Surface-East River
11 Low Pressure Salt Water Pump	Surface-East River
21 Low Pressure Salt Water Pump	Surface-East River
1-2 Low Pressure Salt Water Pump	Surface-East River
31 Low Pressure Salt Water Pump	Surface-East River
32 Low Pressure Salt Water Pump	Surface-East River
33 Low Pressure Salt Water Pump	Surface-East River
Unit 10, 20, & 30 Screen Wash Pumps (5)	Surface-East River
Water Meter House 1, 2, 3 & 4	Purchase - NYCDEP

3. **Evaluation of a practicable alternative to the proposed source shall include an analysis of increased water conservation measures as a means to reduce or eliminate the need for the proposed source.**

Cooling water is a critical component to the production of electricity at the station. Total elimination of cooling water is not a practical alternative. However, conservation methods are a viable option that has been implemented at the facility in order to reduce cooling water withdrawn from the East River. Circulating Water Pumps (CWP) have been retrofitted with VFDs to allow for reduced surface water withdrawal at reduced generation loading and reduced cooling water temperatures. An analysis of the first ten months of cooling water withdrawal from the East River was performed on the CWPs with VFD operation. The average hourly CWP GPM was calculated by utilizing continuously recorded motor speeds. The hourly CWP GPM was then compared to average CWP GPM if VFDs had not been installed (full flow operation). The difference between the two averages was then used to determine the water conservation directly related to the retrofit of the CWP on a daily basis for all units. Monthly averages are shown below. The overall reduction in surface water withdrawn from the East River is significantly reduced with the use of VFD operation of the CWPs. The conservation methods utilized at Ravenswood have directly led to substantial conservation of surface water and have been adequately implemented.

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	Unit 10			Unit 20			Unit 30			
	Unit 10 CWP AVG. GPM with VFD Operation	Unit 10 CWP AVG. GPM NO VFD	AVG. Withdrawal Conservation (GPD)	Unit 20 CWP AVG. GPM with VFD Operation	Unit 20 CWP AVG. GPM NO VFD	AVG. Withdrawal Conservation (GPD)	Unit 30 CWP AVG. GPM with VFD Operation	Unit 30 CWP AVG. GPM NO VFD	AVG. Withdrawal Conservation (GPD)	AVG. Water Withdrawal Conservation All Units (GPD)
July 2012	151,030	179,484	40,973,475	157,429	189,839	46,670,534	338,158	450,387	161,609,894	249,253,904
August 2012	155,883	202,536	38,956,157	167,411	189,839	32,295,838	165,404	225,194	86,096,285	157,348,281
Sept 2012	121,097	168,290	27,961,262	158,758	175,253	23,753,039	22,658	24,587	2,777,300	54,491,601
October 2012	168,933	193,290	35,074,172	52,196	65,581	19,274,255	364,899	537,000	247,826,058	302,174,485
November 2012	103,902	189,072	8,469,802	131,006	160,890	43,032,785	325,356	389,758	92,738,741	144,241,328
December 2012	214,000	214,000	0	43,808	55,226	16,441,232	0	0	0	16,441,232
January 2013	107,490	214,000	34,087,195	86,162	177,103	114,502,914	0	0	0	148,590,109
February 2013	24,563	34,516	10,485,108	2,779	5,713	3,693,642	77,542	138,581	87,895,382	102,074,132
March 2013	0	0	0	123,081	186,387	91,160,256	0	0	0	91,160,256
April 2013	9,107	20,710	17,264,262	95,504	192,400	139,530,196	0	0	0	156,237,546

4. **For public water supply systems, the present and projected population of the water service area and the present and projected consumption rate.**

   Not applicable to Ravenswood Generating Station.

5. **For public water supply systems, the radius of land owned or controlled for wellhead protection surrounding any proposed groundwater withdrawal, or the water quality classification and a copy of any Department of Health Watershed Rules and Regulations for any proposed surface withdrawal.**

   Not applicable to Ravenswood Generating Station.

6. **The general character and extent and essential design features of proposed controlling, diverting or regulatory works.**

   Implementation of site specific procedures on the operation of the CWPs has been employed at the site. Personnel are trained in the operation of the equipment and are instructed on CWP speeds for maximum conservation of water withdrawal.

7. **The proposed instantaneous and maximum daily rates of withdrawal; the existing and projected daily average, daily maximum, and 30 day maximum water demands of the withdrawal system;**

E.S.

2012 Maximum daily withdrawal rate	1,534.75 MGD
2012 Existing Daily Average	486.49 MGD
Projected Daily Average	486.49 MGD
Daily Maximum	1,489.70 MGD
2012 30 Day Maximum Demand	27,933.85 MG30DAY

8. **When applicable, any fire suppression flows which can be supplied, including the duration for which such flows can be main ined.**

   Water for fire suppression is fed from the city water supply (NYC DEP). The city water system supplies the suction to fire pumps which discharge to various fire protection systems located at the facility.

Fire Protection System	Flow
Dock Foam Fire Suppression System	3,000 GPM
GT Foam Fire Suppression System	1,000 GPM
Unit 40 Fire Suppression system	3,000 GPM
10, 20 & 30 Standpipe Booster Pump	750 GPM
06 Tank Foam Fire Suppression System	500 GPM
Rainey Foam Fire Suppression System	1,000 GPM
10/20 Transformer Fire Suppression System	750 GPM

9. **For public water supply systems, the location, extent and character of proposed treatment.**

   Not applicable to Ravenswood Generating Station.

10. **For groundwater sources, well drinking logs, monitoring well locations and pump test data and analyses of results.**

    Not applicable to Ravenswood Generating Station.

11. **For surface water sources, information on rainfall, stream flows and classifications, contributing watershed size, location of nearby USGS stream gauges, other upstream water withdrawals, safe yield analysis or passby flow calculations and proposed withdrawal methods including intake structure design and screening.**

    The Hudson-Raritan Estuary System is a coastal plain estuary dominated by the drowned river valley of the Hudson River estuary. The estuary system extends 170 miles from the dam at Troy, NY to Sandy Hook, NJ. The freshwater tributary to the estuary system drains a total of about 16,300 square miles. Seasonal and inter-annual variation of stream flow of the Hudson River recorded at Green Island, New York, near Troy (USGS gage 0 1358000) is characterized by high flow during March through May, with monthly mean peak flow of 32,719 cubic

feet per second (CFS). The mean oscillating tidal flow in the East River reaches about 240,000 CFS. The estuary system is comprised of all tidally inundated areas within these drainage basins including tidal straights; Harlem and East Rivers. The East River extends 16 miles from the battery to Throgs Neck and Willets Point at the Long Island Sound. The tidal straight is divided into distinct hydrological sections. The East River is narrow and bulk-headed along most of the length, and is divided into east and west channels where it passes Roosevelt Island. The station is located on the east channel from which the station withdraws its cooling water. Maximum river velocities are high, reaching 5.0 ft/sec. The station utilizes a once through cooling water system. The intake structures are recessed 60 feet inside the bulkhead line. Units 10 and 20 each have four water intake bays that measure 11.2 feet wide and by 17 feet deep at mean low water (MLW). Unit 30 has six intake bays that each measure 11.2 feet wide by 24 feet deep (MLW). The existing technology includes 14 vertical continuous traveling screens outfitted with 3/8 inch square mesh and high pressure wash to remove impinged material.

E.S.

Appendix B

DEPARTMENT OF ENVIRONMENTAL CONSERVATION

WATER CONSERVATION PROGRAM FORM

NON-POTABLE WATER SUPPLIES

TO BE COMPLETED AND SUBMITTED AS PART OF A NYSDEC WATER WITHDRAWAL PERMIT APPLICATION
***SEE PAGE 6 FOR FURTHER INTRODUCTION AND INSTRUCTION REGARDING THIS FORM**

If your water facility already has its own written water conservation program, you may submit it as a supplement to this WCPF. If your system is new, indicate the water conservation measures that will be taken when the system is completed (e.g. All sources of supply will be 100% metered).

I. GENERAL SYSTEM INFORMATION

Facility Name: Ravenswood Generating Station		**DEC No.**	
Street Address: 38-54 Vernon Blvd		**WWA No.**	
Post Office Box:	**County:** Queens	**State:** New York	**ZIP:** 11101
Contact Name: Kenneth Yager			
Street Address: 38-54 Vernon Blvd			
Post Office Box:	**County:** Queens	**State:** New York	**ZIP:** 11101
Applicant's Telephone: 7,187,062,702		**Contact's Telephone:** 7,187,062,702	

II. SOURCES OF WATER SUPPLY

[State capacity and withdrawal in gallons per minute (**gpm**), gallons per day (**gpd**), or million gallons per day (**mgd**).]

Source Type: S = Surface supply, G = Ground supply, P = Purchased supply
Source Status: R = Regular use, S = Standby use, E = Emergency use, I = Inactive, D = Decommissioned

Source Name	Source Type	Source Status	Tested Capacity	Actual Current Withdrawal	Start-up Year
East River	S	R	1,534.75 MGD	486.49 MGD	1963
NYCDEP	P	R		0.455 MGD	

III. WATER SOURCES AND METERING

For unmetered systems, please provide your best estimates for water production and/or consumption.

Are all sources of supply (including major interconnections) equipped with master meters?	No
How often are they read? Service water meters are read monthly.	
How often are they calibrated? Meters are not calibrated at this time	
Are there secondary meters located within the facility or system? Yes	If yes, how many? 15

Describe secondary metering system if applicable:
All incoming city water is metered by a NYC DEP service water meter. Inside the plant various secondary water meters are installed to determine water usage throughout the site. Surface water is withdrawn from the East River and flow rate is determined by pump speed.

Water Production for Calendar Year		
Total metered water production:	177,570,461,410	gallons per year
Average day production (total/days of use):	486,494,415	gallons per day
Maximum day production (largest single day):	1,489,700,000	gallons per day

What are your future goals and schedule for water metering?
City water connections from the NYC DEP water system are currently metered to determine the total water purchased. Multiple water meters are installed throughout the facility and are read monthly to determine water usage at different parts of the steam-electric generation process. Currently, primary and secondary water meters are being reviewed to determine the best practice for calibration of these meters.

Best Management Practices:

** 100% metering of all sources of water supply.*

** Source and secondary meters must be tested and calibrated annually.*

IV. WATER AUDITING

The process of conducting an audit of a water system will enable the collection of data on how much and where water enters, leaves and is used within a facility or system. Another goal of a water audit is to estimate unaccounted-for water use, which includes: Losses through leaks, improperly-functioning or inoperative system controls and unmetered sources of water. The water audit provides a system with a baseline against which water-conservation measures can be evaluated.

Do you conduct a water audit at least once each year? No If yes, please submit a copy of your latest audit in addition to completing the following section.

**** Water Audit for Calendar Year**

Total metered water production (from previous section)			Total	177,570,461,410	
Sources of Water Use		**Metered or Estimated?**			**% of Total**
Process Water		Metered	subtract	166,347,970	0.09
Cooling Water		Estimated	subtract	176,711,185,540	99.52
Wash Water			subtract		
Sanitary			subtract		
Incorporation into Product			subtract		
Irrigation			subtract		
Other	HP wash water for screens	Estimated	subtract	692,928,000	0.39
Other			subtract		
TOTAL UNACCOUNTED-FOR WATER			Sub-total	0	0
Unaccounted-for water breakdown	Meter under-registration		subtract	0	0
	Unrepaired leakage		subtract	0	
	Other:		subtract		
** Water measurement and accounting techniques are available in NYSDEC's Water Conservation Manual, http://www.dec.ny.gov/lands/39346.html				0	

What are your future goals for water system auditing?
Continuation of monthly water meter readings by Performance Engineering Group. Water meter readings and site water usage is analyzed and compared to historical data.

Best Management Practices:

** At least once each year, a system water audit must be conducted using metered water production and consumption data to determine unaccounted-for water.*

** Keep accurate estimates of unmetered water use.*

** Quantify all authorized water uses by consumption categories.*

V. LEAK DETECTION AND REPAIR

Do you regularly survey your facility for leakage? No
Are leaks repaired in a timely manner? Yes
If applicable, do you regularly survey underground piping for water leakage? No

Total length of underground piping	Percent of piping surveyed each year	Length of pipe surveyed each year	Listening equipment used	Year of last survey	Number of leaks found	Number of leaks repaired

What are your future goals for water system leak detection and repair?
The site is continuously manned with personnel and water usage data is analyzed monthly. If a leak is detected in underground piping the leak is addressed as soon as possible.

Best Management Practices:

** Check any underground water distribution systems for leaks each year.*

** Fix every detectable leak as soon as possible.*

** Have an on-going system rehabilitation program.*

VI. WATER REUSE, RECYCLING AND DROUGHT PLANNING

Does your facility reuse or recycle primary use water? No If yes, describe process:

Does your facility use reclaimed rainwater, storm water runoff or wastewater? No If yes, describe process:

Describe any equipment or processes that promote the efficient use of water by your facility:
Variable Frequency Drives (VFD) are installed on the Circulating Water Pumps (CWP). The CWPs withdraw surface water from the East River for cooling. VFDs allow for the pumps to operate at less than full speed operation at reduced loads and cooler water temperatures. The reduced speed directly correlates to reduced water withdrawal.

Does your system include storage tanks or ponds to meet short term water demands?
Yes, demineralized water storage tanks are used.

Describe any actions that can be taken to reduce water use during times of drought:
VFD operation of the CWP in order to reduce surface water withdrawal.

What are your future goals for recycling or reducing water usage?
Continuing use of CWPs in VFD to reduce surface water withdrawal at reduced loads.

Best Management Practices:

** Reuse or recycle water whenever possible.*

** Employ efficient irrigation techniques*

** Develop a plan to reduce water use during times of drought.*

VI. SIGNATURE PAGE AND DISCUSSION

Facility Name: Ravenswood Generating Station	WWA No.

Signature:	Signatory:
Title: Compliance Manager	Date: 5/31/2013

DISCUSSION:

Effective February 15, 2011, New York State Environmental Conservation Law (§ECL 15-1501) has required that all applications for a NYSDEC Water Withdrawal Permit include a water conservation program. This Water Conservation Program Form (WCPF) is a required submittal of all such applications.

The WCPF has been set up to cover the following basic elements of a water conservation program: Source Water Inventory, Water Usage and Metering, Water Auditing, Leak Detection/Repair, and Water Use Reduction. The Best Management Practices listed at the bottom of each page represent DEC water conservation policy objectives and should be incorporated into your program development. Additional water conservation measures that are specific to your category of water usage should also be incorporated into your individual program.

Water withdrawal permit applicants can consult the NYSDEC publication entitled "A Survey of Methods for Implementing and Documenting Water Conservation in New York".

The American Water Works Association (AWWA) is also an excellent source of information regarding water conservation practices and procedures. Information ranging from technical manuals to online resources and tools can be found at http://www.awwa.org.

Clear Entire Form

Appendix C

New York State Department of Environmental Conservation

Division of Water, Bureau of Water Resources Management, 625 Broadway, Albany, NY 12233-3508

Water Withdrawal Reporting Form

Due by March 31 each year

Prior to filling out this form please read the instructions on last page

(This form not for Agricultural Facilities)

Section 1

Reporting Year: 2012

Facility Name: Ravenswood Generating Station | Facility Street Address: 38-54 Vernon Boulevard

City: Long Island City | Zip: 11101 | Town: | County: Queens

Contact Name: Gregory Pryor | Email: gregory_pryor@transcanada.com | Telephone: (718) 706-2863

	Source Name	Source Type	Well Depth	Ft	Max Rate	Units
1	East River	S			1,514.5	MGD
2	NYC DEP	P				GPM
3						
4						
5						
6						
7						
8						
9						

If an interbasin diversion occurs, check this box ☐ and enter information in Section 3

Average Day Withdrawal: 486 MGD | Maximum Day Withdrawal: 1,489.7 MGD | Permitted Withdrawal: MGD

Submitted by: Gregory Pryor | Title: Environmental Specialist | Date: 1/11/2013

Water Withdrawal Category (check one)

- ☐ Agricultural
- ☐ Bottled / Bulk Water
- ☐ Commercial
- ☐ Environmental
- ☐ Industrial
- ☐ Institutional
- ☐ Mine Dewatering
- ☐ Oil / Gas Production

Power Production:

- ☒ Fossil Fuel
- ☐ Nuclear
- ☐ Other Pwr:

- ☐ Public Water Supply

Recreation:

- ☐ Golf Course
- ☐ Snow Making
- ☐ Other Rec:

- ☐ Other:

Reset Form | Print Form | Submit by Email

If you do not receive a confirmation email, please contact AWQRSDEC@gw.dec.state.ny.us or 518 402-8086.

Section 2

Calculation Method: P

M = Metered readings. W = Flow through a weir or flume. P = Flow through a pipe or pump run time. E = Estimated.

UNITS: *Must be in gallons per month*	January	February	March	April	May	June
Withdrawn	4,180,896,000	2,783,808,000	11,009,952,000	8,614,800,000	10,453,248,000	14,111,136,720
Transferred / Imported	9,552,777	8,833,832	10,944,208	14,300,667	11,448,093	15,332,994
Consumed	8,160,434	7,446,808	8,048,021	12,381,599	9,174,934	13,485,679
Returned	4,165,584,343	2,778,859,024	10,952,368,187	8,580,431,068	10,412,897,159	14,065,752,035
Diversions In / Out if any	0	0	0	0	0	0

	July	August	September	October	November	December
Withdrawn	29,130,912,720	21,968,064,000	13,070,304,000	26,265,312,000	24,259,392,000	11,556,288,000
Transferred / Imported	19,580,467	15,648,019	10,588,747	18,948,492	19,466,268	11,703,408
Consumed	16,929,661	13,191,527	8,628,313	15,356,435	16,572,638	10,114,834
Returned	29,034,466,581	21,891,608,492	13,027,912,434	26,176,744,057	24,183,433,630	11,516,980,574
Diversions In / Out if any	0	0	0	0	0	0
Describe location of returned water	Water is returned to the East River via SPDES outfalls 001, 008, 009, and 010. These points are annotated as discharges 1-4 respectively on the attached map.					

72

Section 3

General Map Required

Please submit a map showing location of all withdrawals and any points of return flow. Label all points. **A map is not necessary if one was submitted in a previous year and no changes have occurred.** Precise locations will remain confidential.

A paper copy of a USGS map or other high quality map or an electronically generated map can be faxed, mailed, or emailed. For electronic maps a suggested website is described below:
(1) Go to the USGS National Map site [http://usgs01.srv.mst.edu/store3/digital_download/mapping_ap.jsp].
Type the address of the agricultural facility into the search box.
(2) Zoom in and use any of the map-type choices to best confirm your location.
(3) Designate water withdrawal locations by clicking on the map to add a marker(s).
(4) For surface water withdrawals, use the "Topo" tab.
(5) Add a marker to designate the location of any related dams, weirs, or diversion structures.
(6) Print. Manually label the name of each marked source.

Submit your map to DEC in one of the following ways:

- Print and mail or fax to 518 402-8290.
- Print, scan and email to awqrsdec@gw.dec.state.ny.us.
- Copy electronically and email to awqrsdec@gw.dec.state.ny.us.

NOTE: Precise locations will be kept confidential.

Interbasin Diversions

Fill out this section only if water is being transferred between major drainage basins. To determine basin ID, click the link below, highlighted in blue. Enter basin ID where requested. Use drop down menu. Describe location of originating and receiving sites (e.g. Town water intake at north end of Pleasant Lake to southwestern corner of Stony Reservoir near Route 12).

Originating Major Drainage Basin http://www.dec.ny.gov/lands/56800.html	Receiving Major Drainage Basin http://www.dec.ny.gov/lands/56800.html
Enter Basin ID here:	Enter Basin ID here:
Originating Site Description:	Receiving Site Description:

Section 4

Water Conservation and Efficiencies

All permitted water withdrawal systems must have a Water Conservation Program.

Section A: For Permitted Public Water Supply Facilities Only - All others use Section B

Are all sources of supply including major interconnections equipped with master meters? ☐Yes ☐No

What percentage of your system is metered? ____ %. Residential charge per 1000 gallons of water: $____

How often were customer meters read this past year (e.g. quarterly, yearly)? ____

Number of water service connections: ____ Total population served: ____

How many customer meters were recalibrated and/or replaced in the past year? ____

Miles of pipe in water distribution system: ____ Length of pipe replaced in the past year: ____ ____

Miles of pipe on which leak detection was performed using sonic listening equipment: ____ Type of equipment used: ____

How many system-wide water audits were performed in the past year? ____

What percentage of the water withdrawn was not billed to customers? ____ %. Lost to distribution system leakage? ____ %

Was information about household water saving devices and ways to reduce water use distributed to residential customers? ☐Yes ☐No

Was water conservation information about promoting recycling and reuse distributed to industrial and commercial customers? ☐Yes ☐No

Do you have lawn sprinkling time restrictions (e.g. odd/even days) during periods of peak demand? ☐Yes ☐No

Do you have a plan that takes progressive steps to further reduce outdoor water use during drought conditions with an ordinance or procedure to assure compliance? ☐Yes ☐No

Please review your permit(s) for any specific water conservation conditions and report below on progress made in past year.

Section B: Water Withdrawal Reporting and Registered Facilities (see permitting schedule in **NYCRR Part 601.7**)

Are all sources of supply including major interconnections equipped with master meters? ☐Yes ☒No

How often were master meters read in the past year? Monthly

How often were master meters calibrated in the past year? 0

Are there secondary meters located within the facility or system? ☒Yes ☐No

Identify other water conservation and efficiency measures currently used in your system (e.g. Best Management Practices such as recycling process and cooling waters, use of drip irrigation and moisture probes, utilizing storm water runoff and reclaimed wastewater or conducting facility water audits):

The station has conducted major capital upgrades on the circulating water system in order to retrofit circulating water pumps with variable speed drives and vacuum priming systems to allow for variable speed operation. The variable speed operation allows for reductions in water use during periods of reduced load, cool weather conditions, or when full circulating water flow is not required. The circulating water pumps take suction off the East River and provide once through cooling water for the condensers.

Section 5	Instructions / Definitions
Agricultural Purpose	The practice of farming for crops, plants, vines and trees, and the keeping, grazing or feeding of livestock, for sale of livestock or livestock products. Agricultural facilities must use the form titled. "Registration and Water Withdrawal Reporting Form for Agricultural Facilities".
Public Water Supply	Supply water to the public. Examples include: municipality, hotel, apartment, restaurant, church, campground, etc.
Source Name	Name of well or surface water body (e.g., Well No. 1, Alcove Reservoir, etc.). List all sources including unused or back-up wells.
Source Type	S = Stream or River. L = Pond or Lake. R = Reservoir. BW = Bedrock Well. UW = Unconsolidated Well (e.g., sand and gravel). SP = Spring. P = Purchased. Use drop down menu.
Well Depth	Total depth in feet below ground surface. Leave blank for surface sources.
Max Rate	Maximum potential withdrawal rate of the water source. Will be equal or greater than Permitted Rate.
Units (Max Rate)	Gallons per minute (gpm), gallons per day (gpd), or million gallons per day (mgd). Use drop down menu.
Average Day Withdrawal	Total amount withdrawn during reporting year divided by total days withdrawn (e.g., for a public water supply 365 million gallons/365 days = 1 mgd).
Maximum Day Withdrawal	Largest single day withdrawal rate of the source during the reporting year.
Permitted Rate	If unknown, contact NYSDEC at AWQRSDEC@gw.dec.state.ny.us or 518-402-8182.
Calculation Method	M = metered readings. W = flow through a weir or flume. P = flow through a pump or pump run time. E = estimated.
Withdrawn	Amount of water removed from all sources.
Transferred/Imported	Amount of water brought in from or sent to another facility, includes bulk sales. For transferred water use a negative sign.
Consumed	Amount of water not returned (e.g. water incorporated into a product or lost through evaporation). Public water suppliers must use metered sales to customers.
Returned	Amount of water discharged to a water treatment system or discharged back to the environment.
Diversions In/Out	Amount of water, if any, diverted from/to another major drainage basin. For Diversions Out, use a negative (-) sign.
Location of Returned Water	State the general area where returned water is discharged. Example: "Hudson River near Poughkeepsie", "Groundwater near Auburn".
Major Drainage Basins	Report only "Major Basin" transfers. Use the internet link available on the form (labeled "Click Here To Determine Basin ID") and enter Basin ID into the box indicated (use drop down menu). Describe the location of originating withdrawal and receiving discharge. Be as specific as possible.
Water Audit	A water audit is a thorough examination of the accuracy of water records and system control equipment to determine water system efficiency and to identify, quantify, and verify water and revenue losses. Water audits are beneficial in identifying the amount of unaccounted-for water.

Appendix D

JOINT APPLICATION FORM

For Permits/Determinations to undertake activities affecting streams, waterways, waterbodies, wetlands, coastal areas and sources of water withdrawal.

New York State

You must separately apply for and obtain separate Permits/Determinations from each involved agency prior to proceeding with work. Please read all instructions.

US Army Corps of Engineers (USACE)

APPLICATIONS TO

1. NYS Department of Environmental Conservation

Check all permits that apply:

- ☐ Stream Disturbance
- ☐ Excavation and Fill in Navigable Waters
- ☐ Docks, Moorings or Platforms
- ☐ Dams and Impoundment Structures
- ☐ 401 Water Quality Certification
- ☐ Freshwater Wetlands
- ☐ Tidal Wetlands
- ☐ Coastal Erosion Management
- ☐ Wild, Scenic and Recreational Rivers
- ☑ Water Withdrawal
- ☐ Long Island Well
- ☐ Aquatic Vegetation Control
- ☐ Aquatic Insect Control
- ☐ Fish Control
- ☐ Incidental Take of Endangered/Threatened Species

☑ I am sending this application to this agency.

2. US Army Corps of Engineers

Check all permits that apply:

- ☐ Section 404 Clean Water Act
- ☐ Section 10 Rivers and Harbors Act
- ☐ Nationwide Permit(s) - Identify Number(s):

Preconstruction Notification - ☐ Y / ☐ N

☐ I am sending this application to this agency.

3. NYS Office of General Services

Check all permits that apply:

- ☐ State Owned Lands Under Water
- ☐ Utility Easement (pipelines, conduits, cables, etc.)
- ☐ Docks, Moorings or Platforms

☐ I am sending this application to this agency.

4. NYS Department of State

Check if this applies:

- ☐ Coastal Consistency Concurrence

☐ I am sending this application to this agency.

5. Name of Applicant (use full name)

TC Ravenswood LLC

Mailing Address: 38-54 Vernon Blvd.

Post Office City: Long Island City

State: NY Zip Code: 11101

Telephone (daytime): 718.706.2702

Email: Kenneth_Yager@transcanada.com

Applicant must be:

- ☑ Owner
- ☐ Operator
- ☐ Lessee

(check all that apply)

Taxpayer ID (if applicant is NOT an individual): 11-3484082

6. Name of Facility or Property Owner (if different than Applicant)

Mailing Address:

Post Office City:

State: Zip Code:

Telephone (daytime): Email:

7. Contact/Agent Name

Kenneth Yager

Company Name: TC Ravenswood LLC

Mailing Address: 38-54 Vernon Blvd

Post Office City: Long Island City

State: NY Zip Code: 11101

Telephone (daytime): 718.706.2863

Email: Kenneth_Yager@transcanada.com

8. Project / Facility Name

Ravenswood Generating Station

Property Tax Map Section / Block / Lot Number: Block 357 Lot 1

Project Location - Provide directions and distances to roads, bridges and bodies of waters:

Ravenswood cooling water intakes located on the shoreline of the East River. North of the Queensboro Bridge and South of the Roosevelt Island Bridge.

Street Address, if applicable: 38-54 Vernon Blvd.

Post Office City: Long Island City State: NY Zip Code: 11101

Town / Village / City: Long Island City

County: Queens

Name of USGS Quadrangle Map: Central Park

Stream/Water Body Name: East River

Location Coordinates: Enter NYTMs in kilometers, **OR** Latitude/Longitude

NYTM-E	NYTM-N	Latitude	Longitude
		40 45' 41"	73 56' 39"

For Agency Use Only DEC Application Number: USACE Number:

JOINT APPLICATION FORM - PAGE 2 OF 2

Submit this completed page as part of your Application.

9. **Project Description and Purpose:** Provide a complete narrative description of the proposed work and its purpose. Attach additional page(s) if necessary. Include: description of current site conditions and how the site will be modified by the proposed project; structures and fill materials to be installed; type and quantity of materials to be used (i.e., square ft of coverage and cubic yds of fill material and/or structures below ordinary/mean high water) area of excavation or dredging, volumes of material to be removed and location of dredged material disposal or use; work methods and type of equipment to be used; pollution control methods and mitigation activities proposed to compensate for resource impacts; and where applicable, the phasing of activities. **ATTACH PLANS ON SEPARATE PAGES.**

The Ravenswood Power Station has three electric generating units that utilize once through cooling water intake structure. Circulating Water Pumps (CWP) take suction from the East River and circulate water through the condensor to condense exausted steam from the low pressure turbine. Water withdrawn is then return to the East River via SPDES permit NY 0005193. No modifications or maintenance to the water withdrawal system is proposed.

Proposed Use: ☐ Private ☐ Public ☑ Commercial	Proposed Start Date:	Estimated Completion Date:

Has Work Begun on Project? ☑ Yes ☐ No If Yes, explain.

The Ravenswood Generating station has been in operation since 1963.

Will Project Occupy Federal, State or Municipal Land? ☐ Yes ☑ No If Yes, please specify.

10. List Previous Permit / Application Numbers (if any) and Dates:

11. Will this project require additional Federal, State, or Local Permits including zoning changes? ☑ Yes ☐ No If yes, please list:

NYCRR Part 601 Water Withdrawal Permit

12. **Signatures.** If applicant is not the owner, both must sign the application.

I hereby affirm that information provided on this form and all attachments submitted herewith is true to the best of my knowledge and belief. False statements made herein are punishable as a Class A misdemeanor pursuant to Section 210.45 of the Penal Law. Further, the applicant accepts full responsibility for all damage, direct or indirect, of whatever nature, and by whomever suffered, arising out of the project described herein and agrees to indemnify and save harmless the State from suits, actions, damages and costs of every name and description resulting from said project. In addition, Federal Law, 18 U.S.C., Section 1001 provides for a fine of not more than $10,000 or imprisonment for not more than 5 years, or both where an applicant knowingly and willingly falsifies, conceals, or covers up a material fact; or knowingly makes or uses a false, fictitious or fraudulent statement.

	Signature of Applicant	Printed Name	Title	Date
		Kenneth A Yager	Compliance Mgr.	7/31/2013
	Signature of Owner	Printed Name	Title	Date
	Signature of Agent	Printed Name	Title	Date

For Agency Use Only **DETERMINATION OF NO PERMIT REQUIRED**

Agency Project Number _____

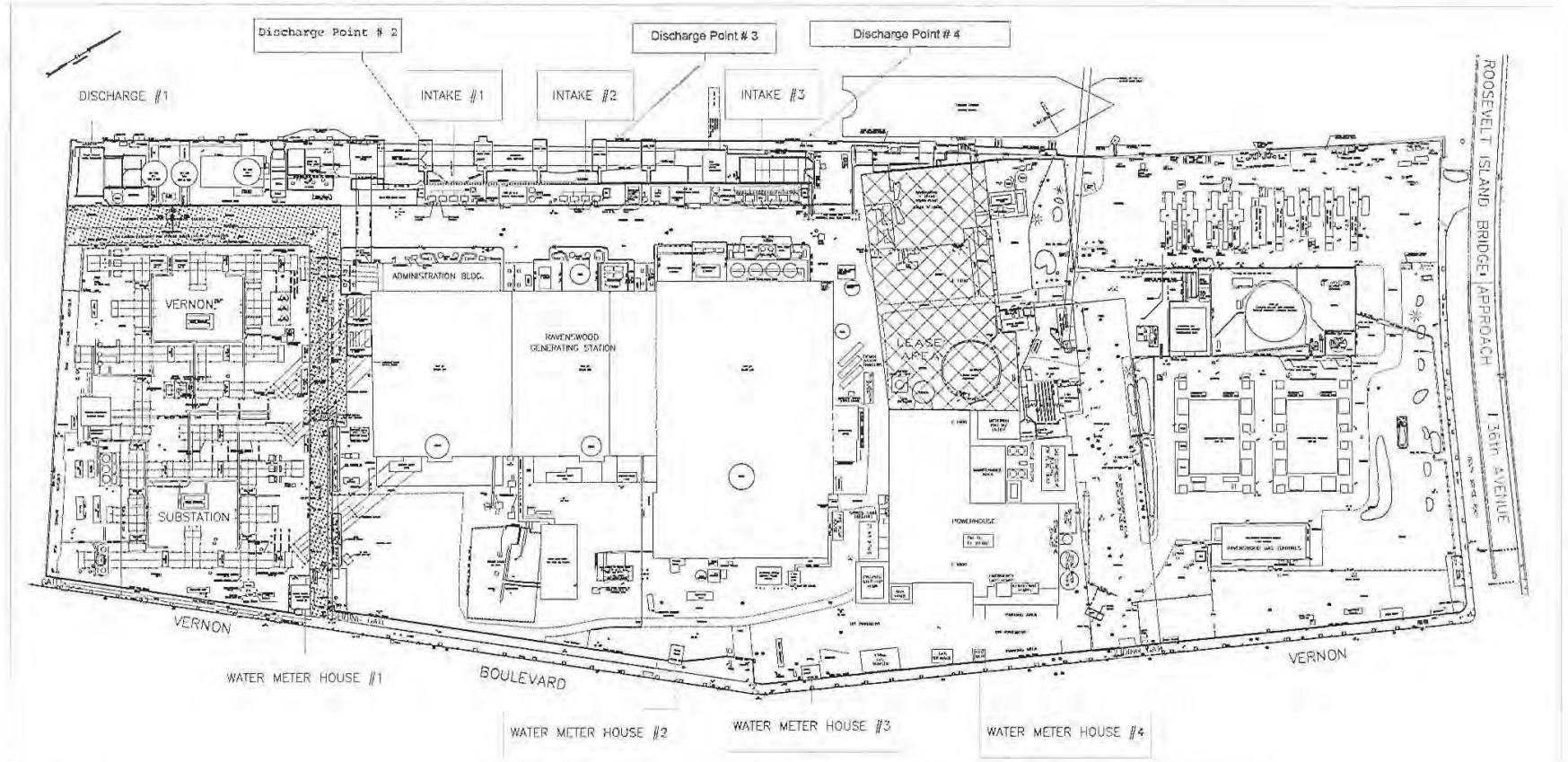
_____ (Agency Name) has determined that No Permit is required from this Agency for the project described in this application.

Agency Representative: Name (printed) _____ Title _____

Signature _____ Date _____

Figure 1

Ravenswood Generating Station
General Map 601.10(b)



Imported	Discharge/Return Points	Withdrawal from East River
Water Meter House # 1-NYC DEP Water Supply	Discharge Point #1-SPDES Outfall 001	Intake # 1- Unit 10 Water Intake
Water Meter House # 2-NYC DEP Water Supply	Discharge Point #2-SPDES Outfall 008	Intake # 2- Unit 20 Water Intake
Water Meter House # 3-NYC DEP Water Supply	Discharge Point #3-SPDES Outfall 009	Intake # 3-Unit 30 Water Intake
Water Meter House #4-NYC DEP Water Supply	Discharge Point #4-SPDES Outfall 010	

80

Figure 2

Source: USGS Central Park, NY-NJ 2013

Jacqueline Kennedy
Onassis Reservoir
Middle
Ground
Stanley
Hennessy
Hog Back
Holmes
Rock
Vega
Reef
Ravenswood

Figure 3

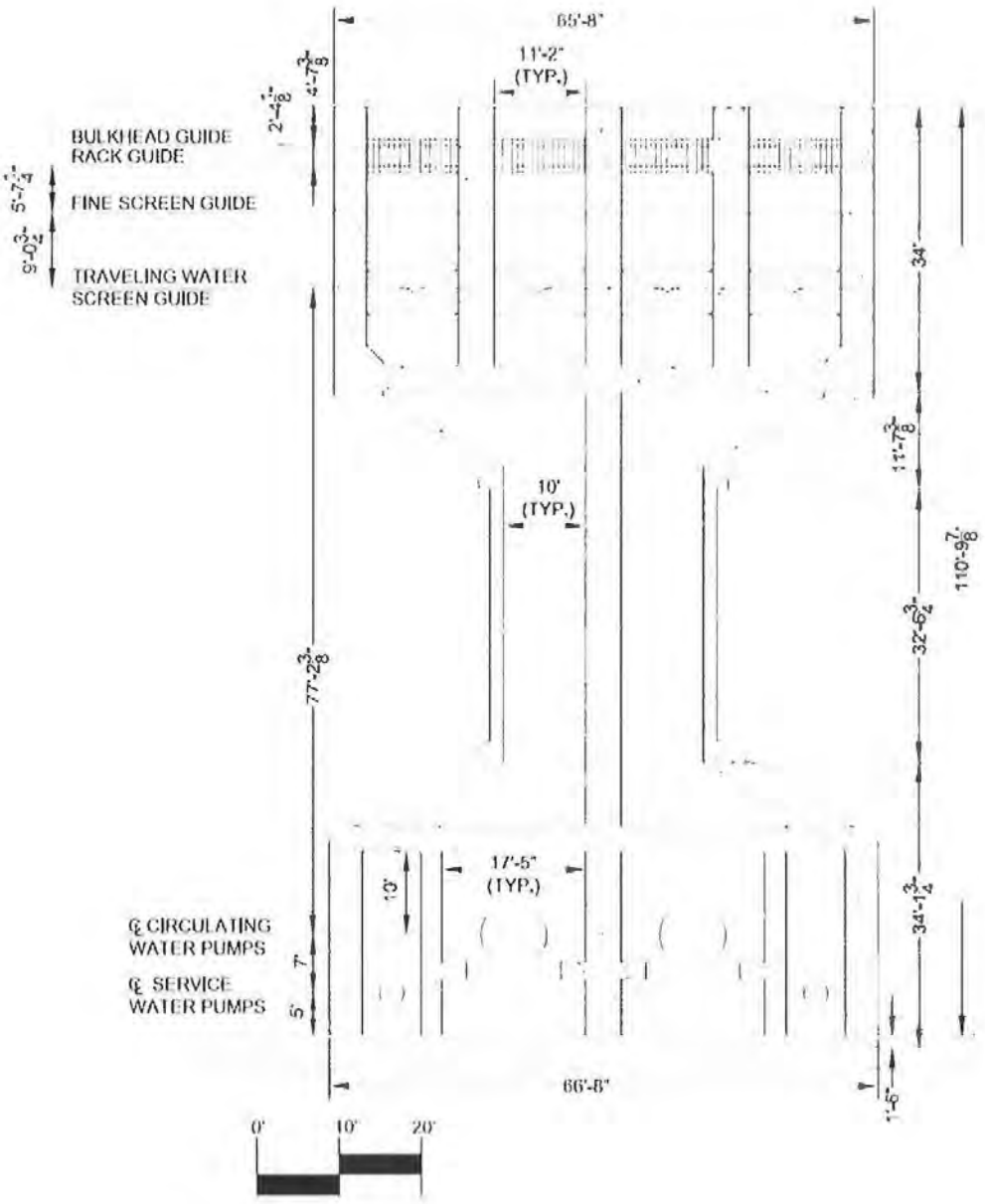


Figure 3 – Ravenswood Generating Station Unit 10 CWIS – Plan
(Unit 20 is Identical)

Figure 4

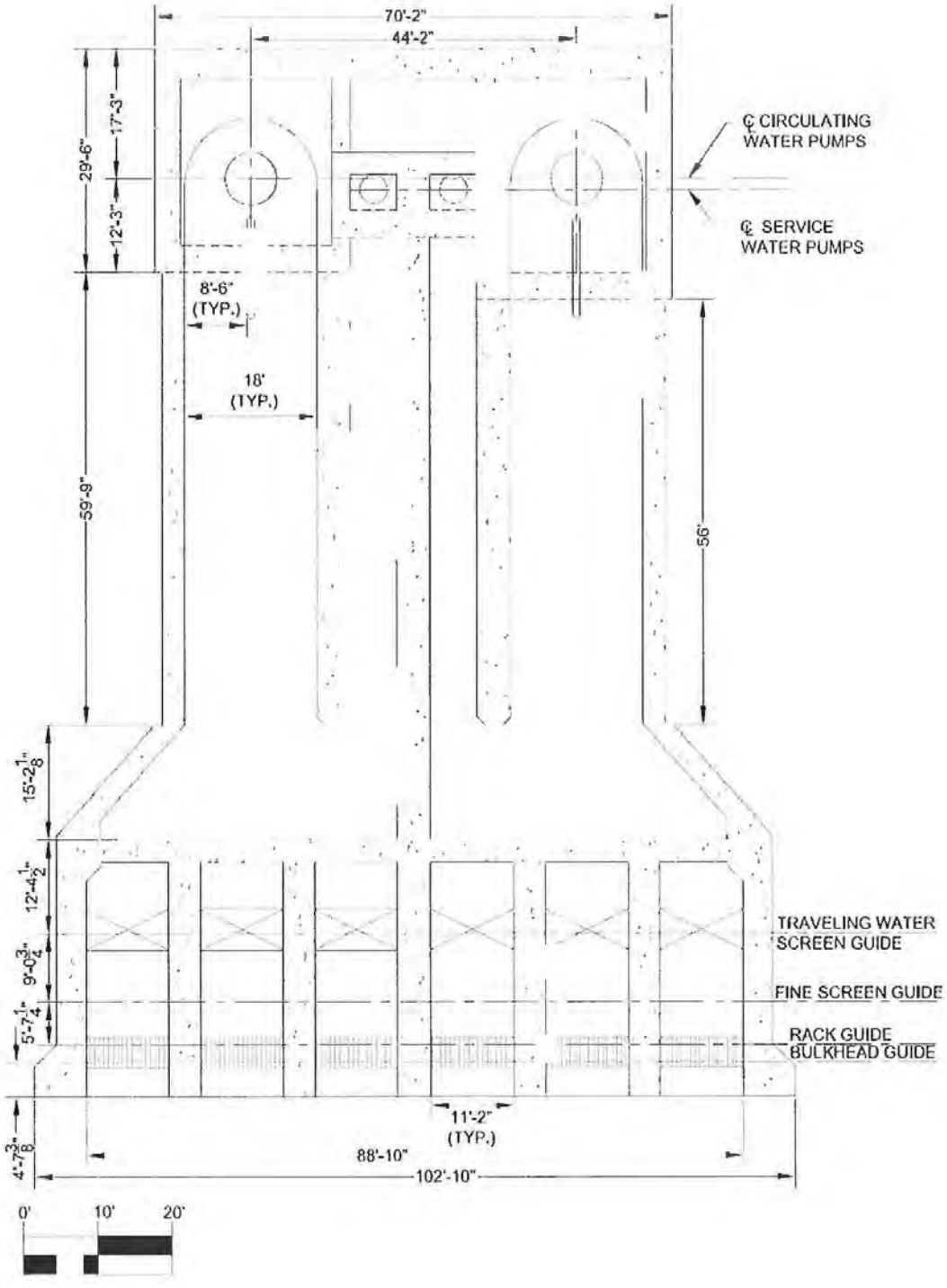


Figure 4 – Ravenswood Generating Station Unit 30 CWIS – Plan

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION ("DEC")
NOTICE OF COMPLETE APPLICATION, DATED AUGUST 1, 2013

THIS IS NOT A PERMIT

New York State Department of Environmental Conservation
Notice of Complete Application

Date 8/1/2013

Applicant TC RAVENSWOOD LLC
110 TURNPIKE RD STE 203
WESTBOROUGH, MA 01581

Facility RAVENSWOOD GENERATING STATION
38-54 VERNON BLVD
QUEENS , NY 11101

Application ID 2-6304-00024/00054

Permit(s) Applied 1 - Water Withdrawal Non-public

Project is located in QUEENS COUNTY

Project Description INITIAL 601 WW PERMIT

Uniform Procedures Act

This is to advise you that your application for the permit(s) listed above is complete. It does not signify approval of your application for permit. Additional information may be requested from you at a future date if it is needed to reach a decision on your application. It has been determined that your application is a minor project. A decision is due to you within 45 days of the date of this notice.

State Environmental Quality Review (SEQR) Determination

Project is not subject to SEQR because it is a Type II action

For further information please contact:

KENT P SANDERS, NYSDEC
625 BROADWAY
ALBANY, NY 12233
(518) 402-9178

cc: File
ECC Only:
S. Mitchell, BWP
E. Schmitt, BWQM
M. Holt, BWQM

ENVIRONMENTAL NOTICE BULLETIN ("ENB") NOTICE OF PUBLIC COMMENT PERIOD ON RAVENSWOOD APPLICATION FOR INITIAL PERMIT, DATED AUGUST 7, 2013
[88- 96]

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

ENB Region 2 Completed Applications 08/07/2013

Region 2 SEQR and Other Notices
Region 2 SPDES Renewals

Kings County

Applicant:

Poly Craft Industries Corp
40 Ranick Rd
Hauppauge, NY 11788 -4209

Facility:

Poly Craft Industries Corp
12 Franklin St
Brooklyn, NY 11222

Application ID:

2-6101-00090/00005

Permit(s) Applied for:

Article 19 Air State Facility

Project is Located:

Brooklyn, Kings County

Project Description:

The Department has made a tentative determination to approve an application for Emission Reduction Credits (ERCs) for the permanent closing of the referenced facility. ERCs being applied for are from past emission reductions resulting from a facility shut down and enforced by the surrender of that facility's permit. The ERCs created were based on emissions compliant with the RACT requirements of 6 NYCRR Part 234. DEC proposes to approve emission reduction credits as follows: VOCs - 15.5 tons. The application and relevant supporting materials are available for review during normal business hours at the DEC office provided in this notice.

Availability of Application Documents:

Filed application documents, and Department draft permits where applicable, are available for inspection during normal business hours at the address of the contact person. To ensure timely service at the time of inspection, it is recommended that an appointment be made with the contact person.

State Environmental Quality Review (SEQR) Determination:

Project is not subject to SEQR because it is a Type II action.

SEQR Lead Agency: None Designated

State Historic Preservation Act (SHPA) Determination:

The proposed activity is not subject to review in accordance with SHPA. The permit type is exempt or the activity is being reviewed in accordance with federal historic preservation regulations.

Coastal Management:

This project is not located in a Coastal Management area and is not subject to the Waterfront Revitalization and Coastal Resources Act.

Opportunity for Public Comment:

Comments on this project must be submitted in writing to the Contact Person no later than *Sep 06, 2013*.

Contact:

Elizabeth A Clarke
NYSDEC Region 2 Headquarters
47-40 21st St
Long Island City, NY 11101
(718)482-4997
r2dep@gw.dec.state.ny.us

Applicant:

Wildlife Conservation Society
2300 Southern Blvd
Bronx, NY 10460 -1099

Facility:

WCS - New York Aquarium
502 Surf Ave
Brooklyn, NY 11224

Application ID:

2-6107-00084/00003

Permit(s) Applied for:

Article 17 Titles 7 & 8 Industrial SPDES - Surface Discharge
Article 15 Title 15 Long Island Well Temporary Dewatering

Project is Located:

Brooklyn, Kings County

Project Description:

The Department has made a tentative determination to approve this application for a new Long Island Well permit for installation of a temporary dewatering system to facilitate construction of a new shark exhibit with a withdrawal of up to 5,558,400 gallons per day and a modification of an existing SPDES permit to allow for the temporary discharge of up to an additional 3,850,000 gallons per day of groundwater from the shark tank construction. The additional 1,698,400 gallons per day will be discharged to the storm sewers. The SPDES permit is also being modified to include a requirement for a new Best Management Practices Plan for all operations at the Aquarium. A draft permit is available for inspection and comment at the regional office.

Availability of Application Documents:

Filed application documents, and Department draft permits where applicable, are available for inspection during normal business hours at the address of the contact person. To ensure timely service at the time of inspection, it is recommended that an appointment be made with the contact person.

State Environmental Quality Review (SEQR) Determination:

Project is an Unlisted Action and will not have a significant impact on the environment. A Negative Declaration is on file. A coordinated review was not performed.

SEQR Lead Agency: None Designated

State Historic Preservation Act (SHPA) Determination:

Cultural resource lists and map have been checked. No registered, eligible or inventoried archaeological sites or historic structures were identified at the project location. No further review in accordance with SHPA is required.

Coastal Management:

This project is located in a Coastal Management area and is subject to the Waterfront Revitalization and Coastal Resources Act.

Opportunity for Public Comment:

Comments on this project must be submitted in writing to the Contact Person no later than *Sep 06, 2013*.

Contact:

Steve A Watts
NYSDEC Region 2 Headquarters
47-40 21st St
Long Island City, NY 11101
(718)482-4997
r2dep@gw.dec.state.ny.us

New York County

Applicant:

11 West 42nd Street Limited Partnership
520 Madison Ave
New York, NY 10022 -4213

Facility:

Power Plant Building
11 West 42nd St
New York, NY 10036

Application ID:

2-6202-00153/00004

Permit(s) Applied for:

Article 19 Air State Facility

Project is Located:

Manhattan, New York County

Project Description:

The Department has made a tentative determination to approve an application for an existing facility that formerly held an Air State Facility Permit for Small Combustion Installations. The cogeneration facility supplies all electric power to a building consisting of eight natural gas fueled engines powering electric generators. There is a boiler that uses #2 fuel oil and a CFC operated air conditioning unit. The facility's NO_x emissions are limited to 24.9 tons per year. The facility is subject to the provisions of State Facility requirements specified under 6NYCRR 201-7.

The application, draft permit, relevant supporting materials and regulations are available for review during normal business hours at the DEC office provided in this notice. Comments of support or objection may be made by filing a written statement by the deadline date indicated. DEC may schedule a public hearing based upon an evaluation of the nature and scope of any written objections raised. Hearing notices will contain instructions on filing for party status and submitting comments.

Availability of Application Documents:

Filed application documents, and Department draft permits where applicable, are available for inspection during normal business hours at the address of the contact person. To ensure timely service at the time of inspection, it is recommended that an appointment be made with the contact person.

State Environmental Quality Review (SEQR) Determination:

Project is an Unlisted Action and will not have a significant impact on the environment. A Negative Declaration is on file. A coordinated review was performed.

SEQR Lead Agency: NYS Department of Environmental Conservation

State Historic Preservation Act (SHPA) Determination:

A cultural resources survey has been completed. The report of the survey is on file. No archaeological sites or historic structures were identified at the project location. No further review in accordance with SHPA is required.

Coastal Management:

This project is not located in a Coastal Management area and is not subject to the Waterfront Revitalization and Coastal Resources Act.

Opportunity for Public Comment:

Comments on this project must be submitted in writing to the Contact Person no later than *Sep 06, 2013*.

Contact:

Elizabeth A Clarke
NYSDEC Region 2 Headquarters
47-40 21st St
Long Island City, NY 11101
(718)482-4997
r2dep@gw.dec.state.ny.us

Queens County

Applicant:

TC Ravenswood LLC
110 Turnpike Rd Ste 203
Westborough, MA 01581

Facility:

Ravenswood Generating Station
38-54 Vernon Blvd
Queens, NY 11101

Application ID:

2-6304-00024/00054

Permit(s) Applied for:

Article 15 Title 15 Water Withdrawal Non-public

Project is Located:

Queens, Queens County

Project Description:

The department has made a tentative determination to issue an initial water withdrawal permit to the above-referenced applicant authorizing a withdrawal of water in the amount of approximately 1.5 billion gallons per day from the East River, Water Index Number ER (0.3 - 10.1), Class I, for use as cooling water for power production. WWA # 11,660

Availability of Application Documents:

Filed application documents, and Department draft permits where applicable, are available for inspection during normal business hours at the address of the contact person. To ensure timely service at the time of inspection, it is recommended that an appointment be made with the contact person.

State Environmental Quality Review (SEQR) Determination:

Project is not subject to SEQR because it is a Type II action.

SEQR Lead Agency: None Designated

State Historic Preservation Act (SHPA) Determination:

The proposed activity is not subject to review in accordance with SHPA. The permit type is exempt or the activity is being reviewed in accordance with federal historic preservation regulations.

Coastal Management:

This project is not located in a Coastal Management area and is not subject to the Waterfront Revitalization and Coastal Resources Act.

Opportunity for Public Comment:

Comments on this project must be submitted in writing to the Contact Person no later than *Aug 22, 2013*.

Contact:

Andrea Sheeran
NYSDEC Headquarters
625 Broadway
Albany, NY 12233
(518)402-9167
depprmt@gw.dec.state.ny.us

Applicant:

Dayton Bch Park # 1 Corporation
8600 Shore Front Parkway
Far Rockaway, NY 11693 -1854

Facility:

Dayton Beach Park # 1 Corporation

8600 Shore Front Parkway
Far Rockaway, NY 11693

Application ID:

2-6308-00233/00006

Permit(s) Applied for:

Article 19 Air State Facility

Project is Located:

Queens, Queens County

Project Description:

The Department has made a tentative determination to approve an application for an existing facility that formerly held an Air State Facility Permit for Small Combustion Installations. The facility operates combustion installation consisting of five Gibralter boilers installed prior to 6/9/89) and one Federal A.L. Eastmond boiler (installed in 2006). There are two boilers rooms at the facility each containing three boilers. The facility NO_x emissions are limited to 24.9 tons per year. The facility is subject to the provisions of State Facility requirements specified under 6 NYCRR 201-7.

The application, draft permit, relevant supporting materials and regulations are available for review during normal business hours at the DEC office provided in this notice. Comments of support or objection may be made by filing a written statement by the deadline date indicated. DEC may schedule a public hearing based upon an evaluation of the nature and scope of any written objections raised. Hearing notices will contain instructions on filing for party status and submitting comments.

Availability of Application Documents:

Filed application documents, and Department draft permits where applicable, are available for inspection during normal business hours at the address of the contact person. To ensure timely service at the time of inspection, it is recommended that an appointment be made with the contact person.

State Environmental Quality Review (SEQR) Determination:

Project is an Unlisted Action and will not have a significant impact on the environment. A Negative Declaration is on file. A coordinated review was performed.

SEQR Lead Agency: NYS Department of Environmental Conservation

State Historic Preservation Act (SHPA) Determination:

A cultural resources survey has been completed. The report of the survey is on file. No archaeological sites or historic structures were identified at the project location. No further review in accordance with SHPA is required.

Coastal Management:

This project is not located in a Coastal Management area and is not subject to the Waterfront Revitalization and Coastal Resources Act.

Opportunity for Public Comment:

Comments on this project must be submitted in writing to the Contact Person no later than *Sep 06, 2013*.

Contact:

Elizabeth A Clarke
NYSDEC Region 2 Headquarters
47-40 21ST St
Long Island City, NY 11101
(718)482-4997
r2dep@gw.dec.state.ny.us

Richmond County

Applicant:

Richmond University Medical Center
355 Bard Ave
Staten Island, NY 10310

Facility:

Richmond University Medical Center
355 Bard Ave
Staten Island, NY 10310

Application ID:

2-6401-00302/00003

Permit(s) Applied for:

Article 19 Air State Facility

Project is Located:

Staten Island, Richmond County

Project Description:

The Department has made a tentative determination to approve an application for an existing facility that formerly held an Air State Facility Permit for Small Combustion Installations. The facility is a medical institution that operates a combustion installation consisting of three boilers rated at 30.8 mmBtu/hr each firing natural gas or #2 fuel oil, two engine driven chillers and five exempt emergency generators. The facility NO_x emissions are limited to 24.9 tons per year. The facility is subject to the provisions of State Facility

requirements specified under 6 NYCRR 201-7.

The application, draft permit, relevant supporting materials and regulations are available for review during normal business hours at the DEC office provided in this notice. Comments of support or objection may be made by filing a written statement by the deadline date indicated. DEC may schedule a public hearing based upon an evaluation of the nature and scope of any written objections raised. Hearing notices will contain instructions on filing for party status and submitting comments.

Availability of Application Documents:

Filed application documents, and Department draft permits where applicable, are available for inspection during normal business hours at the address of the contact person. To ensure timely service at the time of inspection, it is recommended that an appointment be made with the contact person.

State Environmental Quality Review (SEQR) Determination:

Project is an Unlisted Action and will not have a significant impact on the environment. A Negative Declaration is on file. A coordinated review was performed.

SEQR Lead Agency: NYS Department of Environmental Conservation

State Historic Preservation Act (SHPA) Determination:

A cultural resources survey has been completed. The report of the survey is on file. No archaeological sites or historic structures were identified at the project location. No further review in accordance with SHPA is required.

Coastal Management:

This project is not located in a Coastal Management area and is not subject to the Waterfront Revitalization and Coastal Resources Act.

Opportunity for Public Comment:

Comments on this project must be submitted in writing to the Contact Person no later than *Sep 06, 2013*.

Contact:

Elizabeth A Clarke
NYSDEC Region 2 Headquarters
47-40 21st St
Long Island City, NY 11101
(718)482-4997
r2dep@gw.dec.state.ny.us

Region 2 SEQR and Other Notices
Region 2 SPDES Renewals

ENB NOTICE OF EXTENSION OF PUBLIC COMMENT PERIOD ON RAVENSWOOD APPLICATION FOR INITIAL PERMIT, DATED AUGUST 28, 2013 [97-101]

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

ENB - Region 2 Notices 8/28/2013

Public Notice

Notice of Legislative Public Hearing

Location: New York City Department of Parks and Recreation
Lehman College's Lovinger Theater (In The Music Building)
250 Bedford Park Boulevard West, Bronx, New York 10468

Applicant: New York City Department of Parks and Recreation
Olmstead Center
Flushing Meadows Corona Park
Flushing, New York 11368

Application Number: New York State Department of Environmental Conservation (NYS DEC) Application ID # 2-6001-00014/00008

Project Description and Location: Applicant New York City Department of Parks and Recreation (NYS DPR) has applied to the New York State Department of Environmental Conservation (NYS DEC) for a Freshwater Wetlands Permit to change the surface and width of the Putnam Rail Trail, which runs for approximately 1.5 miles on the Old Putnam Railroad track in Van Cortlandt Park from Van Cortlandt Park South to the New York City's boundary line with Westchester County in the north. The proposed project would remove creosote treated rail ties; add approximately 4 ½ inches of pavement on top of the existing rail ballast to create a ten foot (10') wide asphalt path with an adjacent three foot (3') wide earthen-jogging path on one side and an adjacent two foot (2') wide seeded buffer on the other side of the asphalt path; improve drainage on and beneath the trail by filling existing depressions and cleaning or, where necessary, replacing culverts; remove portions of a chain link fence; install a wooden split rail fence in some areas; install benches and path markers; clean and adapt historic artifacts; restore a train platform; remove trees under six inch caliper within the fence line of the corridor and eight to twenty trees larger than six inch caliper; remove invasive plant species; and install landscape plantings. Sections of the proposed work will take place in areas that are subject to the jurisdiction of the NYS DEC under the Freshwater Wetlands Act. Specifically, some of the modifications will take place in the area adjacent to freshwater wetland YO-1 and in two areas, where the trail traverses Van Cortlandt Lake, the project will take place above that wetland.

SEQRA Status: The project is an "unlisted action" as defined in 6 NYCRR 617.2(ak) that was subject to a coordinated review. NYS DPR served as lead agency and issued a negative declaration on June 8, 2011, based upon its determination that the project will cause no significant adverse environmental impacts. 6 NYCRR 617.2(y), 617.7.

Notice of Complete Application: NYS DEC Staff issued a notice of complete application on April 26, 2013.

Coastal Assessment: The project is not located in the coastal area and therefore no coastal assessment is required.

Public Legislative Hearing

In accordance with the provisions of Parts 621 and 663 of 6 NYCRR, a legislative hearing will be held before Administrative Law Judge (ALJ) Richard A. Sherman to receive unsworn statements from the public on the permit application. **The hearing will be held on Monday, September 23, 2013, at 6:00 p.m. at Lehman**

College's Lovinger Theater (in the Music Building), 250 Bedford Park Boulevard West, Bronx, New York 10468.

All persons, organizations, corporations or government agencies that may be affected by the project are invited to attend the hearing session to submit oral or written comments. It is not necessary to file a written request in advance to speak at the legislative hearing.

The hearing location is reasonably accessible to persons with mobility impairments. Interpreter services shall be made available to deaf persons, at no charge, upon written request to the ALJ at least 10 business days before the hearing.

Written comments may also be sent to Harold Dickey,NYS DEC - Division of Environmental Permits, 47-40 21st Street, Long Island City, NY 11101-5407. **Written comments must be received by Monday, September 23, 2013.**

Document Availability: A copy of the application materials is available for inspection at the NYS DEC's Region 2 office, 47-40 21st Street, Long Island City, NY. (Please contact the Division of Environmental Permits at (718) 482-4997 to arrange a time during normal business hours.)

Applicable Statutory and Regulatory Provisions, Permits Applied For:

This application is being processed pursuant to ECL Article 3 (General Functions), Article 24 (Freshwater Wetlands), Article 70 (Uniform Procedures); as well as 6 NYCRR Part 621 (Uniform Procedures), and Part 663 (Freshwater Wetlands - Permit Requirements).

Contact: Harold Dickey, NYS DEC - Region 2 Office, Division of Environmental Permits, 47-40 21st Street, Long Island City, NY 11101, Phone: (718) 482-4972, E-mail: r2dep@gw.dec.state.ny.us.

Fact Sheet

The New York State Department of Environmental Conservation (NYS DEC) has received a Brownfield Cleanup Program (BCP) application with Draft Remedial Investigation Work Plan from 853 Lexington LLC for a site known as the Former Commercial Laundry, site ID #C224180. This site is located in the City of Brooklyn, within the County of Kings, and is located at 853 Lexington Avenue 11221. **Comments regarding this application must be submitted no later than September 27, 2013.** Information regarding the site, the application, and how to submit comments can be found at: http://www.dec.ny.gov/chemical/60058.html or send comments to: John Durnin, NYS DEC - Division of Environmental Remediation, Remedial Bureau B, 625 Broadway, 12th Floor, Albany, NY 12233-7016, Phone: (518) 402-9768, E-mail: jedurnin@gw.dec.state.ny.us.

To have information such as this notice sent right to your e-mail, sign up with county e-mail listservs available at: www.dec.ny.gov/chemical/61092.html.

Notice of Extension of Public Comment Period

New York State Department of Environmental Conservation (NYS DEC) has extended the Public Comment Period for the below Referenced Project until September 11, 2013. This complete notice was previously published in the August 7, 2013 ENB at: http://www.dec.ny.gov/enb/20130807_reg2.html.

Applicant: Trans Canada Ravenswood LLC
Address: 38-54 Vernon Boulevard
Long Island City, NY 11101

Permits applied for and application numbers: Initial Water Withdrawal Permit,

DECID# 2-6304-00024/00054

Project description and location:

The applicant has applied for an initial permit for the continued withdrawal of 1.5 billion GPD of water for operation of the Ravenswood Generation Station. The Station has been in operation since 1963. No changes in current operations are proposed. NYS DEC has determined that the Facility is eligible for an Initial Permit which are limited to existing facilities for existing water withdrawals over 100,000GPD which were properly reported to the Department.

State Environmental Quality Review (SEQR) Determination:

SEQR - 1 - Project is a Type II action
NYS DEC has determined that the issuance of "initial permits" under ECL section 15-501.9 as implemented by 6 NYCRR 601.7 is a ministerial action and therefore subject to the Type II exemption set out in 6 NYCRR 617.5(c)(19).

SEQR Lead Agency: Not applicable

State Historic Preservation Act (SHPA) Determination:

SHPA - 1 Cultural resource lists and map have been checked. No registered, eligible or inventoried archaeological sites or historic structures were identified at the project location. No further review in accordance with SHPA is required.

Coastal Management:

This project is located in a Coastal Management area and is subject to the Waterfront Revitalization and Coastal Resources Act.

Availability for Public Comment:

The application may be reviewed at the address to the right. Written comments on the project must be submitted to the Contact Person by no later than: September 11, 2013

Contact: Kent P. Sanders, NYS DEC - Division of Environmental Permits, 625 Broadway, Albany, NY 12306-2014, Phone: (518) 402-9178, Fax: (518) 402-9168,
E-Mail depprmt@gw.dec.state.ny.us.

Negative Declaration

Bronx County (Bronx) - The City of New York Housing Preservation and Development (NYC HP), as lead agency, has determined that the proposed Banana Kelly - 755 Dawson Street will not have a significant adverse environmental impact. The action involves an application by NYC HP, on behalf of the project sponsor, Banana Kelly Community Improvement Association, Inc. The project sponsor is requesting construction financing allocated by NYC HP that would include City Capital funds, as well as federal funding from the U.S. Department of Housing and Urban Development (HUD), and the HOME Investment Program (HOME) for the moderate rehabilitation of the building. Additional financing will include a Private Lender First Mortgage, Private Developer Equity, Private Bank Loan, and City Council Fund. The proposed actions would facilitate the rehabilitation of one existing five (5) story residential building, located at 755 Dawson Street, in the Bronx, Community District 2, New York. Under the proposed actions, moderate interior rehabilitation would occur resulting in a total of 11 units of affordable housing.

The proposed project is located adjacent to the Kingwood Historic District, Landmarks Preservation Commission and State/National-Register listed in the Bronx and is therefore considered a Type I action under CERES. The existing building contains 11 units. Under the proposed action, rehabilitation would occur and result in 11 affordable units. The proposed rehabilitation work is intended to address the moderate interior rehabilitation of the building. The New York City's construction financing would be used for some minor layout changes to comply with City, State, and Federal regulations for handicap accessibility otherwise the building will remain as it currently stands. The proposed rehabilitation will not alter the unit count or distribution. No construction related impacts to neighboring properties are anticipated as no ground disturbance or changes to the building's overall floor area, height, or footprint are proposed. For all the reasons discussed above, the proposed project would not result in significant adverse impacts to historic resources.

In the event that any State or Federal funding is sought in connection with the proposed project consultation with New York State Office of Parks Recreation and Historic Preservation (NYS OPRHP) in accordance with Section 106 of the National Historic Preservation Act of 1966 would be required prior to the release of funds and start of construction.

Contact: Patrick Backfield, NYC HP, 100 Gold Street, Room V-3, New York, NY 10038, Phone: (212) 863-5056 Fax: (212) 863-5052 Email: blanch@hpd.nyc.gov.

Positive Declaration and Public Scoping

New York County (Manhattan) - The New York State Department of Health (NYS DOH), as lead agency, has determined that the proposed Jewish Home Lifetree, Manhattan -- Replacement Nursing Facility Project may have a significant adverse impact on the environment and a Draft Environmental Impact Statement must be prepared. Written comments on the draft scope will be accepted October 2, 2013. **A public scoping session will be held on September 17, 2013 at 6:30 p.m. at 120 West 400th Street, New York, NY 10025.** The action involves the NYS DOH's approval of a construction application filed pursuant to Section 2802 of the Public Health Law (PHIL) that would consist of Jewish Home Lifetree (HOLY) in Manhattan's Upper West Side neighborhood. The Proposed Project would result in the construction of a new 414 bed skilled nursing facility in a single newly constructed building on the Project Site with private and semi private rooms, replacing the 514 existing, mostly semi private beds currently located in several older buildings in HOLY, Manhattan's existing nursing facility. This would represent a reduction in the NYS DOH certified bed complement of 100 beds. The Proposed Project would redevelop an existing, approximately 31,804 square foot, 88 space surface accessory parking lot located on the project site with a new, 20 story (plus cellar floor), approximately 376,000 gross square foot building. The project is located at 125 West 10th Street, in the Borough of Manhattan, New York.

Contact: Charles P. Abel, NYS DOH, Corning Tower, Empire State Plaza, Albany, NY 12237, Phone: (518) 402-0967, E-mail: dehumidified@health.state.ny.us.

New York County (Manhattan) - The United Nations Development Corporation, as lead agency, has determined that the proposed The United Nations Consolidation Project, including the United Nations Consolidation Building may have a significant adverse impact on the environment and a Draft Environmental Impact Statement must be prepared. **A public scoping session will be held on September 24, 2013 at 6:00 p.m. at the Farkas Auditorium, NY Langone Medical Center, 550 First Avenue, New York, NY 10016.** The action involves the construction of an approximately 36 story, approximately 930,000 square foot office building for use by United Nations office workers currently using space leased by the United Nations elsewhere in New York City. The Consolidation Building would be located on an approximately 28,850 square foot site, which currently is the western portion of the Robert Moses Playground on the east side of

101

First Avenue (United Nations Plaza) between East 41st Street and East 42nd Street in Manhattan. In conjunction with the Consolidation Building, a tunnel would be constructed to provide direct secure access other than by automobile between the United Nations headquarters campus and the Consolidation Building.

A draft Scope of Work for the Proposed Action is being prepared and will be available on or about August 30, 2013 for involved and interested agencies and the public for review and comment.

Construction is expected to begin in 2015 and to be completed in 2018.

The project is located at 724 First Avenue in Manhattan, New York.

Contact: Frances Huppert, United Nations Development Corporation, Two UN Plaza, 27th Floor, New York, NY 10017, Phone: (212) 888-1618, E-mail: fhuppert@undc.org.

COVER LETTER FOR RAVENSWOOD INITIAL PERMIT, DATED NOVEMBER 15, 2013
[102- 103]

New York State Department of Environmental Conservation
Division of Environmental Permits, 4th Floor
625 Broadway, Albany, NY 12233-1750
Phone: (518) 402-9167 • **Fax:** (518) 402-9168
Website: www.dec.ny.gov

Joe Martens
Commissioner

November 15, 2013

Mr. Kenneth Yager
TC Ravenswood LLC.
110 Turnpike Rd Suite 203
Westborough, MA 01581

RE: DEC #2-6304-0002400054
Ravenswood Generating Station
38-54 Vernon Blvd, Queens County

Dear Mr. Yager;

Based on the May 31,2013 permit application concerning the above-referenced facility, an Initial Water Withdrawal Permit has been issued and is enclosed. Please read the enclosed permit carefully and note the conditions that are included. This permit will be in effect concurrently with the facility's SPDES Permit (NY-0005193) and is scheduled to **expire on October 31, 2017. unless timely renewed.**

The permitted withdrawal volume is up to 1.39 billion gallons per day (gpd), the volume your facility reported to the Department as of February 15, 2012 pursuant to ECL § 15-3301. The maximum permitted withdrawal volume determination in the enclosed Initial Permit is based on the express requirements in ECL § 15-1501.9, which state the following:

> *The department shall issue an initial permit, subject to appropriate terms and conditions as required under this article, to any person not exempt from the permitting requirements of this section, for the maximum water withdrawal capacity reported to the department pursuant to the requirements of title sixteen or title thirty-three of this article on or before February fifteenth, two thousand twelve.*

An increase in the permitted maximum withdrawal volume would require an application for a modification of the enclosed Initial Permit under normal permitting procedures.

Please be advised that the Uniform Procedures Regulations (6 NYCRR Part 621) provide that an applicant may request a public hearing if a permit is denied or contains conditions which are unacceptable to them. Any such request must be made in writing within 30 calendar days of the date of permit issuance and must be addressed to the Regional Permit Administrator at the letterhead address. A copy should also be sent to the Chief Administrative Law Judge at NYSDEC, 625 Broadway, 1st Floor, Albany, NY 12233-1550.

Also note that this permit does not eliminate the need to obtain any other federal, state or local permits or approvals that may be required for this project.

Permit Expiration and Renewal
Any permittee who intends to continue to operate a water withdrawal system beyond the period of time covered in the applicable water withdrawal permit must apply for a renewal of the permit at least 30 days prior to its expiration. As provided for in NYCRR 621.11(l) permit coverage may be extended during Department review pursuant to section 401(2) of the State Administrative Procedures Act for projects that submit timely and sufficient renewal applications.

Should you have any questions regarding your obligations under the permit, please feel free to contact me by phone at (518) 402-9178 or by email at kpsander@gw.dec.state.ny.us.

Sincerely,

Kent P. Sanders
Deputy Chief Permit Administrator

Enclosures: Permit
cc: M. Holt, DOW
C. Conyers, OGC
G. Pryor, Trans Canada Ravenswood LLC

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
Facility DEC ID 2-6304-00024

PERMIT
Under the Environmental Conservation Law (ECL)

Permittee and Facility Information

Permit Issued To:
TC RAVENSWOOD LLC
110 TURNPIKE RD STE 203
WESTBOROUGH, MA 01581
(508) 871-1850

Facility:
RAVENSWOOD GENERATING STATION
38-54 VERNON BLVD
QUEENS, NY 11101

Facility Location: in QUEENS COUNTY **Village:** Long Island City
Facility Principal Reference Point: NYTM-E: 588.961 NYTM-N: 4512.613
Latitude: 40°45'34.8" Longitude: 73°56'45.8"
Project Location: 38-54 Vernon Boulevard
Authorized Activity: This permit authorizes the withdrawal of a supply of water up to 1,390,000,000 gallons per day (GPD) from the East River for once through cooling and other processes related to electrical generation.

Permit Authorizations

Water Withdrawal Non-public - Under Article 15, Title 15
Permit ID 2-6304-00024/00054 (WWA No. 11660)
New Permit Effective Date: 11/15/2013 Expiration Date: 10/31/2017

NYSDEC Approval

By acceptance of this permit, the permittee agrees that the permit is contingent upon strict compliance with the ECL, all applicable regulations, and all conditions included as part of this permit.

Permit Administrator: KENT P SANDERS, Deputy Chief Permit Administrator
Address: NYSDEC HEADQUARTERS
625 BROADWAY
ALBANY, NY 12233

Authorized Signature: Kent P. Sanders Date 11/15/2013

Permit Components

WATER WITHDRAWAL NON-PUBLIC PERMIT CONDITIONS

GENERAL CONDITIONS, APPLY TO ALL AUTHORIZED PERMITS

NOTIFICATION OF OTHER PERMITTEE OBLIGATIONS

WATER WITHDRAWAL NON-PUBLIC PERMIT CONDITIONS

1. **Approval of Completed Works from NYS P.E.** Any new works constructed or modified pursuant to this water withdrawal permit shall be constructed under the general supervision of a person licensed to practice engineering in this state (professional engineer). Upon completion of construction and pre-operational testing, such works may not commence final operation until the professional engineer first certifies in writing to the Department that the works have been constructed in accordance with the issued permit.

2. **Permit Expiration and Renewal** Any permittee who intends to continue to operate a water withdrawal system beyond the period of time covered in the applicable water withdrawal permit must apply for a renewal of the permit at least 30 days prior to its expiration.

3. **Transfer of Ownership of Water Withdrawal Systems** Unless otherwise specified in this permit, a new water withdrawal permit application is required for the acquisition or condemnation of the approved water withdrawal system.

4. **Cooling Water Withdrawals Regulated by SPDES** Nothing in this water withdrawal permit shall supercede the need to, where necessary, obtain an appropriate SPDES permit that allows for the operation of a cooling water intake structure and the discharge of the amounts of water approved by this water withdrawal permit. If any modifications to the location, or capacity of the intake structure are required by the permittee's SPDES permit, permittee must also apply for a modification of this water withdrawal permit to reflect such changes.

5. **Incorporation of the SPDES Water Conservation and Fisheries Protection Measures** Required measures for water conservation and the reduction of impacts to the fisheries resource contained in the Biological Monitoring Requirement Section of the facilities SPDES permit # NY0005193 are hereby incorporated by reference into this permit.

6. **Annual Water Withdrawal Reports** The permittee must submit a Water Withdrawal Reporting Form to the Department's Division of Water, Albany, NY. by March 31st of each year. The form is available on the Department's website and includes information regarding approved sources of water supply, source capacities, average and maximum day water use data and water conservation and efficiencies employed during the past calendar year.

7. **Source Meter Calibration** All source meters or measuring devices shall be calibrated for accuracy at least once each year.

8. **Meter All Sources** The permittee must install and maintain meters or other appropriate measuring devices on all sources of supply used in the system. Source master meters or measuring devices are to be read, and records kept of those readings, on at least a weekly basis. The permittee must maintain records of water withdrawn and consumptive use for each calendar year.

GENERAL CONDITIONS - Apply to ALL Authorized Permits:

1. **Facility Inspection by The Department** The permitted site or facility, including relevant records, is subject to inspection at reasonable hours and intervals by an authorized representative of the Department of Environmental Conservation (the Department) to determine whether the permittee is complying with this permit and the ECL. Such representative may order the work suspended pursuant to ECL 71- 0301 and SAPA 401(3).

The permittee shall provide a person to accompany the Department's representative during an inspection to the permit area when requested by the Department.

A copy of this permit, including all referenced maps, drawings and special conditions, must be available for inspection by the Department at all times at the project site or facility. Failure to produce a copy of the permit upon request by a Department representative is a violation of this permit.

2. **Relationship of this Permit to Other Department Orders and Determinations** Unless expressly provided for by the Department, issuance of this permit does not modify, supersede or rescind any order or determination previously issued by the Department or any of the terms, conditions or requirements contained in such order or determination.

3. **Applications For Permit Renewals, Modifications or Transfers** The permittee must submit a separate written application to the Department for permit renewal, modification or transfer of this permit. Such application must include any forms or supplemental information the Department requires. Any renewal, modification or transfer granted by the Department must be in writing. Submission of applications for permit renewal, modification or transfer are to be submitted to:

Deputy Chief Permit Administrator
NYSDEC HEADQUARTERS
625 BROADWAY
ALBANY, NY12233

4. **Permit Modifications, Suspensions and Revocations by the Department** The Department reserves the right to exercise all available authority to modify, suspend or revoke this permit. The grounds for modification, suspension or revocation include:

a. materially false or inaccurate statements in the permit application or supporting papers;

b. failure by the permittee to comply with any terms or conditions of the permit;

c. exceeding the scope of the project as described in the permit application;

d. newly discovered material information or a material change in environmental conditions, relevant technology or applicable law or regulations since the issuance of the existing permit;

e. noncompliance with previously issued permit conditions, orders of the commissioner, any provisions of the Environmental Conservation Law or regulations of the Department related to the permitted activity.

5. **Permit Transfer** Permits are transferrable unless specifically prohibited by statute, regulation or another permit condition. Applications for permit transfer should be submitted prior to actual transfer of ownership.

NOTIFICATION OF OTHER PERMITTEE OBLIGATIONS

Item A: Permittee Accepts Legal Responsibility and Agrees to Indemnification
The permittee, excepting state or federal agencies, expressly agrees to indemnify and hold harmless the Department of Environmental Conservation of the State of New York, its representatives, employees, and agents ("DEC") for all claims, suits, actions, and damages, to the extent attributable to the permittee's acts or omissions in connection with the permittee's undertaking of activities in connection with, or operation and maintenance of, the facility or facilities authorized by the permit whether in compliance or not in compliance with the terms and conditions of the permit. This indemnification does not extend to any claims, suits, actions, or damages to the extent attributable to DEC's own negligent or intentional acts or omissions, or to any claims, suits, or actions naming the DEC and arising under Article 78 of the New York Civil Practice Laws and Rules or any citizen suit or civil rights provision under federal or state laws.

Item B: Permittee's Contractors to Comply with Permit
The permittee is responsible for informing its independent contractors, employees, agents and assigns of their responsibility to comply with this permit, including all special conditions while acting as the permittee's agent with respect to the permitted activities, and such persons shall be subject to the same sanctions for violations of the Environmental Conservation Law as those prescribed for the permittee.

Item C: Permittee Responsible for Obtaining Other Required Permits
The permittee is responsible for obtaining any other permits, approvals, lands, easements and rights-of-way that may be required to carry out the activities that are authorized by this permit.

Item D: No Right to Trespass or Interfere with Riparian Rights
This permit does not convey to the permittee any right to trespass upon the lands or interfere with the riparian rights of others in order to perform the permitted work nor does it authorize the impairment of any rights, title, or interest in real or personal property held or vested in a person not a party to the permit.

New York State Department of Environmental Conservation
Division of Environmental Permits, 4th Floor
625 Broadway, Albany, NY 12233-1750
Phone: (518) 402-9167 • **Fax:** (518) 402-9168
Website: www.dec.ny.gov

Joe Martens
Commissioner

November 15, 2013

To: Interested Parties and Stakeholders:

Re: Response to Public Comments on Application for Initial Water Withdrawal Permit
DEC #2-6304-0002400054
Ravenswood Generating Station
38-54 Vernon Blvd, Queens County

This letter responds to the public comments received by the New York State Department of Environmental Conservation (NYSDEC) on the above-referenced Initial Water Withdrawal Permit application for the Ravenswood Generating Station located at 38-54 Vernon Blvd, Queens NY. The Department offers these responses because of the public interest in the recently-revised water withdrawal regulations and in the statutorily required "Initial Permits" that are being issued under the revised regulations.

Many public comments were received on the above-referenced Initial Permit application. The comments are available from the Department on request. The public comments have been compiled and are presented below along with the Department's responses.

Comment 1

The Ravenswood Initial Permit application fails to provide information on upstream water withdrawals, safe yield analyses, and passby flow calculations

Response 1

The Department determined that the application was complete on August 1, 2013 after technical review. Some of the items called for in the regulations governing water withdrawal permit application (6 NYCRR § 601.10) are not applicable to the withdrawal. Information on rainfall, safe yield, river flow, contributing watershed size, passby analysis or other upstream water withdrawals, is not germane to the Ravenswood Project as the East River is not, in fact, a river but rather a strait between Long Island Sound and Lower New York Harbor. Information on tidal flows, and intake structure designs was provided in the application.

Comment 2

Ravenswood Fails to Provide an Adequate *Watershed Map*

Response 2

The maps submitted with this application are considered to be adequate for this project.

Comment 3

DEC should reclassify the as a Type I action because the withdrawal is over 2 Million Gallons per day.

Response 3

As provided by ECL §15-1501.9 the Department has no discretion but to issue "initial permits" for the amount of the water withdrawals for users that were in operation and properly reported their withdrawals to the Department as of February 15, 2012. ECL

Under these circumstances, the issuance of the water withdrawal permit here is covered by the Type II category for ministerial actions set out in section 617.5(c)(19) of the Department's SEQR regulations. "Ministerial action" is defined [under the SEQR regulations] as "an action performed upon a given state of facts in a prescribed manner imposed by law without the exercise of any judgment or discretion as to the propriety of the act…" Here, above and beyond the amount of the permitted withdrawal (which is prescribed by statute), the Legislature has restricted the Department's discretion to the standard form permit and the imposition of sound water conservation measures.. Generally, an action may be deemed ministerial, if it could not have been approved or denied on the basis of SEQR's broader environmental concerns. The fact that the withdrawal is for an amount that exceeds the Type I threshold does not remove it from the Type II classification..Items on the Type II list under 617.5(c) provide exemptions from SEQRA irrespective of whether the action is also present on the Type I list unless they contain a limitation that the action cannot "meet or exceed any threshold on the Type I list".

Comment 4

The revised notice recognizes that the project is in fact located in a Coastal Management area and is subject to the Waterfront Revitalization and Coastal Resources Act. Now that this is recognized, it would seem that the DEC's consideration of Ravenswood's application for a water withdrawal permit is premature and should not be undertaken until the NYS Department of State and New York City have ruled on the project's consistency with the relevant State and City coastal management policies, including Policy 18:

Response 4

The Coastal Management Program only applies to Type 1 and Unlisted Actions under SEQR. Type II actions do not require a Coastal Consistency Certification. As a consequence, no coordination with the Department of State is required. It must be recalled the Ravenswood water

withdrawal is not new and as such is not presenting any new impacts to the environment. The Department's action in issuing an initial permit for the withdrawal is mandated by state statute for the existing and reported withdrawals that were previously unregulated.

Comment 5

DEC should not create a class of 'initial permits'.

Response 5

The comment is acknowledged. Initial permits were created by the amendments to New York's water withdrawal law. As cited above, under ECL § 15-1501.9, an initial permit "shall be issued" for existing withdrawals that were properly reported to the Department as of February 15, 2012.

Comment 6

Impacts on the Brooklyn-Queens Sole Source Aquifer Must Be Considered Possible impacts of the heavy withdrawals from the East River by the Ravenswood project right at the edge of the Brooklyn-Queens sole source aquifer must be considered in evaluating the environmental impacts of the project.

Response 6

The overwhelming majority of the water withdrawn is returned to the East River within minutes of the withdrawal and within 50 feet of the intakes. Impacts to the Brooklyn-Queens Aquifer are not anticipated.

Comment 7

Ravenswood Fails to Comply with Proper Water Conservation and Efficiency Measures
The responses contained in the Water Conservation Program (WCP) form attached as Appendix B to the Ravenswood application show that Ravenswood's water conservation measures are inadequate in at least five respects.

Response 7

See the Response to Comment 8 below. A comprehensive water conservation plan suitable for this facility was developed pursuant to the facility's SPDES permit.

Comment 8

Fish Kill Issues Must Be Considered
The issuance of a new type of permit to Ravenswood requires that a SEQRA review be done for this permit. Whatever understanding the parties may have reached with regard to the Ravenswood SPDES permit regarding environmental reviews, that understanding does not

encompass the issuance of a new type of permit that was not in existence at the time the understanding was reached.

Response 8

See the Response to Comment 2 above concerning SEQR. In 2007 the Department issued a Departmental Initiated Modification to require the Ravenswood Generating Station up to reduce entrainment mortality by 65% and impingement mortality by 79% from the full flow baseline of Ravenswood water withdrawal system pursuant to 6 NYCRR § 704.5 and § 316(b) of the federal Clean Water Act (CWA).

The applicant was also required to propose additional measures to further reduce impingement mortality, achieving a 90% reduction from full flow baseline. These levels of impact reduction meet the § 316(b) Phase II Best Technology Available (BTA) performance standards. This modification required numerous studies and evaluations of impacts and alternatives, was subject to SEQRA, and a Negative Declaration of Significance was issued. These permit requirements are binding on the applicant.

As noted in Appendix B of the 2012 SPDES permit for the facility, in determining BTA the Department considered the closed cycle cooling alternative:

> "...after evaluating all of the available alternatives the New York State Department of Environmental Conservation determined that, in combination, the following technologies and operational measures listed here represent the best technologies available for minimizing adverse environmental impacts from the cooling water intake system. Implementation of these items was completed by early 2012...
> ..."
>
> a) Installation of variable speed pumps and ancillary equipment at Ravenswood Units 1, 2 and 3 that will allow for the reduction in cooling water use during periods of low electrical generation;
> b) Scheduling of a planned outage process that will require cooling water pumps to be shut down to reduce impingement and entrainment during periods of non electrical generation;
> c) Upgrades to the existing traveling intake screens at Ravenswood Units 1, 2 and 3 to allow for the continuous operation of all traveling intake screens and construction of low stress fish returns, to increase fish impingement survival;..."

Further, NYCRR Part 601.7(f) requires: Where the water withdrawal system listed in an initial permit application is associated with a project, facility, activity or use that is subject to a SPDES permit or another Department permit, the Department will review the initial permit application in coordination with the SPDES or other permit program, particularly with respect to any pending permit renewals.

Conditions requiring BTA for reducing fish impingement and entrainment and reduced water usage are incorporated in the station's 2012 SPDES permit. The Department has considered

these SPDES permit requirements in its review of the Initial Permit Application for a Water Withdrawal Permit.

Thank you for taking the time to comment on this application. If you have any questions or need further information, please don't hesitate to contact me.

Sincerely,

Kent P. Sanders
Deputy Chief Permit Administrator
Division of Environmental Permit

NEGATIVE DECLARATION
Ravenswood Generating Station
December 11, 2006

Background

The Ravenswood Generating Station, located on the East River, contains three units with rated capacities of 400, 400 and 1027 megawatts. The facility has a combined flow of condenser cooling water and service water of 1457 million gallons per day. The shoreline intake structure consists of 14 intake bays and conventional through flow traveling screens to keep the station's condenser clear. Marine organisims and debris washed off the screens at each unit are returned to the East River through a Department approved, low stress fish return pipe.

Ecological Resource

The East River is part of the Hudson-Raritan Estuary System, extending 170 miles from the dam at Troy, NY to Sandy Hook, NJ. The estuary system connects to the coastal marine water of the New York Bight, between Sandy hook, NJ and Rockaway Point, NY, and to the western end of the Long Island Sound through the East River.

The East River is a tidal strait extending about 16 miles from the battery to Throgs Neck at Long Island Sound. At Hell's Gate, a natural sill divides the strait into two distinct hydrological sections. The upper East River, which connects to Long Island Sound, is broader, more shallow and characterized by more natural shoreline habitat. The Lower East River, where the Station is located, is a narrower 10 mile section, bulkheaded along most of its length. The channel here is steep sided with depths at approximately 35 to 80 feet. Current velocities in this part of the East River are high, with average peak flood and ebb currents at about 4.6-4.7 feet per second, and maximum tidal velocities exceeding 5.5 feet per second (ASA, 2001).

More than 140 species of fish have been reported from the Hudson-Raritan Estuary System, representing marine, estuarine, freshwater and diadromous fish , as well as species adapted to northern and southern climates. More than 50 species of fish, mostly marine in origin, have been identified from studies conducted a series of studies to assess the Station's impact on aquatic resources. Under a 1992 consent order with the Department, Con Edison conducted a series of studies to assess the Station's impact on aquatic resources in the East River and determine best technology available for the cooling water intake system. Impingement and entrainment studies conducted were between 1991 and 1994. Approximately 83,000 fish were estimated to be impinged per year, mainly winter flounder, blueback herring, bay anchovy and grubby. Entrainment studies conducted over that time estimated that an average of 220 million eggs, larvae and juvenile fish were entrained per year, with eggs accounting for approximately 75% of the total. The principal species entrained were four beard rockling, bay anchovy, winter flounder, grubby and silver hake.

Studies required under the consent order determined that several species of impinged fish, including winter flounder, bay anchovy and Atlantic tomcod, experience thermal

stress and possibly increased levels of mortality upon exposure to the high summer temperatures in the cooling water discharge canal. A mark-recapture study was then conducted to determine suitable location(s) to return fish directly to the East River without exposure to the station's thermal discharge. Construction of three fish return pipes, one for each unit, was completed in 2005. The system safely transports impinged fish back to the East River and is the first step in mitigating the impacts of the Station's cooling water intake system. Studies being conducted in 2006, to quantify the survival of fish impinged on the Station's intake screens.

Summary of Permit Modifications

The proposed modifications to the SPDES permit for the Ravenswood Station are being done in accordance with the Department's Environmental Benefit Permit Strategy (EBPS) program. The proposed modifications to the permit include;

Water Quality

- Increased monitoring frequency for Total Residual Chlorine from 3 times weekly to hourly.
- Removal of 01B because it has been diverted through an oil/water separator and discharged through outfall 01A.
- New outfalls 01E, 01F, 01G and 01H were added to address the separate discharges from the carbon filter backwash, pre-filter backwash, boiler blowdown and demineralizer regeneration which were previously included under outfall 01A. Chlorine limit changed from 0.2 to detectability of 0.1 mg/l based on WQ analysis and application of standard.
- Addition of outfall 007 to address the intermittent pumping of accumulated stormwater from the former settling ponds to outfall 001.
- A requirement for pH monitoring was added to outfall 01A.
- The monitoring frequency for arochlors 1254 & 1260 at outfall 004 has been reduced from 2/month to quarterly because historic monitoring has not indicated any concentrations above analytical method detection levels.
- Monitoring of benzene, ethylbenzene, toluene and xylene at outfalls 004 & 006 was revised to a 50 ug/1 limit instead of an action level to be consistent with other permits.
- Monitoring of total suspended solids at outfalls 004 & 006 was added to address solids in these stormwater discharges.

- The unit 1,2 & 3 intake screen wash return discharges have been relocated from outfall 001 to new outfalls 008, 009 & 010

- Monitoring for ammonia was added at outfall 01D.

- The limit for total residual chlorine at outfall 001 has been reduced from 0.2 mg/l to 0.13 mg/l based upon the water quality evaluation. An interim compliance limit of 0.2 mg/l will be allowed until October 31, 2007 while the permittee evaluates the operational changes necessary to comply with the 0.13 mg/l final limit.

- Monitoring requirements and limits for hydrostatic tank testing waters have been revised to reflect current practice. Action limits have been replaced with discharge limits for total chlorine residual, benzene, ethylbenzene, toluene and xylene.

- Additional Requirement 11 was added to require a short term monitoring program for mercury in stormwater from outfall 007.

Biological - Best Technology Available

- Installation of variable speed pumps and ancillary equipment at Ravenswood Units 1, 2 and 3 that will allow for the reduction in cooling water use.

- Scheduling of a planned outage process that will require pumps to be shut down to reduce impingement and entrainment.

- Upgrades to the existing traveling intake screens as Ravenswood units 1, 2 and 3 to allow continuous operation of all traveling intake screens to increase impingement survival.

- Continued use of the Department approved, low stress fish return lines.

Impact Analysis

As indicated above, the Department is proposing to modify the effluent limits and biological requirements of the SPDES permit for the Ravenswood Generating Station. The changes to the water quality portion of the permit including changes in monitoring frequency, additional monitoring requirements and the addition/deletion of outfalls are primarily administrative changes to ensure the permit is consistent with existing requirements and that the permit reflects actual existing operations. For total residual chlorine, the Department is reducing the effluent limitation from .2 mg/l to .13 mg/l. This modification is based on a water quality assessment of the receiving waterbody. The reduced effluent limitation will reduce the overall amount of chlorine discharged to the East River and thus, will reduce the impact of the facility on the resource.

The Department is also proposing the addition of biological requirements. The Department is proposing these conditions to ensure the facility operates in accordance with 6 NYCRR Part 704.5 and Section 316(b) of Clean Water Act. These regulations require that facility minimize impacts from impingement and entrainment on aquatic organisms from the cooling water intake. SEQR has similar requirements in that a project sponsor must minimize impacts to the maximum extent practicable. Further discussion of the measures to be employed to minimize impacts from the facility's cooling water intake structure is provided below.

First, the facility already currently employs a fish-friendly return system to increase the survivability of fish that become impinged on the screen. The current permit modification also requires the installation of variable speed pumps on each unit. The installation of variable speed pumps will allow for the reduction in cooling water use. In addition, the draft permit requires upgrades to the traveling screens on all the units. The improvements will allow for the continuous use of the screens and thereby increase the impingement survival. The draft permit also requires the scheduling of a planned outage process. The facility operator must also propose additional measures to reduce impingement.

All of the above measures will result in the reduction of impingent mortality by 90% and entrainment mortality by 65%. These reductions will result in positive environmental benefits to the aquatic resources of the East River. Further, none of the proposed measures require the physical disturbance of either land or the river bed. The proposed measures will also not impact the water column or any benthic habitat.

Based on all of the above the Department has determined the proposed action will not have a significant impact on the environment.

RAVENSWOOD SPDES DISCHARGE PERMIT # NY-0005193, DATED APRIL 20, 2007 AND EFFECTIVE MAY 1, 2007 [117-137]

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

State Pollutant Discharge Elimination System (SPDES)
DISCHARGE PERMIT

4/19/07

Industrial Code:	4911	SPDES Number:	NY- 0005193
Discharge Class (CL):	03	DEC Number:	2-6304-00024
Toxic Class (TX):	01	Effective Date (EDP):	May 1, 2007
Major Drainage Basin:	17	Expiration Date (ExDP):	April 30, 2012
Sub Drainage Basin:	02	Modification Dates (EDPM):	
Water Index Number:	ER (0.3 - 10.1)		
Compact Area:	IEC		

This SPDES permit is issued in compliance with Title 8 of Article 17 of the Environmental Conservation Law of New York State and in compliance with the Clean Water Act, as amended, (33 U.S.C. §1251 et.seq.)(hereinafter referred to as "the Act").

PERMITTEE NAME AND ADDRESS

Name: **KeySpan Generation, LLC** Attention: **Robert D. Teetz**
Street: **175 East Old Country Road**
City: **Hicksville** State: **NY** Zip Code: **11801**
is authorized to discharge from the facility described below:

FACILITY NAME AND ADDRESS

Name: **Ravenswood Power Station**
Location (C,T,V): **Long Island City** County: **Queens**
Facility Address: **38-54 Vernon Boulevard**
City: **Long Island City** State: **NY** Zip Code: **11101**
NYTM -E: NYTM - N:
From Outfall No.: **001** at Latitude: **40 ° 45 ′ 31 ″** & Longitude: **73 ° 56 ′ 54 ″**
into receiving waters known as: **East River** Class: **I**
and; (list other Outfalls, Receiving Waters & Water Classifications)
01A, 01C, 01D, 01E, 01F, 01G, 01H, 002, 004, 006, 007, 008, 009 & 010 East River Class I

in accordance with: effluent limitations; monitoring and reporting requirements; other provisions and conditions set forth in this permit; and 6 NYCRR Part 750-1.2(a) and 750-2.

DISCHARGE MONITORING REPORT (DMR) MAILING ADDRESS

Mailing Name: **KeySpan Corporation**
Street: **175 East Old Country Road**
City: **Hicksville** State: **NY** Zip Code: **11801**
Responsible Official or Agent: **Timothy Curt** Phone: **516-545-2559**

This permit and the authorization to discharge shall expire on midnight of the expiration date shown above and the permittee shall not discharge after the expiration date unless this permit has been renewed, or extended pursuant to law. To be authorized to discharge beyond the expiration date, the permittee shall apply for permit renewal not less than 180 days prior to the expiration date shown above.

DISTRIBUTION:
Bureau of Water Permits
RWM, Reg.2
RPA, Reg 2
EPA Region II - Jeffery Gratz
EPA Region II - J. Chan-Chen
H. Golub, IEC

Permit Administrator: William R. Adriance
Address: 625 Broadway
Albany NY 12233-1750
Signature: William R. Adriance Date: 4/20/07

ADDITIONAL OUTFALL LOCATION INFORMATION

OUTFALL	DESCRIPTION	LATITUDE	LONGITUDE
01A*	Floor Drains and Fuel Oil Heating System Condensate	40° 45' 31"	73° 56' 54"
01C*	Yard and Roof Drains	40° 45' 38"	73° 56' 54"
01D*	Unit 40 Stormwater, Floor Drains, Air Cooled Condenser Wash Water, Boiler Blowdown, Ion Exchange Regeneration Discharge & Reverse Osmosis Reject Water	40° 45' 38"	73° 56' 54"
01E*	Boiler Make-up Water Carbon Filter Backwash	40° 45' 32"	73° 56' 49"
01F*	Boiler Make-up Water Prefilter Backwash	40° 45' 32"	73° 56' 49"
01G*	Units 10, 20 & 30 Boiler Blowdown	40° 45' 32"	73° 56' 49"
01H*	Boiler Make-up Water Demineralizer Regeneration	40° 45' 32"	73° 56' 49"
002	Stormwater	40° 45' 40"	73° 56' 47"
004	Rainey Tank Farm - Containment Vault and Stormwater	40° 45' 48"	73° 56' 40"
006	Stormwater and Combustion Turbine Dump Tanks	40° 45' 44"	73° 56' 43"
007	Stormwater from Old Settling Ponds	40° 45' 32"	73° 56' 53"
008	Unit 10 Screen Wash Return	40° 45' 33"	73° 56' 50"
009	Unit 20 Screen Wash Return	40° 45' 35"	73° 56' 49"
010	Unit 30 Screen Wash Return	40° 45' 37"	73° 56' 48"

Notes: *Outfalls 01A, 01C, 01D, 01E, 01F, 01G & 01H all combine with the condenser cooling water to discharge via Outfall 001.

PERMIT LIMITS, LEVELS AND MONITORING DEFINITIONS

OUTFALL	WASTEWATER TYPE	RECEIVING WATER	EFFECTIVE	EXPIRING
	This cell describes the type of wastewater authorized for discharge. Examples include process or sanitary wastewater, storm water, non-contact cooling water.	This cell lists classified waters of the state to which the listed outfall discharges.	The date this page starts in effect. (e.g. EDP or EDPM)	The date this page is no longer in effect. (e.g. ExDP).

PARAMETER	MINIMUM	MAXIMUM	UNITS	SAMPLE FREQ.	SAMPLE TYPE
e.g. pH, TRC, Temperature, D.O.	The minimum level that must be maintained at all instants in time.	The maximum level that may not be exceeded at any instant in time.	SU, °F, mg/l, etc.		

PARA-METER	EFFLUENT LIMIT	PRACTICAL QUANTITATION LIMIT (PQL)	ACTION LEVEL	UNITS	SAMPLE FREQUENCY	SAMPLE TYPE
	Limit types are defined below in Note 1. The effluent limit is developed based on the more stringent of technology-based standards, required under the Clean Water Act, or New York State water quality standards. The limit has been derived based on existing assumptions and rules. These assumptions include receiving water hardness, pH and temperature; rates of this and other discharges to the receiving stream; etc. If assumptions or rules change the limit may, after due process and modification of this permit, change.	For the purposes of compliance assessment, the analytical method specified in the permit shall be used to monitor the amount of the pollutant in the outfall to this level, provided that the laboratory analyst has complied with the specified quality assurance/quality control procedures in the relevant method. Monitoring results that are lower than this level must be reported, but shall not be used to determine compliance with the calculated limit. This PQL can be neither lowered nor raised without a modification of this permit.	Type I or Type II Action Levels are monitoring requirements, as defined below in Note 2, that trigger additional monitoring and permit review when exceeded.	This can include units of flow, pH, mass, Temperature, concentration. Examples include µg/l, lbs/d, etc.	Examples include Daily, 3/week, weekly, 2/month, monthly, quarterly, 2/yr and yearly.	Examples include grab, 24 hour composite and 3 grab samples collected over a 6 hour period.

Note 1: DAILY DISCHARGE.: The discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for the purposes of sampling. For pollutants expressed in units of mass, the 'daily discharge' is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the 'daily discharge' is calculated as the average measurement of the pollutant over the day.

DAILY MAX.: The highest allowable daily discharge. DAILY MIN.: The lowest allowable daily discharge.

DAILY AVG. or 30 DAY ARITHMETIC MEAN (30 day average).: The highest allowable average of daily discharges over a calendar month, calculated as the sum of each of the daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.

7 DAY ARITHMETIC MEAN (7 day average): The highest allowable average of daily discharges over a calendar week.

30 DAY GEOMETRIC MEAN: The highest allowable geometric mean of daily discharges over a calendar month, calculated as the antilog of the sum of the log of each of the daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.

7 DAY GEOMETRIC MEAN: The highest allowable geometric mean of daily discharges over a calendar week.

RANGE: The minimum and maximum instantaneous measurements for the reporting period must remain between the two values shown.

Note 2: ACTION LEVELS: Routine Action Level monitoring results, if not provided for on the Discharge Monitoring Report (DMR) form, shall be appended to the DMR for the period during which the sampling was conducted. If the additional monitoring requirement is triggered as noted below, the permittee shall undertake a short-term, high-intensity monitoring program for the parameter(s). Samples identical to those required for routine monitoring purposes shall be taken on each of at least three consecutive operating and discharging days and analyzed. Results shall be expressed in terms of both concentration and mass, and shall be submitted no later than the end of the third month following the month when the additional monitoring requirement was triggered. Results may be appended to the DMR or transmitted under separate cover to the same address. If levels higher than the Action Levels are confirmed, the permit may be reopened by the Department for consideration of revised Action Levels or effluent limits. The permittee is not authorized to discharge any of the listed parameters at levels which may cause or contribute to a violation of water quality standards. TYPE I: The additional monitoring requirement is triggered upon receipt by the permittee of any monitoring results in excess of the stated Action Level. TYPE II: The additional monitoring requirement is triggered upon receipt by the permittee of any monitoring results that show the stated action level exceeded for four of six consecutive samples, or for two of six consecutive samples by 20 % or more, or for any one sample by 50 % or more.

PERMIT LIMITS, LEVELS AND MONITORING

OUTFALL No.	WASTEWATER TYPE	RECEIVING WATER	EFFECTIVE	EXPIRING
001	Main Discharge (See footnote 1)	East River	EDP	ExDP

PARAMETER	MINIMUM	MAXIMUM	UNITS	SAMPLE FREQUENCY	SAMPLE TYPE	FOOTNOTES (FN)
pH	6.0	9.0	SU	Weekly	Grab	6

PARAMETER	COMPLIANCE LIMIT		MONITORING ACTION LEVEL		UNITS	SAMPLE FREQUENCY	SAMPLE TYPE	FN
	Daily Avg.	Daily Max.	TYPE I	TYPE II				
Flow	Monitor	Monitor			MGD	Hourly	Pump Log	1
Discharge Temperature	NA	104.2			°F	Continuous	Recorder	2,3,6
Intake-Discharge Temperature Difference	NA	23.0			°F	Continuous	Recorder	3
Net Addition of Heat	NA	10.7 x 10E9			BTU/Hr	Monthly	Calculation	
Total Residual Chlorine	NA	0.13			mg/l	Continuous (see footnote 8)	Grab	4,5,6, 7 & 8

Footnote 1 Main Discharge Outfall 001 includes condenser cooling water and discharges from outfalls 01A, 01C, 01D, 01E, 01F, 01G and 01H.

2 Biological Monitoring Requirement #7 "Thermal Discharge" may result in a determination regarding the Daily Max. Discharge Temperature. This determination may result in the need to modify the permit to adjust the Daily Max. Discharge Temperature and net additional heat discharged.

3 These limitations may be exceeded during periods when one or more condensing units are operating with only one circulating water pump (per unit), due to pump breakdown, routine maintenance, forced outage or other technical problems, (e.g., equipment failure). In the event of pump breakdown, the permittee shall take corrective action as soon as possible. Where possible, routine pump maintenance resulting in these limitations being exceeded, should be avoided during June-September. The permittee shall indicate on the Discharge Reporting Form: (1) which circulating water pumps, if any, were not in operation; (2) the dates and times such pumps were not operating; (3) the reason(s) for such pumps not operating; and (4) the period(s) (dates and times) during which these limitations were exceeded. In no case shall these limitations be exceeded more than 5% of the time during the operating year.

4 The period of chlorination shall be limited to two hours per day per condenser unit. The individnal units shall be treated separately.

5 Monitoring is only reqnired d ng the period of condenser chlorine treatments and discharge.

6 Samples for monitoring pH, temperature and chlorine are to be collected within the discharge tunnels.

7 An interim Total Residual Chlorine compliance limit of 0.2 mg/l will be allowed until October 31, 2007 while the permittee evaluates the operational chai s necessary to comply with the 0.13 mg/l final limit.

8 The permittee shall install a cor uous total residual chlorine monitor by May 15, 2008. Total residual chlorine monitoring prior to May 1, 2008 shall be collected and analyzed at a frequency of 5 daily samples per week during the periods of condenser chlorine treatments. During this interim iod the daily total residual chlorine samples must be collected and be representative of the discharge from a condenser treatment of 30 if this unit is operating or otherwise be collected and be representative of the discharge from condenser treatments of either u 10 or 20 if unit 30 is not operation.

PERMIT LIMITS, LEVELS AND MONITORING

OUTFALL Nos.	WASTEWATER TYPE	RECEIVING WATER	EFFECTIVE	EXPIRING
01A	Floor Drains and Fuel Oil Heating System Condensate	East River via Outfall 001	EDP	ExDP

PARAMETER	MINIMUM	MAXIMUM	UNITS	SAMPLE FREQUENCY	SAMPLE TYPE	FOOTNOTES (FN)
pH	6.0	9.0	SU	Monthly	Grab	9

PARAMETER	ENFORCEABLE LIMIT		MONITORING ACTION LEVEL		UNITS	SAMPLE FREQUENCY	SAMPLE TYPE	FN
	Monthly Avg.	Daily Max.	TYPE I	TYPE II				
Flow	NA	Monitor			GPM	Monthly	Calculated	9
Oil & Grease	NA	15			mg/l	Weekly	Grab	9
Suspended Solids, Total	30	100			mg/l	Monthly	Grab	9

Footnote 9 Samples to be taken from the Oil/Water Separator discharge prior to any mixing with other discharges.

OUTFALL Nos.	WASTEWATER TYPE	RECEIVING WATER	EFFECTIVE	EXPIRING
01D	Unit 40 Stormwater, Floor Drai Air Cooled Condenser Wash Water, Boiler Blowdown, Ion E: ange Regeneration & Reverse Osmosis R :t Water	East River via Outfall 001	EDP	ExDP

PARAMETER	MINIMUM	MA MUM	UNITS	SAMPLE FREQUENCY	SAMPLE TYPE	FOOTNOTES (FN)
pH	6.0	0	SU	Weekly	Grab	10

PARAMETER	ENFOR ABLE LIMIT		MONITORING ACTION LEVEL		UNITS	SAMPLE FREQUENCY	SAMPLE TYPE	FN
	Monthly ...g.	Daily Max.	TYPE I	TYPE II				
Flow	NA	Monitor			GPD	Weekly	Calculated	10
Oil & Grease	NA	15			mg/l	Weekly	Grab	10
Suspended Solids	NA	100			mg/l	Weekly	Grab	10
Ammonia	NA	monitor			mg/l	Monthly	Grab	10

Footnote 10 Samples to be taken from th utfall 01D discharge prior to any mixing with other discharges.

PERMIT LIMITS, LEVELS AND MONITORING

OUTFALL Nos.	WASTEWATER TYPE	RECEIVING WATER	EFFECTIVE	EXPIRING
01E, 01F & 01H	Boiler Make-up Water Carbon Filter Backwash (01E), Pre-Filter Backwash (01F) and Demineralizer Regeneration (01H)	East River via Outfall 001	EDP	ExDP

PARAMETER	ENFORCEABLE LIMIT		MONITORING ACTION LEVEL		UNITS	SAMPLE FREQUENCY	SAMPLE TYPE	FN
	Monthly Avg.	Daily Max.	TYPE I	TYPE II				
Flow	NA	Monitor			GPD	Monthly	Calculated	11
Suspended Solids, Total	NA	100			mg/l	Monthly	Grab	11

Footnote 11 Samples to be collected from each separate discharge outfall.

OUTFALL Nos.	WASTEWATER TYPE	RECEIVING WATER	EFFECTIVE	EXPIRING
01G	Units 10, 20 & 30 Boiler Blowdown	East River via Outfall 001	EDP	ExDP

PARAMETER	ENFORCEABLE LIMIT		MONITORING ACTION LEVEL		UNITS	SAMPLE FREQUENCY	SAMPLE TYPE	FN
	Monthly Avg.	Daily Max.	TYPE I	TYPE II				
Flow	NA	Monitor			GPD	Monthly	Calculated	12
Oil & Grease	NA	15			mg/l	Semi-Annual	Grab	12
Suspended Solids	NA	50			mg/l	Monthly	Grab	12
Ammonia	NA	monitor			mg/l	Monthly	Grab	12

Footnote 12 Samples to be taken from the Outfall 01G discharge prior to any mixing with other discharges.

PERMIT LIMITS, LEVELS AI) MONITORING

OUTFALL No.	WAST	VATER TYPE	RECEIVING WATER	EFFECTIVE	EXPIRING
004	Rainy Tank Farm - Undergr	d Fuel Tank Containment Vault and rmwater	East River	EDP	ExDP

PARAMETER	MINIMUM	MA	MUM	UNITS	SAMPLE FREQUENCY	SAMPLE TYPE	FOOTNOTES (FN)
pH	6.0		0	SU	2/Month	Grab	

PARAMETER	ENFOR	ABLE LIMIT	MONITORING ACTION LEVEL		UNITS	SAMPLE FREQUENCY	SAMPLE TYPE	FN
	Monthly	Daily Max.	TYPE I	TYPE II				
Flow	NA	Monitor			GPD	Monthly	Calculated	
Oil & Grease	NA	15			mg/l	2/Month	Grab	
Total Suspended Solids	NA	50			mg/l	2/Month	Grab	
Aroclor 1254	NA	0.3			µg/l	Quarterly	Grab	13
Aroclor 1254	NA	monitor			g/day	Quarterly	Calculated	13
Aroclor 1260	NA	0.3			µg/l	Quarterly	Grab	13
Aroclor 1260	NA	monitor			g/day	Quarterly	Calculated	13
Benzene	NA	50			µg/l	Quarterly	Grab	
Ethylbenzene	NA	50			µg/l	Quarterly	Grab	
Toluene	NA	50			µg/l	Quarterly	Grab	
Xylene, Total	NA	50			µg/l	Quarterly	Grab	

Footnote 13 a. The permittee must monitor ; discharge for PCBs using USEPA laboratory method 608. The laboratory must make all reasonable attempts to achiev n MDL of 0.065 µ g/l or less per aroclor. Monitoring requirements may be modified in the future if the Department appr es a method different from 608.

b. Non-detect at the MDL is th ischarge goal. The permittee shall report all values above the Minimum Detection Level (MDL) (0.065 µg/l per Aroc). If the level of any Aroclor is above the MDL, the permittee must evaluate the treatment system and identify the cause the detectable level of PCBs in the discharge. Following three consecutive quarterly periods that include analytical results ove the MDL (0.065 µg/l), the permittee shall prepare an approvable report identifying the measures undertaken to elimi e the detections and proposed additional steps to be taken to eliminate the recurrence of such detections. This report shall submitted to the Department within 28 days following receipt of sampling results from the third monitoring period.

c. If the Department determ s that effluent monitoring results above the MDL (0.065 ug/l) can be prevented by implementation of additional asures as proposed by the permittee, the permittee shall implement such additional measures.

d. The treatment technology for is discharge constitutes the maximum feasible treatment technology for treatment of PCBs. As treatment technology impr ements become available, the permittee shall, at its own initiative or the Department's request, review the available technolo and submit for Department approval, plans to improve the treatment technology and/or Best Management Practices empl d to remove maximum feasible amount of PCBs from the wastewater discharge.

e. This limit is a phased Total I ximum Daily Loading limit, prepared in accordance with 6 NYCRR 702.16(b).

f. If a discharge limitation (0.3(g/l) for any Aroclor is exceeded the measurement frequency for all Aroclors shall be monthly until a period of eight (8) cor cutive monthly sampling events shows no discharges above the MDL (0.065 µg/l) at which point quarterly monitoring r resume.

PERMIT LIMITS, LEVELS AND MONITORING

OUTFALL Nos.	WASTEWATER TYPE	RECEIVING WATER	EFFECTIVE	EXPIRING
006	Gas Turbine Site - Combustion Turbine Dump Tank and Stormwater from Secondary Containment & Roof Drains	East River	EDP	ExDP

PARAMETER	MINIMUM	MAXIMUM	UNITS	SAMPLE FREQUENCY	SAMPLE TYPE	FOOTNOTES (FN)
pH	6.0	9.0	SU	Weekly	Grab	

PARAMETER	ENFORCE	BLE LIMIT	MONITORING ACTION LEVEL		UNITS	SAMPLE FREQUENCY	SAMPLE TYPE	FN
	Monthly Av	Daily Max.	TYPE I	TYPE II				
Flow	NA	Monitor			GPD	Monthly	Calculated	
Oil & Grease	NA	15			mg/l	Weekly	Grab	
Total Suspended Solids	NA	50			mg/l	Weekly	Grab	
Benzene	NA	50			µg/l	Quarterly	Grab	
Ethylbenzene	NA	50			µg/l	Quarterly	Grab	
Toluene	NA	50			µg/l	Quarterly	Grab	
Xylene, Total	NA	50			µg/l	Quarterly	Grab	

OUTFALL Nos.	WAS	VATER TYPE	RECEIVING WATER	EFFECTIVE	EXPIRING
007	Stormwater	n Old Settling Ponds	East River	EDP	ExDP

PARAMETER	ENFOR	ABLE LIMIT	MONITORING ACTION LEVEL		UNITS	SAMPLE FREQUENCY	SAMPLE TYPE	FN
	Monthly	Daily Max.	TYPE I	TYPE II				
Flow	NA	Monitor			GPD	Each Discharge	Calculated	
Oil & Grease	NA	15			mg/l	Each Discharge	Grab	14
Total Suspended Solids	NA	50			mg/l	Each Discharge	Grab	14
Benzene	NA	50			µg/l	Each Discharge	Grab	14
Ethylbenzene	NA	50			µg/l	Each Discharge	Grab	14
Toluene	NA	50			µg/l	Each Discharge	Grab	14
Xylene, Total	NA	50			µg/l	Each Discharge	Grab	14

Footnote 14 Samples to be taken prior to y mixing with other discharges.

PERMIT LIMITS, LEVELS AND MONITORING

OUTFALL Nos.	WASTEWATER TYPE	RECEIVING WATER	EFFECTIVE	EXPIRING
01C	Stormwater	East River via Outfall 001	EDP	ExDP
002	Stormwater	East River	EDP	ExDP
008, 009 & 010	Units 10, 20 & 30 Screen Wash Return	East River	EDP	ExDP
NO MONITORING REQUIRED				

OUTFALL Nos.	WA	EWATER TYPE	RECEIVING WATER	EFFECTIVE	EXPIRING
NA	Tank Tes	ater (See footnote 14)	Long Island Sound	EDP	ExDP

PARAMETER	ENFOR	BLE LIMIT	MONITORING ACTION LEVEL		UNITS	SAMPLE FREQUENCY	SAMPLE TYPE	FN
	Monthly A	Daily Max.	TYPE I	TYPE II				
Flow	NA	Monitor			GPD	Each Discharge	Instantaneous	15
Oil & Grease	NA	15			mg/l	Each Discharge	Grab	15
Chlorine, Total Residual	NA	0.1			mg/l	Each Discharge	Grab	15,16
Benzene	NA	20			µg/l	Each Discharge	Grab	15
Toluene	NA	20			µg/l	Each Discharge	Grab	15
Xylenes	NA	20			µg/l	Each Discharge	Grab	15
Ethylbenzene	NA	20			µg/l	Each Discharge	Grab	15

Footnote 15 **Tank Test Water Discharge Re** **ements**
Tanks being hydrostatically teste ust be free of product and cleaned. The Regional Water Manager must be informed at least twn business days prior to the dischar f tank test water.

Any discharge of tank test water n be done under the direct supervision of plant personnel. Samples from the tank must be taken prior to discharge from various levels w n the tank (top, middle, bottom). If sampling shows conformance with effluent limitations, discharge may be initiate. If effluent limita is are not attained, additional measures must be implemented to attain compliance prior to initiation of discharge.

A visual check of the discharge n be made for the presence of oil and floating substances. Data associated with tank test water shall be kept, along with log of visual rvations, for a period of five years and be made available to Department personnel upon request.

The discharge of tank test water t be done in a manner that minimizes erosion of soil or sediment and does not cause flooding in the area of discharge. It must be don a manner that minimizes the impact on the fisheries.

16 Required when a chlorinated sup such as that from a municipal system is used for tank testing purposes.

A. ADDITIONAL REQUIREM - NTS

1. There shall be no discharge of the foll ing wastes to surface waters or groundwater of the State; fly ash and bottom ash sluice wastes or evaporator blowdown. Boil ind metal cleaning wastewater shall be disposed of by incineration in the plant boilers in accordance with the facility's Title ir permit or be collected and transported for treatment and disposal by an wastewater treatment facility capable of treating tl e wastewaters.

2. The permittee shall submit on a yearly is a report to the Department's offices in Albany and Region 2 by the 28th of the month following the end of the annual perioc This annual report must include:

   a. Daily minimum, average and ximum station electrical ontput;

   b. Daily minimum, average and ximum cooling water usage (directly or indirectly measured or calculated);

   c. Daily minimum, average and ximum intake and discharge temperatures;

   d. Values reported in a, b and c ill be based upon measurements taken on an hourly basis. Temperature readings may be obtained from a continuou eording device. This requirement is not a substitute for other monitoring requirements.

3. There shall be no visible sheen of oil ; grease from discharges at outfalls 001, 002, 004, 006 & 007.

4. All water treatment chemicals (e.g., cc sion inhibitors, antifouling additives, slimicides and biocides) identified in the August 31, 2005 submittal are approved for ı Approval is granted only for uses which do not contravene New York State Water Quality Standards. The permittee mus mply with Generic Water Treatment Chemical (WTC) Usage Requirements including annoal reporting and other requireme identified on page 3 of the WTC Usage Notification form available at the NYSDEC website: www.dec.state.ny.us/website s/permits/oilpermits/index.html. If the use of any new water treatment chemicals is intended, prior notification and appro must occur prior to use.

5. In all instances chlorine shall be:

   a. kept to the minimum amoun hich will maintain plant operating efficieocy; and

   b. eliminated when intake wate emperature is below 40 °F onless failure to apply chlorine below 40 °F is shown to adversely affect plant operati efficiency.

6. Discharge from the emergency flood p ips for Units 10, 20 and 30 to the main discharge outfall 001 will be allowed under this permit provided that the permittee:

   a. collect a grab sample of the id pump discharge for each unit and each discharge event to be analyzed for pH, total suspended solids and oil & g se;

   b. notify regional water staff wi ı 1 business day of operation of the flood pumps;

   c. send copies of the monitorin sults to regional water staff upon receipt with a cover letter summarizing operation of the emergency flood pumps : that event; and

   d. provide a written descriptic of the best management practices that will be used to minimize the discharge of contaminants during emerge flood pump operation in the facility's Best Management Plan required under condition C.2 of the SPDES permit.

7. All thermal discharges to the waters of : State shall assure the protection and propagatiou of a balanced, indigenous population of shellfish, fish and wildlife in and o ie body of water as provided in 6NYCRR Part 704.1(a). The thermal plume resulting from this facility's discharge may not e ed 90°F (Part 704.2(b)(5)(i) of the State Water Quality Thermal Criteria) exeept within a designated mixing zone area of 2,58 00 sq. ft. (60 acres).

8. Notwithstanding any other requirements in this permit, the permittee shall also comply with all of the Water Quality Regulations promulgated by the Interstate Environmental Commission, including Section 1.01 and 2.05(f) as they relate to oil and grease.

9. Dilution is prohibited as a substitute for treatment. Except where expressly authorized to do so by an applicable Categorical Standard or the Commissioner or his duly authorized representative, no Industrial User shall ever increase the use of process water or, in any other way, attempt to dilute a discharge as a partial or complete substitute for adequate treatment to achieve compliance with a permit effluent limitation requirement.

10. There shall be no discharge to groundwaters or surface waters of oil tank bottom water, PCBs, and/or any industrial or manufacturing process wastewater effluents from this facility. Included in the effluents categorized as industrial process effluents are wastewater resulting from vehicle maintenance or washing operations. Washing operations are those cleaning operations which involve the use of detergents or other emulsifying chemicals.

    Tank bottoms water, vehicle maintenance and washing wastewater are not likely to be effectively treated by gravity separation alone and therefore are not permitted to be discharged. After review of an Engineering Submission for the treatment of tank bottoms, maintenance and/or washing wastewater, these prohibitions may be altered

11. The permittee shall conduct a short-term monitoring program for mercury in the discharge at outfall 007. The monitoring program shall consist of three separate sampling events when stormwater is being discharged from the abandoned settling ponds. A composite sample made up of at least 3 grab samples shall be collected for each sampling event. Samples shall be analyzed using EPA Method 1631. Sampling and analytical results, along with the average flow for each sampling day, shall be submitted, by EDP + 1 year, to Al Fuchs, Chief, Wastewater Permits - South Section, 625 Broadway, Albany, NY, 12233-3505 and the Regional Water Manager, Region 2, One Hunters Point Plaza, 47-20 21st Street, Long Island City, New York 11101. [Note: Following review of these results, the Department may reopen the permit to add additional limts or action levels for these parameters.]

12. When conducting the periodic testing of the foam fire suppression system as required by the Fire Department of New York (FDNY) the permittee shall:

    a. notify regional water staff at least 3 business days prior to testing;

    b. direct all foam to a temporary containment system at the facility; and

    c. use best efforts to contain, collect and dispose of the foam.

B. BIOLOGICAL MONITORING REQUIREMENTS

All submissions under this section should provide :
Two (2) copies to the Steam Electric Unit Leader;
One (1) copy of the cover letter to the Division of Water
State Pollution Discharge Elimination System (SPDES)
Compliance Information Section; and
One (1) copy of the cover letter to the Regional Water Manager;
unless otherwise noted.

1. **Impingement Survival Study**
By EDP + 6 months, the permittee shall submit an approvable report of the results of 2006 impingement survival studies conducted under continuous intake screen operation at the Ravenswood Generating Station. The report shall describe the study methodology used and present results in terms of: 1) impingement survival for each species tested and, 2) a revised calculation of percent impingement mortality reduction from baseline level, for alternatives that include use of continuous operation of traveling intake screens.

2. **Best Technology Available**
The applicant is required to perform the owing mitigation activities to achieve best technology available (BTA) for the cooling water intake at the Ravenswood Genera g Station. Installation of all technologies and or operational measures required in this condition shall be completed by EDP + ears.

a. Installation of variable speed nps and ancillary equipment at Ravenswood Units 10, 20 and 30 that will allow for a reduction in the volume of coo g water use;

b. Upgrades to the existing trav g intake screens at Ravenswood Units 10, 20 and 30 to allow for the continuous operation of all traveling intak creens to increase impingement survival;

c. Scheduling of a planned outag rocess that will require cooling water circulating pumps to be shut down to reduce the volume of cooling water use;

d. Continued use of the Depart it approved, low stress fish return lines, constructed at each unit in 2005, to return impinged fish directly to the E River; and

e. If necessary, installation of coo uously operated Ristroph modified traveling screens or mitigation measures identified in the approved Supplemental chnology and Operation Review/Plan required in B.4(b).

3. **Performance Standards**

a. The technologies and operatio procedures described in Condition B.2., Best Technology Available, must achieve a reduction in impingement mo ity of 90% for all fish species combined and 90% for winter flounder alone from the full flow calculation baseline. Compliance with this performance standard shall be determined through the studies conducted under the Verificat Monitoring Plan required in Condition B.5.

b. The technologies and operatio procedures described in Condition B.2., Best Technology Available, must achieve a 65% reduction in entrainment n the full flow calculation baseline. Compliance with this performance standard shall be determined through the stu s conducted under the Verification Monitoring Plan required in Condition B.5.

4. **Technology Installation and Operati Plan**

a. By EDP + 3 months, the perm e must submit an approvable Technology Installation and Operation Plan. This plan must include:

(1) A schedule for installing and i lementing the technologies and/or operational measures in Condition B.2 (a) through (d) to meet the BTA requirem s of 6 NYCRR Part 704.5 and 316(b) of the Clean Water Act; and

(2) The methodology for assessin ie efficacy of these technologies and operational measures.

b. Within 15 months, after the im mentation of all measures in conditions B.2 (a) through (d) on unit 30 at Ravenswood, but no later than EDP + 3.75 y s, the permittee shall submit a Supplemental Technology and Operation Review/Plan identifying the level of reduct s in impingement mortality attributable to the implementation of such measures and a projection as to whether the p rmance standards in B. 3. will be achieved once all units at the site are equipped and operated in accordance with t equirements of conditions B.2 (a) through(d).

If such projections indicate th he performance standards in condition B.3 will not be achieved, the permittee shall identify in the Supplemental T nology and Operation Review/Plan any additional measures needed to achieve a 90% reduction in impingement mor ty from the full flow calculation baseline. The supplement shall contain a schedule for installing and implementing te ologies and/or operational measures to achieve compliance with performance standards contained in condition B.3 (a) thin the time frame required in condition B.2.

Upon receipt of Department ap oval, the permittee must implement the Technology Installation and Operation Plan and Supplemental Technology an peration Review/Plan in accordance with the approved schedule. The Technology Installation and Operation Pla he Supplemental Technology and Operation Review/Plan and the approved schedule will become enforceable cond ns of this SPDES permit.

5. **Verification Monitoring Plan**

a. Within 3 months of the Depa ent's approval of the Supplemental Technology and Operation Review/Plan described in Condition B.4 (b), the per lee must submit an approvable Verification Monitoring Plan. This plan must include details of procedures to confi that the performance standards for reducing impingement and entrainment required by this permit in Condition B.3. being achieved, and must include the following:

(1) Use of a five year averaging p od to verify the full-scale performance of all BTA measures specified in Condition B.2. The average estimated reduct s in impingement mortality and entrainment shall be based on:
i) a minimum two y of additional in-plant impingement and entrainment monitoring,
ii) existing in-plant ingement and entrainment monitoring data,
iii) actual water use he station during the averaging period, and
iv) any other relevat nformation;

(2) A description of the frequenc d duration of monitoring, the parameters to be monitored, and the basis for determining the parameters and the freque y and duration for monitoring;

(3) A schedule of implementatio nd

(4) A draft proposed Standard Op tion Procedure (SOP) that describes the sampling protocols for these monitoring studies.

The plan and SOP must be up ed as required by the Department. Upon receipt of Department approval, the permittee must complete the Verificatio lonitoring Plan in accordance with the approved schedule. The Verification Monitoring Plan and approved schedule become enforceable conditions of this SPDES permit.

b. A draft report shall be subr ed to the Steam Electric Unit Leader no later than 18 months after the start of the monitoring program that sum rizes the results of the first year of study.

c. Within 6 months of the comp ion of the Verification Monitoring Plan the permittee must submit an approvable report to the Steam Electric Unit L er that demonstrates compliance with Condition B.3. of this permit and 316(b) of the Clean Water Act.

6. **Additional Reporting Requirement**

a. The permittee must maintain ords of all data, reports and analysis pertaining to compliance with 6NYCRR Part 704 and Section 316(b) CWA for eriod no less than 10 years from EDP.

b. The permittee must submit st reports at EDP + 2.5 years and EDP + 5 years. At a minimum, these status reports must include a description of the erational status of the facility during the preceding two years and compliance with Condition B.2. through B.5. his permit.

7. **Thermal Discharge**

By EDP + 6 months, the permittee mus bmit an approvable thermal study plan designed to address issues regarding the thermal criteria contained in 6 NYCRR §704.

Thermal Criteria

The *Thermal Criteria Study Plan* mus designed to describe all applicable criteria contained in 6 NYCRR §704 and evaluate compliance with those criteria. The *Thermal Criteria Study Plan* must include study protocols, a schedule for conducting the studies, and the submission of approv *Thermal Criteria Report*. The *Thermal Criteria Report* must include all information obtained from implementing the plan; ovide a comparison of the applicable criteria to the varying operating conditions of the facility; document the Daily Maximu Discharge Temperature (as delineated on page 5 of 22 of this permit) the facility can discharge to meet all applicable crit ; and provide all assumptions, calculations, and models used in deriving the Daily Maximum Discharge Temperature.

Upon receipt of Department approval e *Thermal Study Plan*, the permittee must complete the studies and submit the *Thermal Report* in accordance with the approv schedules.

8. The permittee shall comply with the p visions agreed to under Consent Order # R20000906-179 which are designed to study, and if necessary, mitigate biological i acts associated with the Ravenswood Generating Station condenser cooling water use.

9. Modification of the facility cooling w: intake must not occur without prior Department approval. The permittee must submit written notification, including detaile: scriptions and plans, to the NYSDEC Steam Electric Unit; the Director of the Bureau of Water Compliance Program; and b the Regional Permit Administrator and the Regional Water Engineer, Region 2, at least 60 days prior to any proposed change v h would result in the alteration of the permitted operation, location, design, construction or capacity of the cooling water intak ructure. The permittee must submit with the written notification a demonstration that the change reflects the best technology ailable for minimizing adverse environmental impacts pursuant to 6 NYCRR Part 704.5 and Section 316(b) of the Clean Wate ct. As determined by NYSDEC, a permit modification application in accordance with 6 NYCRR Part 621 may be required.

C. SPECIAL CONDITIONS - INDU 'RY BEST MANAGEMENT PRACTICES

1. **General** - The permittee shall develo maintain, and implement a Best Management Practices (BMP) plan to prevent releases of significant amounts of pollutants to waters of the State through plant site runoff; spillage and leaks; sludge or waste disposal; and stormwater discharges including, not limited to, drainage from raw material storage.

The BMP plan shall be documented i arrative form and shall include the 13 minimum BMPs and any necessary plot plans, drawings, or maps. Other documents ady prepared for the facility such as a Safety Manual or a Spill Prevention, Control and Countermeasure (SPCC) plan may be d as part of the plan and may be incorporated by reference. A copy of the current BMP plan shall be submitted to the Departn t as required in item (2.) below and a copy must be maintained at the facility and shall be available to authorized Departmen presentatives upon request.

2. **Compliance Deadlines** - The initial c pleted BMP plan shall be submitted **EDP + 6 months** to the Regional Water Manager. The BMP plan shall be implemented w in 6 months of submission, unless a different time frame is approved by the Department. The BMP plan shall be reviewed ann ly and shall be modified whenever: (a) changes at the facility materially increase the potential for releases of pollutants, (b) al releases indicate the plan is inadequate, or (c) a letter from the Department identifies inadequacies in the plan. The permitte all certify in writing, as an attachment to the December Discharge Monitoring Report (DMR), that the annual review has be completed. All BMP plan revisions (with the exception of SWPPPs - see item (4.B.) below) must be submitted to the Reg al Water Manager within 30 days. Note that the permittee is not required to obtain Department approval of the BMP plan r of any SWPPPs) unless notified otherwise. Subsequent modifications to or renewal of this permit does not reset or revise ese deadlines unless a new deadline is set explicitly by such permit modification or renewal.

3. **Facility Review** - The permittee shal view all facility components or systems (including but not limited to material storage areas; in-plant transfer, process, and ma ial handling areas; loading and unloading operations; storm water, erosion, and sediment control measures; process emergency c rol systems; and sludge and waste disposal areas) where materials or pollutants are used, manufactured, stored or handled to ev ate the potential for the release of pollutants to the waters of the State. In performing such an evaluation, the permittee shall sider such factors as the probability of equipment failure or improper operation, cross-contamination of storm water by proce materials, settlement of facility air emissions, the effects of natural phenomena such as freezing temperatures and precipitatio ires, and the facility's history of spills and leaks. The relative toxicity of the pollutant shall be considered in determining the nificance of potential releases.

The review shall address all substances sent at the facility that are identified in Tables 6-10 of SPDES application Form NY-2C (available at *http://www.dec.state.ny.u ebsite/dcs/permits/olpermits/form2c.pdf*) or that are required to be monitored for by the SPDES permit.

4. A. **13 Minimum BMPs** - Whenever potential for a release of pollutants to State waters is determined to be present, the permittee shall identify BMPs that h been established to prevent or minimize such potential releases. Where BMPs are inadequate or absent, appropriate BM hall be established. In selecting appropriate BMPs, the permittee shall consider good industry practices and, where appropria tructural measures such as secondary containment and erosion/sediment control devices and practices. USEPA guidauce for de opment of stormwater elements of the BMP is available in the September 1992 manual *Storm Water Management for Industri ctivities*, EPA 832-R-92-006 (available from NTIS, 703-487-4650, order #PB 92235969 or at http://cfpub.epa.gov/npdes/storm ter/swppp-msgp.cfm). As a minimum, the plan shall include the following BMPs:

1. BMP Pollution Prevention Team
2. Reporting of BMP Incidents
3. Risk Identification & Assessmen
4. Employee Training
5. Inspections and Records
6. Security
7. Preventive Maintenance
8. Good Housekeeping
9. Materials/Waste Handling, Storage, & Compatibility
10. Spill Prevention & Response
11. Erosion & Sediment Control
12. Management of Runoff
13. Street Sweeping

Note that for some facilities, especia those with few employees, some of the above BMPs may not be applicable. It is acceptable in these cases to indicate "N Applicable" for the portion(s) of the BMP Plan that do not apply to your facility, along with an explanation.

B. **Stormwater Pollution Prevention ns (SWPPPs) Required for Discharges of Stormwater From Construction Activity to Surface Waters** - As part of BMP , a SWPPP shall be developed prior to the initiation of any site disturbance of one acre or more of uncontaminated area. Unco minated area means soils or groundwater which are free of contamination by any toxic or non-conventional pollutants identi d in Tables 6-10 of SPDES application Form NY-2C. Disturbance of any size contaminated area(s) and the resulting charge of contaminated stormwater is not authorized by this permit unless the discharge is under State or Federal oversight as t of a remedial program or after review by the Regional Water Manager; nor is such discharge authorized by any SPDES eral permit for stormwater discharges. SWPPPs are not required for discharges of stormwater from construction activity groundwaters.

The SWPPP shall conform to the *New k Standards and Specifications for Erosion and Sediment Control* and *New York State Stormwater Management Design Man* unless a variance has been obtained from the Regional Water Manager, and to any local reqnirements. The permittee shall subi a copy of the SWPPP and any amendments thereto to the local governing body and any other authorized agency having jnrisd on or regnlatory control over the construction activity **at least 30 days prior to soil disturbance**. The SWPPP shall also b bmitted to the Regional Water Manager if contamination, as defined above, is involved and the permittee must obtain a deter ation of any SPDES permit modifications and/or additional treatment which may be required prior to soil disturbance. Oth vise, the SWPPP shall be snbmitted to the Department only upon reqnest. When a SWPPP is required, a properly mpleted *Notice of Intent* (NOI) form shall be submitted (available at *www.dec.state.ny.us/website/dow/tool /swforms.html*) prior to soil disturbance. Note that submission of a NOI is required for informational purposes; the permittee not eligible for and will not obtain coverage under any SPDES general permit for stormwater discharges, nor are any ad nal permit fees incurred. SWPPPs must be developed and submitted for subsequent site disturbances in accordance with th ove requirements. The permittee is responsible for ensuring that the provisions of each SWPPP is properly implemented.

5. **Required Sampling For "Hot Spot" entification** - Development of the BMP plan shall include sampling of waste stream segments for the purpose of pollutan not spot" identification. The economic achievability of effluent limits will not be considered until plant site "hot spot" s ces have been identified, contained, removed or minimized through the imposition of site specific BMPs or application of m al facility treatment technology. For the purposes of this permit condition a "hot spot" is a segment of an industrial facility (i ding but not limited to soil, equipment, material storage areas, sewer lines etc.) which contributes elevated levels of problem llutants to the wastewater and/or stormwater collection system of that facility. For the porposes of this definition, problem llutants are snbstances for which treatment to meet a water quality or technology requirement may, considering the resu of waste stream segment sampling, be deemed unreasonable. For the purposes of this definition, an elevated level is a conce ation or mass loading of the pollutant in question which is sufficiently higher than the concentration of that same pollutant at compliance monitoring location so as to allow for an economically justifiable removal and/or isolation of the segment and/or A.T. treatment of wastewaters emanating from the segment.

6. **Facilities with Petroleum and/or Ch ical Bulk Storage (PBS and CBS) Areas** - Compliance must be maintained with all applicable regulations including those olving releases, registration, handling and storage (6 NYCRR 595-599 and 612-614). Stormwater discharges from handling l storage areas should be eliminated where practical.

A. Spill Cleanup - All spilled or leake ubstances must be removed from secondary containment systems as soon as practical and for CBS storage areas within 24 ho unless written authorization is received from the Department. The containment system must be thoroughly cleaned to remov ny residual contamination which could cause contam d the resulting discharge of pollutants to wat of the State. Following spill cleanup the affected area must be completely flushed with clean water three times and the water removed after each flushing for proper disposal in an on-site or off-site wastewater treatment

plant designed to treat such water and mitted to discharge such wastewater. Alternately, the permittee may test the first batch of stormwater following the spill clea) to determine discharge acceptability. If the water contains no pollutants it may be discharged. Otherwise it must be disp d of as noted above. See *Discharge Monitoring* below for the list of parameters to be sampled for.

B. Discharge Operation - Stormwater ist be removed before it compromises the required containment system capacity. Each discharge may only proceed with the ior approval of the permittee staff persnn responsible for ensuring SPDES permit compliance. Bulk storage secondary c ainment drainage systems must be locked in a closed position except when the operator is in the process of draining accumulat stormwater. Transfer area secondary containment drainage systems must be locked in a closed position during all transfers ; must not be reopened unless the transfer area is clean of contaminants. Stormwater discharges from secondary containmen stems should be avoided during periods of precipitation. A logbook shall be maintained on site noting the date, time and perso el supervising each discharge.

C. Discharge Screening - Prior to ca discharge from a secondary containment system the stormwater must be screened for contamination*. All stormwater must b nspected for visible evidence of contamination. Additional screening methods shall be developed by the permittee as part of th verall BMP Plan, e.g. the use of volatile gas meters to detect the presence of gross levels of gasoline or volatile organic compo ls. If the screening indicates contamination, the permittee must collect and analyze a representative sample** of the stormwa . If the water contains no pollutants it may be discharged. Otherwise it must either be disposed of in an on site or off site wastewater treatment plant designed to treat and permitted to discharge such wastewater or the Regional Water Manager can be c acted to determine if it may be discharged without treatment.

D. Discharge Monitoring - Unless th ischarge from any bulk storage containment system outlet is identified in the SPDES permit as an outfall with explicit efflu and monitoring requirements, the permittee shall monitor the outlet as follows:

(i) *Bulk Storage Secondary Containn t Systems:*

(a) The volume of each dis rge from each outlet must be monitored. Discharge volume may be calculated by measuring the depth of water hin the containment area times the wetted area converted to gallons or by other suitable methods. A representative sa le shall be collected of the first discharge* following any cleaned up spill or leak. The sample must be analyzed fo d, the substance(s) stored within the containment area and any other pollutants the permittee knows or has reaso) believe are present**.

(b) Every fourth discharge* fr each outlet must be sampled for pH, the substance(s) stored within the containment area and any other pollutants the p nittee knows or has reason to believe are present**.

(ii) *Transfer Area Secondary Contain nt Systems:*

The first discharge* followin ny spill or leak must be sampled for flow, pH, the substance(s) transferred in that area and any other pollutants the p nittee knows or has reason to believe are present**.

E. Discharge Reporting - Any resu nf monitoring required above, excluding screening data, must be submitted to the Department by appending them to the responding DMR. Failure to perform the required discharge monitoring and reporting shall constitute a violation of the term the SPDES permit.

F. Prohibited Discharges - **In all ca any discharge which contains a visible sheen, foam, or odor, or may cause or contribute to a violation of water qu y is prohibited.** The following discharges are prohibited unless specifically authorized elsewhere in this SPDES permit: spills leaks, tank bottoms, maintenance wastewaters, wash waters where detergents or other chemicals have been used, tank hydro and ballast waters, contained fire fighting runoff, fire training water contaminated by contact with pollutants or containing m or fire retardant additives, and unnecessary discharges of water or wastewater into secondary containment systems.

* Discharge includes stormwater disch es and snow and ice removal. If applicable, a representative sample of snow and/or ice should be collected and allowed to melt prior to assessm

** If the stored substance is gasoline or tion fuel then sample for oil & grease, benzene, ethylbenzene, naphthalene, toluene and total xylenes (EPA method 602). If the stored substa is kerosene, diesel fuel, fuel oil, or lubricating oil then sample for oil & grease and polynuclear aromatic hydrocarbons (EPA method 610). I substance(s) are listed in Tables 6-8 of SPDES application form NY-2C then sampling is required. If the substance(s) are listed in NY-2C Tal 9-10 sampling for appropriate indicator parameters may be required, e.g. BOD5 or toxicity testing. Contact the facility inspector for further gui e. In all cases flow and pH monitoring is required.

DISCHARGE NOTIFICATIOI REQUIREMENTS

(a) Except as provided in (c), (f) and (g) c iese Discharge Notification Act requirements, the permittee shall install and maintain identification signs at all outfalls to st ce waters listed in this permit. Such signs shall be installed before initiation of any discharge.

(b) Subsequent modifications to or renew f this permit does not reset or revise the deadline set forth in (a) above, unless a new deadline is set explicitly by such perm iodification or renewal.

(c) The Discharge Notification Requiren s described herein do not apply to outfalls from which the discharge is composed exclusively of storm water, or dischar to ground water.

(d) The sign(s) shall be conspicuous, leg and in as close proximity to the point of discharge as is reasonably possible while ensuring the maximum visibility from surface water and shore. The signs shall be installed in such a manner to pose minimal hazard to navigation, bathing or other er related activities. If the public has access to the water from the land in the vicinity of the outfall, an identical sign shall b osted to be visible from the direction approaching the surface water.

The signs shall have **minimum** dimen s of eighteen inches by twenty four inches (18" x 24") and shall have white letters on a green background and contain the fo wing information:

r.S. PERMITTED DISCHARGE POINT

SPDES PERMIT No.: NY_____

OUTFALL No. :____

For information about this permittec scharge contact:

- Permittee Name: _____ _____
- Permittee Contact: _____ _____
- Permittee Phone: ( ) - ## ####
- OR:
- NYSDEC Division of Water Region Office Address :
- NYSDEC Division of Water Region Phone: ( ) - ### -####

(e) For each discharge required to have a n in accordance with a), the permittee shall, concurrent with the installation of the sign, provide a repository of copies of the D harge Monitoring Reports (DMRs), as required by the **RECORDING, REPORTING AND ADDITIONAL MONITORIN REQUIREMENTS** page of this permit. This repository shall be open to the public, at a minimum, during normal daytime bu ess hours. The repository may be at the business office repository of the permittee or at an off-premises location of its choi such location shall be the village, town, city or county clerk's office, the local library or other location as approved by the De tment). In accordance with the **RECORDING, REPORTING AND ADDITIONAL MONITORING REQUIREMENTS** ge of your permit, each DMR shall be maintained on record for a period of three years.

(f) If, upon November 1, 1997, the permit has installed signs that include the information required by 17-0815-a(2)(a) of the ECL, but do not meet the specifications listec ove, the permittee may continue tu use the existing signs for a period of up to five years, after which the signs shall comply wit ie specifications listed above.

(g) All requirements of the Discharge Notification Act, including public repository requirements, are waived for any outfall meeting any of the following circumstances, provided Department notification is made in accordance with (h):

(i) such sign would be inconsistent with any other state or federal statute;

(ii) the Discharge Notification Requirements contained herein would require that such sign could only be located in an area that is damaged by ice or flooding due to a one-year storm or storms of less severity;

(iii) instances in which the outfall to the receiving water is located on private or government property which is restricted to the public through fencing, patrolling, or other control mechanisms. Property which is posted only, without additional control mechanisms, does not qualify for this provision;

(iv) instances where the outfall pipe or channel discharges to another outfall pipe or channel, before discharge to a receiving water; or

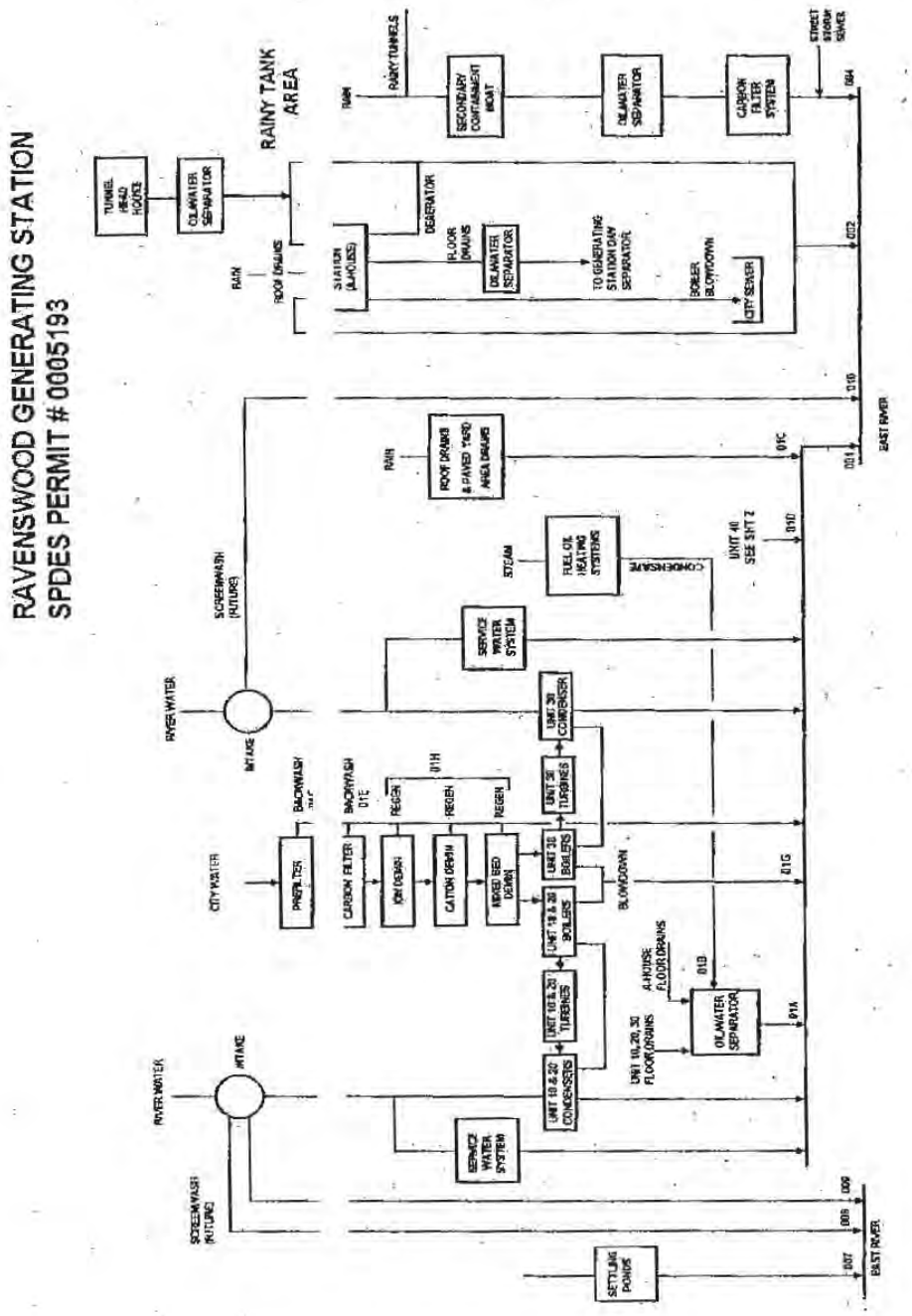
(v) instances in which the discharge from the outfall is located in the receiving water, two-hundred or more feet from the shoreline of the receiving water.

(h) If the permittee believes that any outfall which discharges wastewater from the permitted facility meets any of the waiver criteria listed in (g) above, notification (form enclosed) must be made to the Department's Bureau of Water Permits, Central Office, of such fact, and, provided there is no objection by the Department, a sign and DMR repository for the involved outfall(s) are not required. This notification must include the facility's name, address, telephone number, contact, permit number, outfall number(s), and reason why such outfall(s) is waived from the requirements of discharge notification. The Department may evaluate the applicability of a waiver at any time, and take appropriate measures to assure that the ECL and associated regulations are complied with.

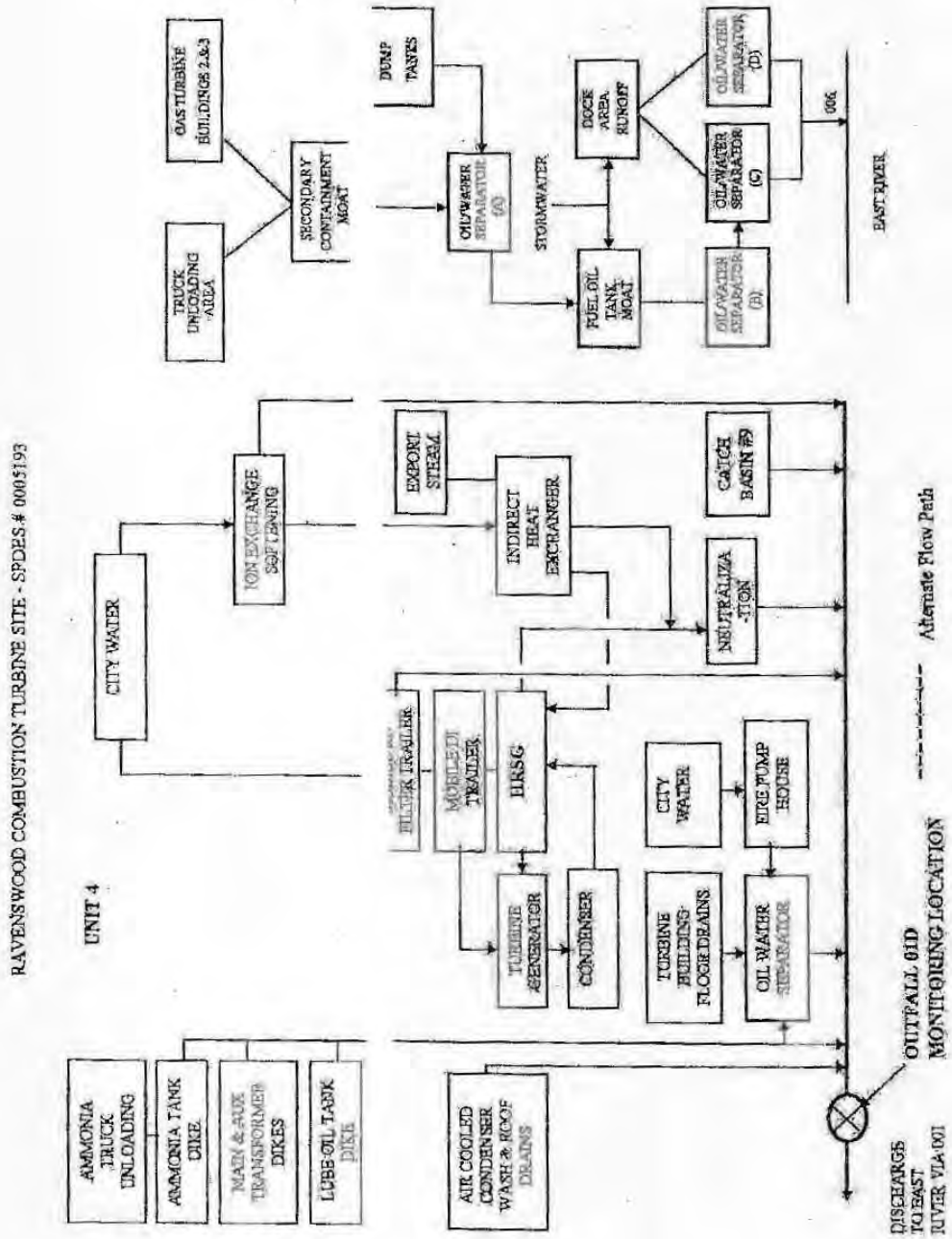
(i) The permittee shall periodically inspect the outfall identification signs in order to ensure that they are maintained, are still visible and contain information that is current and factually correct.

M NITORING LOCATIONS

The permittee shall take samples and mea ements, to comply with the monitoring requirements specified in this permit, at the location(s) specified below and on the followin age:



MONITORING LOCATIONS (continued)



RECORDING, REPORTING AND ADDITIONAL MONITORING REQUIREMENTS

a) The permittee shall also refer to 6 NYCRR Part 750-1.2(a) and 750-2 for additional information concerning monitoring and reporting requirements and conditions.

b) The monitoring information required by this permit shall be summarized, signed and retained for a period of five years from the date of the sampling for subsequent inspection by the Department or its designated agent. **Also, monitoring information required by this permit shall be summarized and reported by submitting;**

[x] (if box is checked) completed and signed Discharge Monitoring Report (DMR) forms for each 1 month reporting period to the locations specified below. Blank forms are available at the Department's Albany office listed below. The first reporting period begins on the effective date of this permit and the reports will be due no later than the 28th day of the month following the end of each reporting period.

[ ] (if box is checked) an annual report to the Regional Water Manager at the address specified below. The annual report is due by February 1 and must summarize information for January to December of the previous year in a format acceptable to the Department.

[ ] (if box is checked) a monthly "Wastewater Facility Operation Report..." (form 92-15-7) to the:
[ ] Regional Water Manager and/or [ ] County Health Department or Environmental Control Agency specified below

Send the **original** (top sheet) of each DMR page to:

Department of Environmental Conservation
Division of Water
Bureau of Watershed Compliance Programs
625 Broadway
Albany, New York 12233-3506

Phone: (518) 402-8177

Send the **first copy** (second sheet) of each DMR page to:

Department of Environmental Conservation
Regional Water Manager, Region 2
One Hunters Point Plaza
47-20 21st Street
Long Island City, New York 11101

Phone: (718) 482-4930

c) Noncompliance with the provisions of this permit shall be reported to the Department as prescribed in 6 NYCRR Part 750-1.2(a) and 750-2.

d) Monitoring must be conducted according to test procedures approved under 40 CFR Part 136, unless other test procedures have been specified in this permit.

e) If the permittee monitors any pollutant more frequently than required by the permit, using test procedures approved under 40 CFR Part 136 or as specified in this permit, the results of this monitoring shall be included in the calculations and recording of the data on the Discharge Monitoring Reports.

f) Calculation for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified in this permit.

g) Unless otherwise specified, all information recorded on the Discharge Monitoring Report shall be based upon measurements and sampling carried out during the most recently completed reporting period.

h) Any laboratory test or sample analysis required by this permit for which the State Commissioner of Health issues certificates of approval pursuant to section five hundred two of the Public Health Law shall be conducted by a laboratory which has been issued a certificate of approval. Inquiries regarding laboratory certification should be sent to the Environmental Laboratory Accreditation Program, New York State Health Department Center for Laboratories and Research, Division of Environmental Sciences, The Nelson A. Rockefeller Empire State Plaza, Albany, New York 12201.

KEYSPAN

175 East Old Country Road
Hicksville, New York 11801-4280

August 1, 2007

Mr. Roy A. Jacobson
Steam Electric Unit Leader
NYSDEC, Division of Fish Wildlife & Marine Resources
Bureau of Habitat, 5th Floor
625 Broadway
Albany, NY 12233-4756

Re: KeySpan Ravenswood Power Station
SPDES No. 0005193

Dear Mr. Jacobson:

The Ravenswood SPDES permit requires the submittal of a Technology Installation and Operation Plan by August 1, 2007. Under the Biological Monitoring Requirements, Technology Installation and Operation Plan section (B.4) the permit requires "a) 1. a schedule for installing and implementing the technologies and/or operational measures...." to meet specified technologies. The requirement is met via the attached the draft "Ravenswood Power Station Operation of CWIS" and schedules for the design, procurement and installation of equipment at Ravenswood Units 10, 20 and 30.

Section a.(2) requires a description of the "Methodology for Assessing the Efficacy of Technologies and Operational Measures". That is also attached for your review.

If you have any questions please feel free to contact me at 516-545-2556 or via e mail at ccorrado@keyspanenergy.com.

Best Regards,

Christopher Corrado
Environmental Engineering & Compliance Department

cc: Regional Water Manager, DEC Region 2 (w/o Attachments)
SPDES Compliance Information Section

	DRAFT Ravenswood Power Station Operation of CWIS	Doc. # Revision: 0 July 2007 Page 1 of 2

1.0 Purpose

This procedure is issued to set out the parameters by which the cooling water intake system (CWIS) is operated. The Station's State Pollutant Discharge Elimination System (SPDES) permit issued by the New York State Department of Environmental Conservation requires that technologies be installed and that operational measures be implemented to reduce the percentage of fish, eggs and larvae impinged and/or entrained by the CWIS. This procedure outlines those technologies and measures.

2.0 Scope

This procedure is applicable to components of the CWIS at Ravenswood Unit 10, 20 and 30, specifically the traveling screens, screen wash pumps, circulating water pumps and fish return lines.

3.0 Operation of Variable Speed Pumps (VSP)

The circulating water pumps are to be modified to permit variable speed operation. The VSPs shall be operated to reduce flow during peak entrainment season and as needed to achieve compliance with SPDES permit performance standards.

3.1 The drive motors shall be operated in variable speed drive at less than maximum unit load. Factors determining the speed of the drive shall include condenser back pressure, temperature at the discharge, difference in temperature between the intake and discharge (delta T), density of aquatic life, etc.

3.2 To further minimize the water flow the following rules shall apply when the Unit shuts down for more than 3 days. Once the Unit is off-line, one circulator shall be shut down completely. The second pump shall then be operated at lowest speed practicable in accordance with Section 3.1 until temperatures decrease to safe and acceptable levels in plant equipment such as the turbine exhaust hood. At such time the pump shall be turned off.

4.0 Operation of Traveling Screens

The SPDES permit requires the intake screens to operate continuously when the circulating pumps are operating. This requirement includes operation of the screen wash pumps and spray system. The screens shall operate continuously except for the following circumstances.

4.1 During the performance of routine maintenance activities on the traveling screen, drives, motors, pumps, spray nozzles and ancillary and associated equipment and facilities. Maintenance shall be performed as quickly as practicable and the screen returned to service without unreasonable delay.

4.2 During the performance of repairs on the traveling screen, drives, motors, pumps, spray nozzles and ancillary and associated equipment and facilities. Repairs shall be performed as quickly as practicable and the screen returned to service without unreasonable delay.

5.0 Use of the Fish Return System

The fish friendly return system shall be maintained in good operating condition and used continuously. Should periodic maintenance need to be performed it shall be scheduled to minimize impacts (i.e. perform maintenance during outages, screen maintenance, and other periods when the pumps or screens are not operating).

6.0 Scheduling of Unit Outages

In order to minimize the number of marine organisms entrained in the CWIS, flow reduction shall be implemented. In addition to variable speed pumps, unit outages during the peak entrainment season (March – May) shall be scheduled. During the March 15 through May 7 period, outages[1] shall be scheduled on one or more units to span as much of that period as possible.

7.0 Authorization

Approved By:

_____

Director, Electric Production

[1] Outages are subject to the approval of New York State Independent System operator (NYISO) and the local transmission operator (TO), Con Edison

Ravenswood TIOP Schedules

Ravenswood 10 & 20 Screen Wash Pumps[1]		
Activity	**Start**	**Completion**
Design & Engineering[2]	May 17, 2006	November 1, 2006
Procurement & Delivery	November 1, 2006	November 1, 2007
Installation & Testing[3]	November 1, 2007	December 31, 2007
Ravenswood 30 Screen Wash Pumps[1]		
Activity	**Start**	**Completion**
Design & Engineering[2]	May 17, 2006	November 1, 2006
Procurement & Delivery	November 1, 2006	April 1, 2008
Installation& Testing[3]	April 1, 2008	June 1, 2008
Ravenswood 30 VSP and Vacuum Priming System		
Activity	**Start**	**Completion**
Design & Engineering[2]	November 1, 2006	July 1, 2007
Procurement & Delivery	July 1, 2007	September 1, 2009
Installation & Testing[3]	September 1, 2009	November 1, 2009
Ravenswood 10 VSP and Vacuum Priming System		
Activity	**Start**	**Completion**
Design & Engineering[2]	November 1, 2007	September 1, 2008
Procurement & Delivery	September 1, 2008	September 1, 2010
Installation & Testing[3]	September 1, 2010	November 1, 2010
Ravenswood 20 VSP and Vacuum Priming System		
Activity	**Start**	**Completion**
Design & Engineering[2]	January 1, 2009	November 1, 2009
Procurement & Delivery	November 1, 2009	November 1, 2011
Installation & Testing[3]	November 1, 2011	December 31, 2011

[1] Screen wash pump upgrades are required for continuous screen operation
[2] Engineering activities will continue throughout the project.
[3] Once installed and tested, equipment shall be operated in accordance with the Ravenswood CWIS operating procedure.

Ravenswood TIOP

B.4.a.(2) Methodology for Assessing the Efficacy of Technologies and Operational Measures

The efficacy of technologies and operational measures in Condition B.2.a-d will be assessed using computer model simulations of impingement mortality and entrainment at Ravenswood units 10, 20, and 30. Model simulations of impingement mortality and entrainment for winter flounder and for the total of all finfish with the BTA technologies and operations in place will be compared to impingement mortality and entrainment for the Calculation Baseline to estimate average percentage reductions in IM&E over a 5-year operating period. Simulations for the Calculation Baseline will be based on unit operation at full flow and full capacity with 100% impingement mortality. Assessments for the Supplemental Technology and Operation Review Plan conducted in this permit period will be based on simulated generating conditions and outage schedules for each of the Ravenswood units. Assessments to verify compliance with the permit performance standards during the next permit cycle will be based on actual water use at the Station during the averaging period. Other inputs to the simulations will include: 1) available impingement and entrainment abundance data for Ravenswood, 2) impingement survival data from Ravenswood studies and the general literature, 3) condenser and auxiliary pump flows applicable to varying operational conditions, 4) other relevant information.

143

DEC APPROVAL OF RAVENSWOOD TECHNOLOGY INSTALLATION AND OPERATION PLAN, DATED AUGUST 29, 2007

New York State Department of Environmental Conservation
Division of Fish, Wildlife & Marine Resources
Bureau of Habitat, 5th Floor
625 Broadway, Albany, New York 12233-4756
Phone: (518) 402-8924 • **FAX:** (518) 402-8925
Website: www.dec.ny.gov

August 29, 2007

Christopher Corrado
Environmental Engineering
KeySpan Corporation
175 East Old Country Road
Hicksville, New York 11801-4280

RE: Ravenswood Generating Station
SPDES No. 0005193
Technology Installation and Operation Plan

Dear Mr. Corrado:

I have reviewed the Technology Installation and Operation Plan (TIOP) submitted for the Ravenswood Generating Station, as required under SPDES Biological Monitoring Requirement No. B.4. The TIOP is approved by the Department. I look forward to the continuation of this important work. Thank You.

Sincerely,

Michael J. Calaban
Conservation Biologist

CC: C. Dowd
R. Jacobson
S. Zahn
B. Terbush

Permittee: TC Ravenswood, LLC
Facility: Ravenswood Generating Station
SPDES No: NY0005193

Date: September 12, 2012
Prepared by: Bruce Terbush

Industrial Fact Sheet

Treatment Plant Description

The Ravenswood Generating Station is located in Long Island City along the East River. The facility has been in operation since 1963 and consists of 3 steam electric generators (units 10, 20 and 30), a combined cycle combustion turbine/steam electric generator (unit 40) and 11 simple cycle combustion turbines. Units 10, 20 and 30 have rated capacities of 400, 400 and 1027 megawatts. The SPDES permit for this facility addresses the discharge of once through cooling water, stormwater, boiler blowdown, floor drains, condensate, intake screen wash/fish returns and discharges from several processes which provide enhanced treatment to the municipal drinking water so that it can be used in the facility's boiler system. The additional treatment processes for boiler water include filtration, ion exchange and reverse osmosis.

Summary of Proposed Permit Changes:

- Updated permit pages and conditions reflect current permit language, Department guidance , format and nomenclature
- Latitude and longitude information were corrected for outfall 009 and 010 to reflect information submitted in the permittee's application.
- The discharge limit for total chlorine residual at outfall 001 was reduced from 0.13 mg/l to 0.075 mg/l.
- Monthly average limits 30 mg/l for total suspended solids (TSS) have been added to internal outfalls 01D, 01E, 01F, 01G and 01H. This is a BPT limit required by 40 CFR 423.12(b)(3) for the Steam Electric Power Generating Point Source Category.
- Daily maximum limits for oil and grease of 15 mg/l have been included at internal outfalls 01E, 01F and 01H.
- Monthly average limits 15 mg/l for oil & grease have been added to internal outfalls 01D, 01E, 01F, 01G and 01H. This is a BPT limit required by 40 CFR 423.12(b)(3) for the Steam Electric Power Generating Point Source Category.
- Outfall 004 limits and monitoring for Aroclors 1254 and 1260 have been removed as results have been reported as not detected for the past 10 years.
- The discharge limit for ethylbenzene at outfalls 004, 006 and 007 was reduced from 50 ug/l to 45 ug/l based upon the aquatic chronic standard of 7.5 ug/l.
- PCB monitoring for stormwater at outfall 011 has been removed. This is a new stormwater outfall that was added to the SPDES permit as a modification issued on December 28, 2010. PCBs are not expected to be present in this discharge.
- Footnotes regarding the permit limits, levels and monitoring requirements have been updated and consolidated onto page 8 of the draft permit.
- The Additional Requirements Section, Condition 1 (page 9) first sentence has been revised to more clearly prohibit the discharge of boiler and metal cleaning wastes.
- The old condition 4 (water treatment chemicals) in the Additional Requirements Section has been removed and replaced by the Water Treatment Chemical (WTC) Requirements section on page 18 of the draft permit.
- The Biological Monitoring Requirements section has been revised to eliminate the completed requirements.

Background Information

The current SPDES permit for the TC Ravenswood Generating Station was issued on April 20, 2007 and is based upon an application submitted in August 2005 in response to a request for information under the Environmental Benefit Permit Strategy program. Permit modifications were issued on January 13, 2009 and December 28, 2010.

In a June 13, 2011 letter the Department notified the Permittee that their SPDES permit would expire on April 30, 2012 and that they must submit a SPDES Permit Renewal Application and sampling data for review. The SPDES permit application was received on November 1, 2011. Sampling requested included conventional parameters and priority pollutants.

A review of the facility's Discharge Monitoring Reports from 10/1/08 to 11/30/11 shows that the facility exceeded their SPDES permit limits as follows:

DMR Period	Outfall	Parameter	Permit Limit	Value Reported
Nov. 2008	01A	pH (minimum)	6.0 s.u.	5.3 s.u.
June 2009	01D	pH (maximum)	9.0 s.u.	9.3 s.u
June 2009	004	TSS (daily max.)	50 mg/l	58 mg/l
Mar. 2010	006	TSS (daily max.)	50 mg/l	116 mg/l
Dec. 2010	006	TSS (daily max.)	50 mg/l	73 mg/l
May 2011	01D	TSS (daily max.)	100 mg/l	136 mg/l

Discharge Composition

Table 1 in Appendix C presents the existing effluent quality of the facility. The average and maximum concentration and mass reported are based on 3 years of Discharge Monitoring Report (DMR) data submitted by the permittee from 10/1/08 to 11/30/11. Additional pollutants detected in the effluent were reported in the SPDES NY-2C permit application.

Outfall and Receiving Water Information

The facility maintains the following outfalls:

Outfall No.	Design Flow Rate (MGD)	Latitude	Longitude	Receiving Water	Water Class	Water Index Number
001	853	40° 45' 31"	73° 56' 54"	East River	I	ER(0.3-10.1)
01A*	0.012	40° 45' 31"	73° 56' 54"	East River	I	ER(0.3-10.1)
01C*	0.145	40° 45' 31"	73° 56' 54"	East River	I	ER(0.3-10.1)
01D*	0.022	40° 45' 31"	73° 56' 54"	East River	I	ER(0.3-10.1)
01E*	0.002	40° 45' 31"	73° 56' 54"	East River	I	ER(0.3-10.1)
01F*	0.004	40° 45' 31"	73° 56' 54"	East River	I	ER(0.3-10.1)
01G*	0.01	40° 45' 31"	73° 56' 54"	East River	I	ER(0.3-10.1)
01H*	0.003	40° 45' 31"	73° 56' 54"	East River	I	ER(0.3-10.1)
002	0.027	40° 45' 40"	73° 56' 47"	East River	I	ER(0.3-10.1)
004	0.007	40° 45' 48"	73° 56' 40"	East River	I	ER(0.3-10.1)
006	0103	40° 45' 44"	73° 56' 43"	East River	I	ER(0.3-10.1)
007*	0.10	40° 45' 32"	73° 56' 53"	East River	I	ER(0.3-10.1)
008	1.152	40° 45' 33"	73° 56' 50"	East River	I	ER(0.3-10.1)
009	1.152	40° 45' 33"	73° 56' 50"	East River	I	ER(0.3-10.1)
010	1.728	40° 45' 37"	73° 56' 45"	East River	I	ER(0.3-10.1)
011	0.416	40° 45' 30"	73° 56' 45"	East River	I	ER(0.3-10.1)

Note: "*" Outfalls 01A, 01C, 01D, 01E, 01F, 01G, 01H and 007 combine with the condenser cooling water and discharge via Outfall 001.

The facility discharges condenser cooling water, stormwater, boiler blowdown, floor drains, intake screen wash/fish returns filter backwash, reverse osmosis reject water, condensate and demineralizer & ion exchange regeneration discharges through the outfalls listed below into the East River. The East River is classified as Class I by the Department with the following beneficial uses:

> The best usages of Class I waters are secondary contact recreation and fishing. These waters shall be suitable for fish, shellfish, and wildlife propagation and survival.

Critical Flows and Dilution

Due to the tidal nature of the receiving water, the 7Q10 and 30Q10 flows are not applicable. Dilution and receiving water data is as follows:

Outfall No.	Receiving Water	Dilution/Mixing	pH (SU)	Temp (°C)	Salinity
001	East River	10:1 d	7.2	Summer 24.8° C Winter 0° C	Summer 23.9 ppt Winter 21.8 ppt
002	East River	10:1 d	7.2	Summer 24.8° C Winter 0° C	Summer 23.9 ppt Winter 21.8 ppt
004	East River	10:1 d	7.2	Summer 24.8° C Winter 0° C	Summer 23.9 ppt Winter 21.8 ppt
007	East River	10:1 d	7.2	Summer 24.8° C Winter 0° C	Summer 23.9 ppt Winter 21.8 ppt
008	East River	10:1 d	7.2	Summer 24.8° C Winter 0° C	Summer 23.9 ppt Winter 21.8 ppt
009	East River	10:1 d	7.2	Summer 24.8° C Winter 0° C	Summer 23.9 ppt Winter 21.8 ppt
010	East River	10:1 d	7.2	Summer 24.8° C Winter 0° C	Summer 23.9 ppt Winter 21.8 ppt
011	East River	10:1 d	7.2	Summer 24.8° C Winter 0° C	Summer 23.9 ppt Winter 21.8 ppt

Notes: d - use default dilution value per TOGS 1.3.1

Dilution/Mixing Zone Analysis

Mixing zone analysis has not been conducted and a default dilution of 10:1 has been assigned per TOGS 1.3.1.

Critical Receiving Water Data

Values for temperature, pH, and salinity were obtained from Ravenswood intake monitoring data, Ravenswood discharge monitoring data and NYCDEP Harbor WQ Survey Data (1990-1999), respectively.

303(d) Impaired Waterbody Information

Year Listed	Cause/Pollutant	Suspected Source	TMDL Status
1998	PCBs, other toxics	Contaminated Sediments	Completed in 1994 for copper, lead mercury & nickel

The 303(d) list identifies waters that do not support appropriate uses and that require development of a Total Maximum Daily Load (TMDL) or other restoration strategy. The NJ-NY Harbor waters are listed in 303(d) list for mercury, PCBs, dioxins/furans, PAHs, pesticides and heavy metals. The department of health has issued a health advisory for eating fish taken from the Hudson River.

A TMDL was developed in 1994 for the NY-NJ Harbor for copper, mercury, nickel and lead. The East River was determined to be effluent limited for copper, nickel and lead. The mercury exceeded NY State's ambient water quality standard throughout NY-NJ Harbor. Waste Load allocation (TMDL/WLA) for this facility have not been applied because the water is being removed from and returned to the East River for cooling with no net increase in copper, mercury, nickel and lead loadings.

Effluent Limitations

The NYSDEC followed the Clean Water Act, state and federal regulations, and the Division of Waters Technical and Operational Guidance Series documents for developing the effluent limits. In general, the Clean Water Act requires that the effluent limits for a particular pollutant are the more stringent of either the technology-based or water quality-based limits. A technology-based effluent limit requires a minimum level of treatment for industrial point sources based on currently available treatment technologies. A water quality-based effluent limit (WQBEL) is designed to ensure that the water quality standards of receiving waters are being met. The table detailing the effluent limits is included in the draft permit. More information on the derivation of technology- and water quality-based effluent limits is presented in Appendix C.

Monitoring Requirements

Section 308 of the Clean Water Act and federal regulations 40 CFR 122.44(i) require that monitoring be included in permits to determine compliance with effluent limitations. Additional effluent monitoring may also be required to gather data to determine if effluent limitations may be required. The permittee is responsible for conducting the monitoring and for reporting results on Discharge Monitoring Reports (DMRs) to NYSDEC.

The draft permit contains the monitoring requirements for the facility. Monitoring frequency is based on the minimum sampling necessary to adequately monitor the facility's performance. For industrial facilities, sampling frequency is based on guidance provided in TOGS 1.2.1.

Other Permit Conditions

Additional Requirements

Several additional permit conditions are listed in the permit to address operational issues and additional reporting requirements related to steam electric power generating facilities.

Biological Monitoring Requirements

In accordance with 6 NYCRR Part 704.5, the location, design, construction and capacity of the cooling water intake structures, in connection with point source thermal discharges, shall reflect the best technology available for minimizing the adverse environmental impacts. The Ravenswood facility has a combined flow of once through, condenser cooling water and service water of 1457 million gallons per day. The shoreline intake structure consists of 14 intake bays and conventional through flow traveling screens to keep the station's condensers clear. Marine organisms and debris are continuously washed off the screens at each unit are returned to the East River through a Department approved, low stress fish

return pipe. As part of the SPDES permit modification issued on April 20, 2007, the New York State Department of Environmental Conservation (NYSDEC) determined that, in combination, the following technologies represent the best technology available (BTA) for minimizing adverse environmental impacts from the cooling water intake system. In accordance with schedules contained in the current SPDES permit, installation of these alternatives were to be completed by February 28, 2012 in order to achieve a 90% reduction in impingement mortality and a 65% reduction in entrainment from the calculation baseline. The technologies included:

a) Installation of variable speed pumps and ancillary equipment at Ravenswood Units 1, 2 and 3 that will allow for the reduction in cooling water use during periods of low electrical generation;

b) Scheduling of a planned outage process that will require cooling water pumps to be shut down to reduce impingement and entrainment during periods of non electrical generation;

c) Upgrades to the existing traveling intake screens at Ravenswood Units 1, 2 and 3 to allow for the continuous operation of all traveling intake screens and construction of low stress fish returns, to increase fish impingement survival;

The Biological Monitoring Requirements included in this SPDES permit reflect a continuation of these requirements including verification monitoring, a report demonstrating compliance and submission of status reports. A Biological Fact Sheet for the Cooling Water Intake Structures, prepared by the NYSDEC, Division of Fish, Wildlife and Marine Resources, Bureau of Habitat, Steam Electric Unit has been included in Appendix B of this fact sheet

Special Conditions – Industry Best Management Practices

The permittee is required to implement a Best Management Practices (BMP) plan that prevents, or minimizes the potential for, the release of significant amounts of toxic or hazardous pollutants to state waters. The BMP plan requires annual review by the permittee.

Water Treatment Chemicals

The use of water treatment chemicals (WTCs) in wastewater treatment systems requires the review and authorization by the NYSDEC. In most cases, a permit modification is not necessary. WTC usage must be logged and detailed in an annual report sent to the DEC. The draft permit details the authorized WTCs for the facility.

Compliance Schedules

A schedule of compliance is included in the draft permit identifying a submission required by the biological monitoring requirements for the cooling water intake structures.

Additional Permit Provisions

The draft permit contains standard regulatory language that is/are required to be in all SPDES permits. These permit provisions are based largely upon 40 CFR 122, subpart C and include requirements pertaining to monitoring, recording, reporting, and compliance responsibilities.

Other Legal Requirements

Discharge Notification Act

In accordance with Discharge Notification Act (ECL 17-0815-a), the permittee is required to post a sign at each point of wastewater discharge to surface waters. The permittee is also required to provide a public repository for DMRs as required by the SPDES permit.

Antidegradation Policy

New York State implements the antidegradation portion of the CWA based upon two documents:

1. Organization and Delegation Memorandum #85-40, entitled "Water Quality Antidegradation Policy," signed by the Commissioner of NYSDEC, dated September 9, 1985.

2. TOGS 1.3.9, entitled "Implementation of the NYSDEC Antidegration Policy – Great Lakes Basin (Supplement to Antidegradation Policy dated September 9, 1985)."

An SPDES permit cannot be issued that would result in the water quality criteria being violated. The draft permit for the facility contains effluent limits which ensure that the existing beneficial uses of the East River will be maintained.

Appendix A

Basis for Effluent Limitations

Statutory and Regulatory Basis for Limits

Sections 101, 301(b), 304, 308, 401, 402, and 405 of the Clean Water Act (CWA) provide the basis for the effluent limitations and other conditions in the draft permit. The NYSDEC evaluates discharges with respect to these sections of the CWA and the relevant SPDES regulations to determine which conditions to include in the draft permit.

In general, the permit writer does a statistical analysis of the monitoring data provided in permittee-submitted discharge monitoring reports (DMRs). Pollutant screening data as required in the Request for Information is also reviewed to determine the presence of additional contaminants that should be considered for inclusion in the permit. The permit writer determines the technology-based limits that must be incorporated into the permit in accordance with federal and state rules, regulations, and technical guidance. The Department then evaluates the water quality expected to result from these controls to determine if any exceedances of water quality standards in the receiving water would result. If there is a reasonable potential for exceedances to occur, water quality-based limits must be included in the permit. The draft permit limits reflect whichever requirements, technology or water quality, are more stringent. The proposed limits are located on Page[s] **xx-xx** of the draft permit. This Appendix describes the technology-based and water quality-based evaluation for the facility.

Technology-Based Evaluation

Section 301(b) and 402 of the CWA require technology-based controls on effluents. This section of the Clean Water Act requires that, by March 31, 1989, all permits contain effluent limitations which: (1) control toxic pollutants and non-conventional pollutants through the use of "best available technology economically achievable" (BAT), and (2) represent "best conventional pollutant control technology" (BCT) for conventional pollutants. In no case may BCT or BAT be less stringent than "best practical control technology currently available" (BPT), which is the minimum level of control required by Section 301(b)(1)(A) of the Clean Water Act. After March 31, 1989, all permits for new sources are required to contain effluent limitations for all categories of point sources which control toxic pollutants through the use of best available demonstrated technology (BADT). BADT is specifically applied through New Source Performance Standards (NSPS).

In many cases, BPT, BCT, BAT and NSPS limitations are based on effluent guidelines developed by USEPA for specific industries. Guidelines for the Steam Electric Power Generation Category can be found in 40 CFR 423. Specific effluent guidelines for this facility include once through cooling water and low volume waste sources (e.g., floor drains, boiler blowdown, ion exchange water treatment systems, etc.) and require monitoring and limitations on pH, TSS, Oil & Grease and Total Residual Chlorine. Specific effluent limits for these pollutants can be found in the Tables at the end of Appendix C. In addition to the effluent guidelines promulgated by USEPA, the permit writer is authorized to use his/her best professional judgment (BPJ) in developing technology-based limitations. The authority for BPJ is contained in Section 402(a)(1) of the CWA, which authorizes the Department to issue a permit containing "such conditions as the Administrator determines are necessary to carry out the provisions of the Act." The NPDES regulations in 40 CFR 125.3 state that permits developed on a case-by-case basis under Section 402(a)(1) of the CWA must consider:

1. The appropriate technology for the category class of point sources, of which the applicant is a member, based on available information; and
2. Any unique factors relating to the applicant.

For certain industrial sectors, Effluent Guidelines have not been promulgated by USEPA. In other instances, facilities that are subject to federal regulations may have substances in their discharges that are not explicitly limited by the regulations. To determine if these substances require technology-based effluent limits, the permit writer must apply Best Professional Judgment (BPJ). The authority for BPJ is contained in Section 402(a)(1) of the CWA, which authorizes the Department to issue a permit containing "such conditions as the Administrator determines are necessary to carry out the provisions of the Act." The NPDES regulations in 40 CFR 125.3 state that permits developed on a case-by-case basis under Section 402(a)(1) of the CWA must consider:

1. Reviewing Effluent Guidelines for sectors with similar pollutants,
2. Reviewing limitations developed at similar facilities, and
3. Any unique factors relating to the applicant.

Water Quality-Based Evaluation

In addition to the technology-based limits previously discussed, the NYSDEC evaluated the discharge to determine compliance with Section 301(b)(1)(C) of the Clean Water Act. This section requires the establishment of limitations in permits necessary to meet water quality standards by July 1, 1977.

The regulations in 40 CFR 122.44(d)(1) implement Section 301(b)(1)(C) of the Clean Water Act. These regulations require that SPDES permits include limits for all pollutants or parameters which are or may be discharged at a level which will cause, or contribute to an excursion above any State water quality standard, including State narrative criteria for water quality. The limits must be stringent enough to ensure that water quality standards are met and must be consistent with any available wasteload allocation (WLA).

Water Quality Criteria

Water quality regulations detailed in 6 NYCRR Parts 700-706 and ambient water quality standards and guidance values specified in TOGS 1.1.1 were applied to the facility's discharge. Specific application of the regulations and standards is detailed in the tables at the end of Appendix C.

Reasonable Potential Evaluation

Reasonable potential analysis is the process for determining whether a discharge causes, has the reasonable potential to cause, or contributes to an excursion above New York State water quality criteria for toxic pollutants. When conducting a reasonable potential analysis for each pollutant of concern, factors such as receiving water classification and corresponding water quality criteria and guidance values, pollutant concentration in the effluent, dilution available in the receiving water, background concentrations and additional upstream and downstream dischargers containing the pollutant of concern are used to quantify the receiving water quality. If the expected concentration of the pollutant of concern in the receiving water exceeds the ambient water quality criteria or guidance value then there is reasonable potential that the discharge may cause or contribute to a violation of the water quality standard, and a water quality-based effluent limit or load allocation for the pollutant is required. Calculations performed specifically for the effluent of this facility can be found at the end of this Appendix.

Whole Effluent Toxicity (WET) Testing - WET tests use small vertebrate and invertebrate species to measure the aggregate toxicity of an effluent. There are two different durations of toxicity tests: acute and chronic. Acute toxicity tests measure survival over a 96-hour test exposure period. Chronic toxicity tests measure reductions in survival, growth, and reproduction over a 7-day exposure. Per TOGS 1.3.2, WET testing is required when

- there is the presence of substances in the effluent for which ambient water quality criteria do not exist.
- there are uncertainties in the development of TMDLs, WLAs, and WQBELs, caused by inadequate ambient and/or discharge data, high natural background concentrations of pollutants, available treatment technology, and other such factors.
- there is the presence of substances for which WQBELs are below analytical detectability.
- there is the possibility of complex synergistic or additive effects of chemicals, typically when the number of metals or organic compounds discharged by the permittee equals or exceeds five.
- there are observed detrimental effects on the receiving water biota.
- previous WET testing indicated a problem.

WET testing has not been included with this permit. The major discharges at this facility are once through cooling water and site stormwater. There are also several low volume wastewater discharges including boiler blowdown and treatment discharges related to the treatment of municipal drinking water for use in the power station boilers. Any water treatment chemicals used in these processes are evaluated and the information provided includes product composition, dosage rates, outfall concentrations and toxicity data. Based upon review of this information WET testing has not been recommended because there is no expectation of toxic effects from the discharge in the receiving water.

Procedure for Deriving Water Quality-Based Effluent Limits (WQBELs)

The TMDL process is a water quality based approach to implementing water quality standards. It is applied to an entire watershed or drainage basin whenever possible, but may also be applied to waterbody segments with individual or multiple pollutant sources. The TMDL analysis is carried out separately for each pollutant. It allows for the consideration of all sources of the pollutant including point sources, non-point sources, atmospheric deposition and natural background. Dependant on the complexity of the issue and the amount of data available, the analysis can be relatively simple such as a desk-top, mass-balance calculation or it can be exacting and detailed by using complex, multidimensional water quality models. The TMDL process serves a dual function in the permit development process. It provides the basis for the reasonable potential analysis. If the reasonable potential analysis indicates that the pollutant of concern has the potential to cause or contribute to an excursion of water quality standards, the TMDL process is then used to determine the WQBELs for all sources of the pollutant to assure compliance with the standards.

Pollutant-Specific Analysis

This section outlines the basis for each of the effluent limitations in the permittee's draft permit.

Mercury

Mercury was previously detected in stormwater at the facility at an average level of 14.1 ng/l, which exceeds the water quality standard of 0.7 ng/l. Although the standard is exceeded, this concentration in rainwater is common. New York State's mercury multiple discharge variance (MDV) in TOGS 1.3.10 is being applied. Mercury may also be present in the intake water taken directly from the same body of water to which the discharge occurs. As there are no known sources or additional contributions of

mercury which would qualify the facility as high priority mercury discharger, the permit does not include a mercury limit or mercury minimization program.

Outfall 001

Discharge Temperature - The discharge temperature is based upon existing permit limits. This limit remains in the permit unchanged.

Intake-Discharge Temperature Difference - The discharge temperature difference (or delta T) is based upon existing limits. This limit remains in the permit unchanged.

Net Addition of Heat - The net addition of heat is based upon existing limits. This limit remains in the permit unchanged.

Total Residual Chlorine (TRC) - A TRC limit of 0.075 mg/L is included in the draft permit. 6 NYCRR Part 703.5 establishes a total residual chlorine standard of 7.5 µg/L as a aquatic chronic standard. A default 10:1 dilution ratio has been applied to this discharge to the East River.

Outfalls 01A, 01D, 01E, 01F, 01G & 01H

Total Suspended Solids (TSS) - The discharges from these outfalls are considered to be low volume waste sources as identified in the Steam Electric Power Generation Category. The daily maximum limit of 100 mg/l and the 30 day average limit of 30 mg/l are best practicable control technology (BPT) limits required by 40 CFR 423.12(b)(3). The existing daily maximum limit of 50 mg/l at outfall 01G will remain based upon antibacksliding provisions.

Oil & Grease - The discharges from these outfalls are considered to be low volume waste sources as identified in the Steam Electric Power Generation Category. The daily maximum limit of 20 mg/l and the 30 day average limit of 15 mg/l are best practicable control technology (BPT) limits required by 40 CFR 423.12(b)(3). The existing permit includes daily maximum Oil & Grease limits of 15 mg/l for outfalls 01A, 01D and 01G. These limits remain unchanged in the draft permit. Daily maximum Oil & Grease limits of 15 mg/l have also been added for outfalls 01E, 01F and 01H. During the public comment period for the draft permit, the USEPA commented that the monthly average Oil & Grease limit of 15 mg/l must also be included to reflect the technology based limit for the Steam Electric Power Generation Category for low volume wastewater. As a result, the monthly average limit has been added to the permit.

Ammonia – Monitoring for ammonia at outfalls 01D and 01G is based upon the potential for it to be present in the discharge based upon ammonia storage for air pollution control equipment and a possible byproduct from water treatment chemical use in boiler blowdown.

Outfalls 004, 006, 007 and 011

Oil & Grease – An oil and grease limit of 15 mg/l has been applied to these discharges based upon the narrative water quality standard for oil and floating substances contained in 6 NYCRR Part 703.2. The 15 mg/l limit reflects the lower concentration at which a visible sheen is observed.

Total Suspended Solids (TSS) – An TSS limit of 50 mg/l has been applied to these discharges based upon the narrative water quality standard for turbidity, suspended, colloidal and settleable solids contained in 6 NYCRR Part 703.2. The 50 mg/l limit reflects the lower concentration at which a visible contrast may be observed and may cause deposition or impair waters for their best usage.

Benzene, Toluene and Xylene – The existing limit of 50 ug/l for these compounds have been applied as BPJ limits. These compounds are common target pollutants associated with fuel storage. The 50 ug/l limit is more stringent than the associated WQBEL for these compounds.

Ethylbenzene – A limit of 45 ug/l is included in the draft permit. The Department-s Technical & Operational Guidance Series (TOGS) 1.1.1 - Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations lists an ambient aquatic (chronic) guidance value of 4.5 ug/l. Using a default 10:1 dilution ratio, a WQBEL of 45 ug/l has been applied.

Aroclor – The existing permit limit for Aroclors 1254 and 1260 at outfall 004 was removed as sampling data for the past 10 years indicates that samples were all reported as not detected.

APPENDIX B
Biological Fact Sheet - Cooling Water Intake Structure
Bureau of Habitat, Steam Electric Unit

Description of Facility
The Ravenswood Generating Station, located on the East River, contains three units with rated capacities of 400, 400 and 1027 megawatts. The facility has a combined flow of condenser cooling water and service water of 1457 million gallons per day. The shoreline intake structure consists of 14 intake bays and conventional through flow traveling screens to keep the station's condensers clear. Marine organisms and debris are continuously washed off the screens at each unit are returned to the East River through a Department approved, low stress fish return pipe.

Ecological Resource
The East River is part of the Hudson-Raritan Estuary System, extending approximately 170 miles from the dam at Troy, NY to Sandy Hook, NJ. The estuary system connects to the coastal marine waters of the New York Bight, between Sandy Hook, NJ and Rockaway Point, NY, and to the western end of the Long Island Sound through the East River.

The East River is a tidal strait extending about 16 miles from the battery to Throgs Neck at Long Island Sound. At Hell's Gate, a natural sill divides the strait into two distinct hydrological sections. The upper East River, which connects to Long Island Sound, is broader, more shallow and characterized by more natural shoreline habitat. The Lower East River, where the Station is located, is a narrower 10 mile section, bulkheaded along most of its length. The channel here is steep sided with depths at approximately 35 to 80 feet. Current velocities in the vicinity of the Station are high, with average peak flood and ebb currents at about 4.6-4.7 feet per second, and maximum tidal velocities exceeding 5.5 feet per second (ASA, 2001).

More than 140 species of fish have been reported from the Hudson-Raritan Estuary System, representing marine, estuarine, freshwater and diadromous fish, as well as species adapted to northern and southern climates. More than 50 species of fish, mostly marine in origin, have been identified from studies conducted at the Station in the 1990s. Under a 1992 consent order with the Department, Con Edison conducted a series of studies to assess the Station's impact on aquatic resources in the East River and determine best technology available for the cooling water intake system. Impingement and entrainment studies conducted were between 1991 and 1994. Approximately 83,000 fish were estimated to be impinged per year, mainly winter flounder, blueback herring, bay anchovy and grubby. Entrainment studies conducted over that time estimated that an average of 220 million eggs, larvae and juvenile fish were entrained per year, with eggs accounting for approximately 75% of the total. The principal species entrained were four beard rockling, bay anchovy, winter flounder, grubby and silver hake (Con. Ed., 1996).

Studies required under the consent order determined that several species of impinged fish, including winter flounder, bay anchovy and Atlantic tomcod, experience thermal stress and possibly increased levels of mortality upon exposure to the high summer temperatures in the cooling water discharge canal. A mark-recapture study was then conducted to determine suitable location(s) to return fish directly to the East River without exposure to the station's thermal discharge. Construction of three fish return pipes, one for each unit, was completed in 2005. The system safely transports impinged fish back to the East River and was the first step in mitigating the impacts of the Station's cooling water intake system.

The most recent Impingement and Entrainment studies were conducted from March 2005 to February 2006. About 25,850 fish were impinged over the year, representing 61 taxons. Blueback herring (21.8%), bay anchovy (13.5%) and alewife (11.3%) were impinged in greatest numbers. Approximately 149.7 million eggs, larvae and juveniles were entrained through the station. Bay anchovy (22.8%), Atlantic menhaden (18.5%) and the goby family (12.5%) were the predominant taxons entrained. Post-yolk-sac larvae (51.2%) and eggs (47.0%) were the main life stages found in the entrainment collections.

Alternatives Evaluated

Feasible technological and operational alternatives were evaluated for this facility, including the use of closed cycle cooling, in order to determine best technology available to minimize adverse environmental impact from operation of the cooling water intake system. The Department selected the alternatives that will minimize impacts, consistent with 6NYCRR Part 704.5 and the federal Clean water Act.

Determination of Best Technology Available

According to 6NYCRR Part 704.5 - Intake structures and Section 316(b) of the federal Clean Water Act, the location, design, construction, and capacity of cooling water intake structures must reflect the "best technology available" (BTA) for minimizing adverse environmental impact. After evaluating all of the available alternatives, the New York State Department of Environmental Conservation (NYSDEC) determined that, in combination, the following technologies and operational measures listed here represent the best technology available (BTA) for minimizing adverse environmental impacts from the cooling water intake system. Implementation of these items was completed by early 2012. The SPDES permit requires that these alternatives achieve a 90% reduction in impingement mortality and a 65% reduction in entrainment from the calculation baseline. The cost of these technologies is not wholly disproportionate to the benefits.

a) Installation of variable speed pumps and ancillary equipment at Ravenswood Units 1, 2 and 3 that will allow for the reduction in cooling water use during periods of low electrical generation;

b) Scheduling of a planned outage process that will require cooling water pumps to be shut down to reduce impingement and entrainment during periods of non electrical generation;

c) Upgrades to the existing traveling intake screens at Ravenswood Units 1, 2 and 3 to allow for the continuous operation of all traveling intake screens and construction of low stress fish returns, to increase fish impingement survival;

A Supplemental Technology and Operation Review/Plan was submitted and approved by the Department in May 2011. Based upon performance testing of variable speed pumps installed at Unit 30, simulations of variable speed pump operation and cooling water use reduction was established for the entire station. Plant generation data from 2005-2009 and several years of in-plant impingement, impingement survival and entrainment data were then used to estimate what the likely reductions in impingement mortality and entrainment would have been over the 2005-2009 period with the BTA alternatives in place. The assessment indicated that under the stated operating conditions and time period, the impingement mortality reduction of 90% and entrainment reduction of 65% from baseline, required by the SPDES permit, would have been achieved.

Monitoring Requirements

A *Verification Monitoring Plan* for was submitted and approved by the Department in December 2011. The plan details the procedures necessary to confirm that the reductions in impingement mortality and entrainment required by this permit are being achieved. The specific requirements of the monitoring plan are set forth in Additional Requirements Nos. 4.a.- e. of the modified SPDES permit.

Legal Requirements

The requirements for the cooling water intake structure in this State Pollutant Discharge Elimination System permit are consistent with the policies and requirements embodied in the New York State Environmental Conservation Law, in particular - Sec.1-0101.1.; 1-0101.2.; 1-0101.3.b., c.; 1-0303.19.; 3-0301.1.b., c., i., s. and t.; 11-0107.1; 11-0303.; 11-0535.2; 11-1301.; 11-1321.1.; 17-0105.17.; 17-0303.2., 4.g.; 17-0701.2. and the rules thereunder, specifically 6NYCRR Part 704.5. Additionally, the requirements are consistent with the Clean Water Act, in particular Section 316(b) and the rules thereunder, specifically Subpart J of 40 CFR §125 - Requirements Applicable to Cooling Water Intake Structures for Phase II Existing Facilities Under 316(b) of the Clean Water Act.

Summary of Changes

Deletions (Former Permit Conditions)

Former Permit Condition	Reason for Deletion or Change
Additional Requirement No. B.1	Condition has been met.
Additional Requirement No.B.8.	Condition is no longer relevant, now that BTA has been established.

References

ASA 2001. Ravenswood Generating Station. Final Action Report. Prepared by ASA Analysis and Communication, Inc. for the Keyspan Corporation.

ASA 2004. Evaluation of the Fish Protection Benefits of Cooling Water Intake System Alternatives at the Ravenswood Generating Station. Phase 2 Report. Prepared by ASA Analyses and Communication, Inc. for the Keyspan Corporation. April 2004. Revised February 2005.

Con. Ed. 1996. Ravenswood Generating Station. Diagnostic Study Report. Prepared by Consolidated Edison Company of New York, Inc. Pursuant to the December 23, 1993 Order On Consent in DEC file No. R2-2985-90-04. April 30, 1996.

Document prepared by Michael J. Calaban, and last revised on 25 January 2012.

Appendix C

Individual Outfall Data Summaries and Permit Limit Development

Existing Effluent Quality and Technology Based Effluent Limits (TBEL)

Technology Based Effluent Limit (TBEL) is set based upon an evaluation of Best Available Technology Economically Achievable (BAT), Best Conventional Pollutant Control Technology (BCT), Best Practicable Technology Currently Available (BPT), and Best Professional Judgment (BPJ). BPJ limits may be set using any reasonable method that takes into consideration the criteria set forth in 40 CFR 125.3.

For the Existing Effluent Quality, the statistical methods utilized are in accordance with TOGS 1.2.1 and the USEPA, Office of Water, Technical Support Document For Water Quality-based Toxics Control, March 1991, Appendix E. Statistical calculations were not performed for parameters with insufficient data. Generally, ten or more data points are needed to calculate percentiles (See TOGS 1.2.1 Appendix D). Two or more data points are necessary to calculate an average and a maximum. Non-detects were excluded in the statistical calculations.

Monitoring data collected during the following time period of 10/1/08 to 11/30/11 was used to calculate statistics and these data were taken from Discharge Monitoring Reports.

Water Quality Based Effluent Limits (WQBEL)

Ambient Water Quality Criteria (AWQC) and guidance values specified in "Water Quality Regulations" New York State Codes, Rules and Regulations Title 6, Chapter X, Parts 700-705 and TOGS 1.1.1 were applied to the following pollutants identified in the facilities discharge. Water Quality Based Effluent Limits (WQBEL's) were calculated by applying the TMDL process for each pollutant.

TABLE 1

Outfall #	001 Main Outfall – Condenser cooling water for units 10, 20 & 30 plus discharge outfalls 01A, 01C, 01D, 01E, 01F, 01G and 01H

Effluent Parameter (Units) (concentration units - mg/l, ug/l or ng/l; mass units - lbs/d or g/d)	**Existing Effluent Quality – (EEQ)**				**Technology Based Effluent Limit – (TBEL)**					**Water Quality Based Effluent Limit**				**Permit Basis** (T or WQ)
	concentration		mass					PQL		AWQC	Effluent			
	Avg/Max	95%/99%	Avg/Max	95%/99%	conc.	mass	Type	conc.	Basis	conc.	conc.	mass	Type	
Flow Rate (MGD)	Average	538	Maximum	1390	Monitor			NA						
pH (su)	Minimum	7.1	Maximum	7.6	6.0 – 9.0		Range		BCT, 40 CFR Part 423.12(b)(1)	6.5-8.5	Apply TBEL			T
Temperature (deg. F)	75.9	97.9			104.2		Max		6NYCRR Part 704	6NYCRR Part 704		See text		
Intake/Discharge Temperature Difference (deg. F)	14.8	20.5			23		Max		BPJ – existing limit	No stnd/guidance value				T
Net Addition of Heat (BBTU/hr)	4.34	9.5			10.7		Max		BPJ – existing limit	No stnd/guidance value				T
Total Chlorine Residual (mg/l)	0.07	0.07			0.2		Max		BCT, 40 CFR Part 423.13(b)(1)	7.5	0.075	------	Max	WQ

Notes: Outfalls 01A, 01C, 01D, 01E, 01F, 01G & 01H all combine with condenser cooling water to discharge via Outfall 001.

TRC Application is 2 hours per unit, with 3 units total , use Aquatic Chronic A(C) standard of 7.5 ug/l Default Dilution 10:1 from TOGS 1.3.1

159

TABLE 2

Outfall # 01A - Floor Drains and Fuel Oil Heating System Condensate

Effluent Parameter (Units) (concentration units - mg/l, ug/l or ng/l; mass units - lbs/d or g/d)	**Existing Effluent Quality**				**Technology Based Effluent Limit**					**Water Quality Based Effluent Limit**				**Permit Basis** (T or WQ)
	concentration		mass					PQL		AWQC	Effluent			
	Avg/Max	95%/99%	Avg/Max	95%/99%	conc.	mass	Type	conc.	Basis	conc.	conc.	mass	Type	
Flow Rate (MGD)	Average	8.3	Maximum	8.3	Monitor			NA		NA - Internal Outfall				
pH (su)	Minimum	5.3	Maximum	7.9	6.0 – 9.0		Range		40 CFR Part 423.12(b)(1)					T
Total Suspended Solids (mg/l)	11.2	28			30/100		Avg/Max		40 CFR Part 423.12(b)(3)					T
Oil & Grease (mg/l)	5.2	8.6			15/15		Avg/Max		BPJ, existing limit and 40 CFR Part 423.12(b)(3)					T/WQ

160

TABLE 3

Outfall # 01D – Boiler Blowdown, Reverse Osmosis Concentrate, Unit 40 stormwater, air cooled condenser wash water & ion exchange regeneration discharge

Effluent Parameter (Units) (concentration units - mg/l, ug/l or ng/l; mass units - lbs/d or g/d)	**Existing Effluent Quality**				**Technology Based Effluent Limit**					**Water Quality Based Effluent Limit**				**Permit Basis** (T or WQ)
	concentration		mass					PQL		AWQC	Effluent			
	Avg/Max	95%/99%	Avg/Max	95%/99%	conc.	mass	Type	conc.	Basis	conc.	conc.	mass	Type	
Flow Rate (GPD)	Average	6000	Maximum	6000	Monitor			NA		NA - Internal Outfall				
pH (su)	Minimum	6.1	Maximum	9.3	6.0 – 9.0		Range		40 CFR Part 423.12(b)(1)					T
Total Suspended Solids (mg/l)	17.6	136			30/100	Avg/Max			40 CFR Part 423.12(b)(3)					T
Oil & Grease (mg/l)	5.2	8.6			15/15	Avg/Max			40 CFR Part 423.12(b)(3)					T/WQ
Ammonia, (mg/l)	0.3	1.8			Monitor only	Max			BPJ					T

TABLE 4

Outfall #	01E - Boiler Make-up Water Carbon Filter Backwash

Effluent Parameter (Units) (concentration units - mg/l, ug/l or ng/l; mass units - lbs/d or g/d)	**Existing Effluent Quality**				**Technology Based Effluent Limit**					**Water Quality Based Effluent Limit**				**Permit Basis** (T or WQ)
	concentration		mass					PQL		AWQC	Effluent			
	Avg/Max	95%/99%	Avg/Max	95%/99%	conc.	mass	Type	conc.	Basis	conc.	conc.	mass	Type	
Flow Rate (GPD)	Average	2297	Maximum	2910	Monitor			NA		NA - Internal Outfall				
Total Suspended Solids (mg/l)	11.5	68			30/100		Avg/Max		40 CFR Part 423.12(b)(3)					T
Oil & Grease (mg/l)	< 5	< 5			15/15		Avg/Max		40 CFR Part 423.12(b)(3)					T/WQ
Note: Municipal water receives additional treatment for boiler make-up water														

TABLE 5

Outfall #	01F – Pre Filter Backwash

Effluent Parameter (Units) (concentration units - mg/l, ug/l or ng/l; mass units - lbs/d or g/d)	**Existing Effluent Quality**				**Technology Based Effluent Limit**					**Water Quality Based Effluent Limit**				**Permit Basis** (T or WQ)
	concentration		mass					PQL		AWQC	Effluent			
	Avg/Max	95%/99%	Avg/Max	95%/99%	conc.	mass	Type	conc.	Basis	conc.	conc.	mass	Type	
Flow Rate (GPD)	Average	8157	Maximum	10500	Monitor			NA		NA - Internal Outfall				
Total Suspended Solids (mg/l)	10	10			30/100		Avg/Max		40 CFR Part 423.12(b)(3)					T
Oil & Grease (mg/l)	< 5	< 5			15/15		Avg/Max		40 CFR Part 423.12(b)(3)					T/WQ
Note: Municipal water receives additional treatment for boiler make-up water														

161

TABLE 6

Outfall #	01G - Units 10, 20 & 30 Boiler Blowdown

Effluent Parameter (Units) (concentration units - mg/l, ug/l or ng/l; mass units - lbs/d or g/d)	**Existing Effluent Quality**				**Technology Based Effluent Limit**					**Water Quality Based Effluent Limit**				**Permit Basis** (T or WQ)
	concentration		mass					PQL		AWQC	Effluent			
	Avg/Max	95%/99%	Avg/Max	95%/99%	conc.	mass	Type	conc.	Basis	conc.	conc.	mass	Type	
Flow Rate (GPD)	Average	24055	Maximum	68763	Monitor			NA		NA - Internal Outfall				
Total Suspended Solids (mg/l)	10.5	29			30/50*		Avg/Max		40 CFR Part 423.12(b)(3)					T
Oil & Grease (mg/l)	5	5			15/15		Avg/Max		BPJ, existing limit and 40 CFR Part 423.12(b)(3)					T/WQ
Ammonia (mg/l)	0.16	1.0			Monitor				BPJ					T

Note: "*" Existing TSS daily maximum permit limit of 50 mg/l.

TABLE 7

Outfall #	01H – Demineralizer Regeneration

Effluent Parameter (Units) (concentration units - mg/l, ug/l or ng/l; mass units - lbs/d or g/d)	**Existing Effluent Quality**				**Technology Based Effluent Limit**					**Water Quality Based Effluent Limit**				**Permit Basis** (T or WQ)
	concentration		mass					PQL		AWQC	Effluent			
	Avg/Max	95%/99%	Avg/Max	95%/99%	conc.	mass	Type	conc.	Basis	conc.	conc.	mass	Type	
Flow Rate (GPD)	Average	16616	Maximum	37066	Monitor			NA		NA - Internal Outfall				
Total Suspended Solids (mg/l)	10	10			30/100		Avg/Max		40 CFR Part 423.12(b)(3)					T
Oil & Grease (mg/l)	< 5	< 5			15/15		Avg/Max		40 CFR Part 423.12(b)(3)					T/WQ

TABLE 8

Outfall #	004 – Rainy Tank Farm – Underground Fuel Oil Tank Containment Vault

Effluent Parameter (Units) (concentration units - mg/l, ug/l or ng/l; mass units - lbs/d or g/d)	**Existing Effluent Quality**				**Technology Based Effluent Limit**					**Water Quality Based Effluent Limit**				**Permit Basis** (T or WQ)
	concentration		mass					PQL		AWQC	Effluent			
	Avg/Max	95%/99%	Avg/Max	95%/99%	conc.	mass	Type	conc.	Basis	conc.	conc.	mass	Type	
Flow Rate (GPD)	Average	7200	Maximum	7200	Monitor			NA						
pH (su)	Minimum	7.0	Maximum	8.0	6.0 – 9.0		Range		BCT, existing limit	6.5-8.5	Apply TBEL			T
Total Suspended Solids (mg/l)	11.6	58			50				BPJ, existing limit	Narrative standard		Apply TBEL		T
Oil & Grease (mg/l)	5.1	7.8			15				BPJ, existing limit for visible sheen – narr.stnd	Narrative standard		Apply TBEL		T
Aroclor 1254 (ug/l)	< 0.065	< 0.065	< 0.002	< 0.002	Removed									
Aroclor 1260 (ug/l)	< 0.065	< 0.065	< 0.002	< 0.002	Removed									
Benzene (ug/l)	< 0.7	< 0.7			50				BPJ, existing limit	10 H(FC)	100	-----	Max	T
Ethylbenzene (ug/l)	< 1.0	< 1.0			50				BPJ, existing limit	4.5 A(C)	**45**	-----	Max	WQ
Toluene (ug/l)	< 1.0	< 1.0			50				BPJ, existing limit	92 A(C)	920	-----	Max	T
Xylene, Total (ug/l)	< 3.0	< 3.0			50				BPJ, existing limit	19 A(C)	190	-----	Max	T

Note: A(C) Aquatic Chronic Standard
H(FC) Human Consumption of Fish Standard
Default 10:1 dilution used per TOGS 1.3.1

163

TABLE 9

Outfall # 006 – Stormwater from Gas Turbine Site Secondary Containment & Roof Drains

Effluent Parameter (Units) (concentration units - mg/l, ug/l or ng/l; mass units - lbs/d or g/d)	**Existing Effluent Quality**				**Technology Based Effluent Limit**					**Water Quality Based Effluent Limit**				**Permit Basis** (T or WQ)
	concentration		mass					PQL		AWQC	Effluent			
	Avg/Max	95%/99%	Avg/Max	95%/99%	conc.	mass	Type	conc.	Basis	conc.	conc.	mass	Type	
Flow Rate (GPD)	Average	1600	Maximum	1600	Monitor			NA						
pH (su)	Minimum	6.1	Maximum	8.0	6.0 – 9.0		Range		BCT, existing limt	6.5-8.5	Apply TBEL			T
Total Suspended Solids (mg/l)	16.5	116			50				BPJ, existing limit	Narrative standard		Apply TBEL		T
Oil & Grease (mg/l)	5.0	5.3			15				BPJ, existing limit for visible sheen – narr.stnd	Narrative standard		Apply TBEL		T
Benzene (ug/l)	< 0.7	< 0.7			50				BPJ, existing limit	10 H(FC)	100	-----	Max	T
Ethylbenzene (ug/l)	< 1.0	< 1.0			50				BPJ, existing limit	4.5 A(C)	45	-----	Max	WQ
Toluene (ug/l)	< 1.0	< 1.0			50				BPJ, existing limit	92 A(C)	920	-----	Max	T
Xylene, Total (ug/l)	4.2	16.1			50				BPJ, existing limit	19 A(C)	190	-----	Max	T

Note: A(C) Aquatic Chronic Standard
H(FC) Human Consumption of Fish Standard
Default 10:1 dilution used per TOGS 1.3.1

164

TABLE 10

Outfall #	007 – Stormwater from Old Settling Pond

Effluent Parameter (Units) (concentration units - mg/l, ug/l or ng/l; mass units - lbs/d or g/d)	**Existing Effluent Quality**				**Technology Based Effluent Limit**					**Water Quality Based Effluent Limit**				**Permit Basis** (T or WQ)
	concentration		mass					PQL		AWQC	Effluent			
	Avg/Max	95%/99%	Avg/Max	95%/99%	conc.	mass	Type	conc.	Basis	conc.	conc.	mass	Type	
Flow Rate (GPD)	Average	28800	Maximum	28800	Monitor			NA						
Total Suspended Solids (mg/l)	10.3	11			50				BPJ, existing limit	Narrative standard		Apply TBEL		T
Oil & Grease (mg/l)	< 5.0	< 5.0			15				BPJ, existing limit for visible sheen – narr. stnd	Narrative standard		Apply TBEL		T
Benzene (ug/l)	< 0.7	< 0.7			50				BPJ, existing limit	10 H(FC)	100	-----	Max	T
Ethylbenzene (ug/l)	< 1.0	< 1.0			50				BPJ, existing limit	4.5 A(C)	45	-----	Max	WQ
Toluene (ug/l)	< 1.0	< 1.0			50				BPJ, existing limit	92 A(C)	920	-----	Max	T
Xylene, Total (ug/l)	< 3.0	< 3.0			50				BPJ, existing limit	19 A(C)	190	-----	Max	T

Note: A(C) Aquatic Chronic Standard
H(FC) Human Consumption of Fish Standard
Default 10:1 dilution used per TOGS 1.3.1

165

TABLE 11

Outfall #	011 – Stormwater from East Side of Units 10 & 20

Effluent Parameter (Units) (concentration units - mg/l, ug/l or ng/l; mass units - lbs/d or g/d)	**Existing Effluent Quality**				**Technology Based Effluent Limit**					**Water Quality Based Effluent Limit**				**Permit Basis** (T or WQ)
	concentration		mass					PQL		AWQC	Effluent			
	Avg/Max	95%/99%	Avg/Max	95%/99%	conc.	mass	Type	conc.	Basis	conc.	conc.	mass	Type	
Flow Rate (GPD)	Average	No data	Maximum	No data	Monitor			NA						
Total Suspended Solids (mg/l)	No data – stormwater outfall not yet completed				50				BPJ	Narrative standard		Apply TBEL		T
Oil & Grease (mg/l)					15				BPJ, limit for visible sheen – narr. stnd	Narrative standard		Apply TBEL		T

166

RAVENSWOOD SPDES DISCHARGE PERMIT # NY-0005193, DATED OCTOBER 1, 2012 AND EFFECTIVE NOVEMBER 1, 2012 [167-187]

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

State Pollutant Discharge Elimination System (SPDES)
DISCHARGE PERMIT

Industrial Code:	4911	SPDES Number:	**NY0005193**
Discharge Class (CL):	03	DEC Number:	**2-6304-00024/00004**
Toxic Class (TX):	T	Effective Date (EDP):	**11/01/2012**
Major Drainage Basin:	17	Expiration Date (ExDP):	**10/31/2017**
Sub Drainage Basin:	02	Modification Dates:(EDPM)	
Water Index Number:	ER (0.3 – 10.1)		
Compact Area:	IEC		

This SPDES permit is issued in compliance with Title 8 of Article 17 of the Environmental Conservation Law of New York State and in compliance with the Clean Water Act, as amended, (33 U.S.C. §1251 et.seq.)(hereinafter referred to as "the Act").

PERMITTEE NAME AND ADDRESS

Name: TC Ravenswood , LLC Attention: William C. Taylor, Vice President
Street: 110 Turnpike Road, Suite 203
City: Westborough State: MA Zip Code: 01581

is authorized to discharge from the facility described below:

FACILITY NAME AND ADDRESS

Name: Ravenswood Generating Station
Location (C,T,V): Long Island City County: Queens
Facility Address: 38-54 Vernon Boulevard
City: Long Island City State: **NY** Zip Code: 11101
NYTM -E: NYTM - N:
From Outfall No.: 001 at Latitude: 40 ° 45 ' 31 '' & Longitude: 73 ° 56 ' 54 ''
into receiving waters known as: East River Class: I

and; (list other Outfalls, Receiving Waters & Water Classifications)
01A, 01C, 01D, 01E, 01F, 01G, 01H, 004, 006, 007, 008, 009, 010 &011 East River Class I

in accordance with: effluent limitations; monitoring and reporting requirements; other provisions and conditions set forth in this permit; and 6 NYCRR Part 750-1.2(a) and 750-2.

DISCHARGE MONITORING REPORT (DMR) MAILING ADDRESS

Mailing Name: Ravenswood Generating Station
Street: 38-54 Vernon Blvd.
City: Long Island City State: NY Zip Code: 11101
Responsible Official or Agent: Kenneth A. Yager, Compliance Manager Phone: (718) 706-2702

This permit and the authorization to discharge shall expire on midnight of the expiration date shown above and the permittee shall not discharge after the expiration date unless this permit has been renewed, or extended pursuant to law. To be authorized to discharge beyond the expiration date, the permittee shall apply for permit renewal not less than 180 days prior to the expiration date shown above.

DISTRIBUTION:

C.O. BWP – Permit Coordinator
BWC
RWE
RPA
EPA Region II - Michelle Josilo
IEC
NYSDOH District Office

Deputy Chief Permit Administrator: Stuart M. Fox	
Address: Division of Environmental Permits 625 Broadway Albany, NY 12233-3505	
Signature:	Date: 10/ 1 / 12

ADDITIONAL OUTFALL LOCATION INFORMATION

OUTFALL	DESCRIPTION	LATITUDE	LONGITUDE	Receiving Stream/Class
01A*	Floor Drains and Fuel Oil Heating System Condensate	40° 45' 31"	73° 56' 54"	East River/Class I
01C*	Yard and Roof Drains	40° 45' 38"	73° 56' 54"	East River/Class I
01D*	Unit 40 Stormwater, Floor Drains, Air Cooled Condenser Wash Water, Boiler Blowdown, Ion Exchange Regeneration Discharge & Reverse Osmosis Reject Water	40° 45' 38"	73° 56' 54"	East River/Class I
01E*	Boiler Make-up Water Carbon Filter Backwash	40° 45' 32"	73° 56' 49"	East River/Class I
01F*	Boiler Make-up Water Prefilter Backwash	40° 45' 32"	73° 56' 49"	East River/Class I
01G*	Units 10, 20 & 30 Boiler Blowdown	40° 45' 32"	73° 56' 49"	East River/Class I
01H*	Boiler Make-up Water Demineralizer Regeneration	40° 45' 32"	73° 56' 49"	East River/Class I
004	Rainey Tank Farm - Containment Vault and Stormwater	40° 45' 48"	73° 56' 40"	East River/Class I
006	Stormwater and Combustion Turbine Dump Tanks	40° 45' 44"	73° 56' 43"	East River/Class I
007	Stormwater from Old Settling Ponds	40° 45' 32"	73° 56' 53"	East River/Class I
008	Unit 10 Screen Wash Return	40° 45' 33"	73° 56' 50"	East River/Class I
009	Unit 20 Screen Wash Return	40° 45' 33"	73° 56' 50"	East River/Class I
010	Unit 30 Screen Wash Return	40° 45' 37"	73° 56' 45"	East River/Class I
011	Stormwater from East Side of Units 10 & 20	40° 45' 30"	73° 56' 45"	East River/Class I

Notes:*Outfalls 01A, 01C, 01D, 01E, 01F, 01G & 01H all combine with the condenser cooling water to discharge via Outfall 001.

PERMIT LIMITS, LEVELS AND MONITORING DEFINITIONS

OUTFALL	WASTEWATER TYPE	RECEIVING WATER	EFFECTIVE	EXPIRING
	This cell describes the type of wastewater authorized for discharge. Examples include process or sanitary wastewater, storm water, non-contact cooling water.	This cell lists classified waters of the state to which the listed outfall discharges.	The date this page starts in effect. (e.g. EDP or EDPM)	The date this page is no longer in effect. (e.g. ExDP)

PARAMETER	MINIMUM	MAXIMUM	UNITS	SAMPLE FREQ.	SAMPLE TYPE
e.g. pH, TRC, Temperature, D.O.	The minimum level that must be maintained at all instants in time.	The maximum level that may not be exceeded at any instant in time.	SU, °F, mg/l, etc.		

PARA-METER	EFFLUENT LIMIT	PRACTICAL QUANTITATION LIMIT (ML)	ACTION LEVEL	UNITS	SAMPLE FREQUENCY	SAMPLE TYPE
	Limit types are defined below in Note 1. The effluent limit is developed based on the more stringent of technology-based standards, required under the Clean Water Act, or New York State water quality standards. The limit has been derived based on existing assumptions and rules. These assumptions include receiving water hardness, pH and temperature; rates of this and other discharges to the receiving stream; etc. If assumptions or rules change the limit may, after due process and modification of this permit, change.	For the purposes of compliance assessment, the analytical method specified in the permit shall be used to monitor the amount of the pollutant in the outfall to this level, provided that the laboratory analyst has complied with the specified quality assurance/quality control procedures in the relevant method. Monitoring results that are lower than this level must be reported, but shall not be used to determine compliance with the calculated limit. This ML can be neither lowered nor raised without a modification of this permit.	Action Levels are monitoring requirements, as defined below in Note 2, that trigger additional monitoring and permit review when exceeded.	This can include units of flow, pH, mass, Temperature, concentration. Examples include µg/l, lbs/d, etc.	Examples include Daily, 3/week, weekly, 2/month, monthly, quarterly, 2/yr and yearly.	Examples include grab, 24 hour composite and 3 grab samples collected over a 6 hour period.

Note 1: DAILY DISCHARGE: The discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for the purposes of sampling. For pollutants expressed in units of mass, the 'daily discharge' is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the 'daily discharge' is calculated as the average measurement of the pollutant over the day. DAILY MAX: The highest allowable daily discharge. DAILY MIN: The lowest allowable daily discharge. MONTHLY AVG (daily avg): The highest allowable average of daily discharges over a calendar month, calculated as the sum of each of the daily discharges measured during a calendar month divided by the number of daily discharges measured during that month. RANGE: The minimum and maximum instantaneous measurements for the reporting period must remain between the two values shown. 7 DAY ARITHMETIC MEAN (7 day average): The highest allowable average of daily discharges over a calendar week. 12 MRA (twelve month rolling avg): The average of the most recent twelve month's monthly averages. 30 DAY GEOMETRIC MEAN (30 d geo mean): The highest allowable geometric mean of daily discharges over a calendar month, calculated as the antilog of : the sum of the log of each of the daily discharges measured during a calendar month divided by the number of daily discharges measured during that month. 7 DAY GEOMETRIC MEAN (7 d geo mean): The highest allowable geometric mean of daily discharges over a calendar week.

Note 2: ACTION LEVELS: Routine Action Level monitoring results, if not provided for on the Discharge Monitoring Report (DMR) form, shall be appended to the DMR for the period during which the sampling was conducted. If the additional monitoring requirement is triggered as noted below, the permittee shall undertake a short-term, high-intensity monitoring program for the parameter(s). Samples identical to those required for routine monitoring purposes shall be taken on each of at least three consecutive operating and discharging days and analyzed. Results shall be expressed in terms of both concentration and mass, and shall be submitted no later than the end of the third month following the month when the additional monitoring requirement was triggered. Results may be appended to the DMR or transmitted under separate cover to the same address. If levels higher than the Action Levels are confirmed, the permit may be reopened by the Department for consideration of revised Action Levels or effluent limits. The permittee is not authorized to discharge any of the listed parameters at levels which may cause or contribute to a violation of water quality standards. The additional monitoring requirement is triggered upon receipt by the permittee of any monitoring results in excess of the stated Action Level.

PERMIT LIMITS, LEVELS AND MONITORING

OUTFALL No.	WASTEWATER TYPE	RECEIVING WATER	EFFECTIVE	EXPIRING
001	Main Discharge (See footnote 1)	East River	11/01/2012	10/31/2017

PARAMETER	MINIMUM	MAXIMUM	UNITS	SAMPLE FREQUENCY	SAMPLE TYPE	FOOTNOTES (FN)
pH	6.0	9.0	SU	Weekly	Grab	5

PARAMETER	EFFLUENT LIMIT or CALCULATED LEVEL		ACTION LEVEL	UNITS	SAMPLE FREQUENCY	SAMPLE TYPE	FN
	Daily Avg.	Daily Max.					
Flow	Monitor	Monitor		MGD	Hourly	Pump Log	1
Discharge Temperature	Monitor	104.2		°F	Continuous	Recorder	2,5
Intake-Discharge Temperature Difference	Monitor	23.0		°F	Continuous	Recorder	
Net Addition of Heat	Monitor	10.7 x 10E9		BTU/Hr	Monthly	Calculation	
Total Residual Chlorine	Monitor	0.075		mg/l	Continuous	Grab	3,4,5

OUTFALL Nos.	WASTEWATER TYPE	RECEIVING WATER	EFFECTIVE	EXPIRING
01A	Floor Drains and Fuel Oil Heating System Condensate	East River via Outfall 001	11/01/2012	10/31/2017

PARAMETER	MINIMUM	MAXIMUM	UNITS	SAMPLE FREQUENCY	SAMPLE TYPE	FOOTNOTES (FN)
pH	6.0	9.0	SU	Monthly	Grab	6

PARAMETER	EFFLUENT LIMIT or CALCULATED LEVEL		ACTION LEVEL	UNITS	SAMPLE FREQUENCY	SAMPLE TYPE	FN
	Monthly Avg.	Daily Max.					
Flow	NA	Monitor		GPM	Monthly	Calculated	6
Oil & Grease	15	15		mg/l	Weekly	Grab	6
Suspended Solids, Total	30	100		mg/l	Monthly	Grab	6

OUTFALL Nos.	WASTEWATER TYPE	RECEIVING WATER	EFFECTIVE	EXPIRING
01D	Unit 40 Stormwater, Floor Drains, Air Cooled Condenser Wash Water, Boiler Blowdown, Ion Exchange Regeneration & Reverse Osmosis Reject Water	East River via Outfall 001	11/01/2012	10/31/2017

PARAMETER	MINIMUM	MAXIMUM	UNITS	SAMPLE FREQUENCY	SAMPLE TYPE	FOOTNOTES (FN)
pH	6.0	9.0	SU	Weekly	Grab	7

PARAMETER	EFFLUENT LIMIT or CALCULATED LEVEL		ACTION LEVEL	UNITS	SAMPLE FREQUENCY	SAMPLE TYPE	FN
	Monthly Avg.	Daily Max.					
Flow	Monitor	Monitor		GPD	Weekly	Calculated	7
Oil & Grease	15	15		mg/l	Weekly	Grab	7
Suspended Solids	30	100		mg/l	Weekly	Grab	7
Ammonia	NA	Monitor		mg/l	Monthly	Grab	7

Footnotes listed on page 8 of this permit.

PERMIT LIMITS, LEVELS AND MONITORING (continued)

OUTFALL Nos.	WASTEWATER TYPE	RECEIVING WATER	EFFECTIVE	EXPIRING
01E, 01F & 01H	Boiler Make-up Water Carbon Filter Backwash (01E), Pre-Filter Backwash (01F) & Demineralizer Regeneration (01H)	East River via Outfall 001	11/01/2012	10/31/2017

PARAMETER	EFFLUENT LIMIT or CALCULATED LEVEL		ACTION LEVEL	UNITS	SAMPLE FREQUENCY	SAMPLE TYPE	FN
	Monthly Avg.	Daily Max.					
Flow	NA	Monitor		GPM	Monthly	Calculated	7
Oil & Grease	15	15		mg/l	Semi-Annual	Grab	7
Suspended Solids, Total	30	100		mg/l	Monthly	Grab	7

OUTFALL Nos.	WASTEWATER TYPE	RECEIVING WATER	EFFECTIVE	EXPIRING
01G	Units 10, 20 & 30 Boiler Blowdown (01G)	East River via Outfall 001	11/01/2012	10/31/2017

PARAMETER	EFFLUENT LIMIT or CALCULATED LEVEL		ACTION LEVEL	UNITS	SAMPLE FREQUENCY	SAMPLE TYPE	FN
	Monthly Avg.	Daily Max.					
Flow	NA	Monitor		GPM	Monthly	Calculated	7
Oil & Grease	15	15		mg/l	Semi-Annual	Grab	7
Suspended Solids, Total	30	50		mg/l	Monthly	Grab	7
Ammonia	NA	Monitor		mg/l	Monthly	Grab	7

OUTFALL No.	WASTEWATER TYPE	RECEIVING WATER	EFFECTIVE	EXPIRING
004	Rainy Tank Farm - Underground Fuel Tank Containment Vault and Stormwater	East River	11/01/2012	10/31/2017

PARAMETER	MINIMUM	MAXIMUM	UNITS	SAMPLE FREQUENCY	SAMPLE TYPE	FOOTNOTES (FN)
pH	6.0	9.0	SU	2/Month	Grab	

PARAMETER	EFFLUENT LIMIT or CALCULATED LEVEL		ACTION LEVEL	UNITS	SAMPLE FREQUENCY	SAMPLE TYPE	FN
	Monthly Avg.	Daily Max.					
Flow	NA	Monitor		GPD	Monthly	Calculated	
Oil & Grease	Monitor	15		mg/l	2/Month	Grab	
Total Suspended Solids	Monitor	50		mg/l	2/Month	Grab	
Benzene	NA	50		ug/l	Quarterly	Grab	
Ethylbenzene	NA	45		ug/l	Quarterly	Grab	
Toluene	NA	50		ug/l	Quarterly	Grab	
Xylene, Total	NA	50		ug/l	Quarterly	Grab	

Footnotes listed on page 8 of this permit.

PERMIT LIMITS, LEVELS AND MONITORING (continued)

OUTFALL Nos.	WASTEWATER TYPE	RECEIVING WATER	EFFECTIVE	EXPIRING
006	Gas Turbine Site - Combustion Turbine Dump Tank and Stormwater from Secondary Containment & Roof Drains	East River	11/01/2012	10/31/2017

PARAMETER	MINIMUM	MAXIMUM	UNITS	SAMPLE FREQUENCY	SAMPLE TYPE	FOOTNOTES (FN)
pH	6.0	9.0	SU	Weekly	Grab	

PARAMETER	EFFLUENT LIMIT or CALCULATED LEVEL		ACTION LEVEL	UNITS	SAMPLE FREQUENCY	SAMPLE TYPE	FN
	Monthly Avg.	Daily Max.					
Flow	NA	Monitor		GPD	Monthly	Calculated	
Oil & Grease	Monitor	15		mg/l	Weekly	Grab	
Total Suspended Solids	Monitor	50		mg/l	Weekly	Grab	
Benzene	NA	50		ug/l	Quarterly	Grab	
Ethylbenzene	NA	45		ug/l	Quarterly	Grab	
Toluene	NA	50		ug/l	Quarterly	Grab	
Xylene, Total	NA	50		ug/l	Quarterly	Grab	

OUTFALL Nos.	WASTEWATER TYPE	RECEIVING WATER	EFFECTIVE	EXPIRING
007	Stormwater from Old Settling Ponds	East River	11/01/2012	10/31/2017

PARAMETER	EFFLUENT LIMIT or CALCULATED LEVEL		ACTION LEVEL	UNITS	SAMPLE FREQUENCY	SAMPLE TYPE	FN
	Monthly Avg.	Daily Max.					
Flow	Monitor	Monitor		GPD	Each Discharge	Calculated	
Oil & Grease	Monitor	15		mg/l	Each Discharge	Grab	
Total Suspended Solids	Monitor	50		mg/l	Each Discharge	Grab	
Benzene	Monitor	50		ug/l	Each Discharge	Grab	
Ethylbenzene	Monitor	45		ug/l	Each Discharge	Grab	
Toluene	Monitor	50		ug/l	Each Discharge	Grab	
Xylene, Total	Monitor	50		ug/l	Each Discharge	Grab	

Footnotes listed on page 8 of this permit.

PERMIT LIMITS, LEVELS AND MONITORING (continued)

OUTFALL Nos.	WASTEWATER TYPE	RECEIVING WATER	EFFECTIVE	EXPIRING
011	Stormwater from East Side of Units 10 & 20	East River	11/01/2012	10/31/2017

PARAMETER	MINIMUM	MAXIMUM	UNITS	SAMPLE FREQUENCY	SAMPLE TYPE	FOOTNOTES (FN)
pH	6.0	9.0	SU	Quarterly	Grab	8,9

PARAMETER	EFFLUENT LIMIT or CALCULATED LEVEL		ACTION LEVEL	UNITS	SAMPLE FREQUENCY	SAMPLE TYPE	FN
	Monthly Avg.	Daily Max.					
Flow	NA	Monitor		GPD	Quarterly	Calculated	
Oil & Grease	NA	15		mg/l	Quarterly	Grab	8,9
Total Suspended Solids	NA	50		mg/l	Quarterly	Grab	8,9

OUTFALL Nos.	WASTEWATER TYPE	RECEIVING WATER	EFFECTIVE	EXPIRING
01C	Stormwater	East River via Outfall 001	11/01/2012	10/31/2017
008, 009 & 010	Units 10, 20 & 30 Screen Wash Return	East River	11/01/2012	10/31/2017
NO MONITORING REQUIRED				

OUTFALL Nos.	WASTEWATER TYPE	RECEIVING WATER	EFFECTIVE	EXPIRING
NA	Tank Test Water (See footnote 10)	East River	11/01/2012	10/31/2017

PARAMETER	EFFLUENT LIMIT or CALCULATED LEVEL		ACTION LEVEL	UNITS	SAMPLE FREQUENCY	SAMPLE TYPE	FN
	Monthly Avg.	Daily Max.					
Flow	Monitor	Monitor		GPD	Each Discharge	Instantaneous	10
Oil & Grease	Monitor	15		mg/l	Each Discharge	Grab	10
Chlorine, Total Residual	Monitor	0.10		mg/l	Each Discharge	Grab	10,11
Benzene	Monitor	20		ug/l	Each Discharge	Grab	10
Toluene	Monitor	20		ug/l	Each Discharge	Grab	10
Xylene, Total	Monitor	20		ug/l	Each Discharge	Grab	10
Ethylbenzene	Monitor	20		ug/l	Each Discharge	Grab	10

Footnotes listed on page 8 of this permit.

Footnotes

1 Main Discharge Outfall 001 includes condenser cooling water and discharges from outfalls 01A, 01C, 01D, 01E, 01F, 01G and 01H.

2 These limitations may be exceeded during periods when one or more condensing units are operating with only one circulating water pump (per unit), due to pump breakdown, routine maintenance, forced outage or other technical problems. (e.g., equipment failure). In the event of pump breakdown, the permittee shall take corrective action as soon as possible. Where possible, routine pump maintenance resulting in these limitations being exceeded, should be avoided during June-September. The permittee shall indicate on the Discharge Reporting Form: (1) which circulating water pumps, if any, were not in operation; (2) the dates and times such pumps were not operating; (3) the reason(s) for such pumps not operating; and (4) the period(s) (dates and times) during which these limitations were exceeded. In no case shall these limitations be exceeded more than 5% of the time during the operating year.

3 The period of chlorination shall be limited to two hours per day per condenser unit. The individual units shall be treated separately.

4 Monitoring is only required during the period of condenser chlorine treatments and discharge.

5 Samples for monitoring pH, temperature and chlorine are to be collected within the discharge tunnels.

6 Samples to be taken from the Oil/Water Separator discharge prior to any mixing with other discharges.

7 Samples to be taken from the discharge outfall prior to any mixing with other discharges.

8 Sample to be collected from the first manhole upstream of the junction with the NYC DEP storm sewer.

9 Stormwater is to be sampled as a grab sample collected from the discharge of a storm event with at least 0.1 inch of precipitation (defined as a "measurable" storm event), providing the interval from the preceding measurable storm event is at least 72 hours. The grab sample must be taken during the first 30 minutes of the stormwater discharge.

10 **Tank Test Water Discharge Requirements**
Tanks being hydrostatically tested must be free of product and cleaned. The Regional Water Manager must be informed at least two business days prior to the discharge of tank test water.

Any discharge of tank test water must be done under the direct supervision of plant personnel. Samples from the tank must be taken prior to discharge from various levels within the tank (top, middle, bottom). If sampling shows conformance with effluent limitations, discharge may be initiated. If effluent limitations are not attained, additional measures must be implemented to attain compliance prior to initiation of discharge.

A visual check of the discharge must be made for the presence of oil and floating substances. Data associated with tank test water shall be kept, along with log of visual observations, for a period of five years and be made available to Department personnel upon request.

The discharge of tank test water must be done in a manner that minimizes erosion of soil or sediment and does not cause flooding in the area of discharge. It must be done in a manner that minimizes the impact on the fisheries.

11 Required when a chlorinated supply such as that from a municipal system is used for tank testing purposes.

A. ADDITIONAL REQUIREMENTS

1. There shall be no discharge of the following wastes to surface waters or groundwater of the State; fly ash and bottom ash, sluice wastes, evaporator blowdown, or boiler and metal cleaning wastewater. Boiler and metal cleaning wastewater shall be disposed of by incineration in the plant boilers in accordance with the facility's Title V air permit or be collected and transported for treatment and disposal by an wastewater treatment facility capable of treating these wastewaters.

2. The permittee shall submit on a yearly basis a report to the Department's offices in Albany and Region 2 by the 28th of the month following the end of the annual period. This annual report must include:

   a. Daily minimum, average and maximum station electrical output;

   b. Daily minimum, average and maximum cooling water usage (directly or indirectly measured or calculated);

   c. Daily minimum, average and maximum intake and discharge temperatures;

   d. Values reported in a, b and c shall be based upon measurements taken on an hourly basis. Temperature readings may be obtained from a continuous recording device. This requirement is not a substitute for other monitoring requirements.

3. There shall be no visible sheen of oil and grease from discharges at any outfall.

4. In all instances chlorine shall be:

   a. kept to the minimum amount which will maintain plant operating efficiency; and

   b. eliminated when intake water temperature is below 40 $^{\circ}$F unless failure to apply chlorine below 40 $^{\circ}$F is shown to adversely affect plant operating efficiency.

5. Discharge from the emergency flood pumps for Units 10, 20 and 30 to the main discharge outfall 001 will be allowed under this permit provided that the permittee:

   a. collect a grab sample of the flood pump discharge for each unit and each discharge event to be analyzed for pH, total suspended solids and oil & grease;

   b. notify regional water staff within 1 business day of operation of the flood pumps;

   c. send copies of the monitoring results to regional water staff upon receipt with a cover letter summarizing operation of the emergency flood pumps for that event; and

   d. provide a written description of the best management practices that will be used to minimize the discharge of contaminants during emergency flood pump operation in the facility's Best Management Plan required under condition C.2 of the SPDES permit.

6. All thermal discharges to the waters of the State shall assure the protection and propagation of a balanced, indigenous population of shellfish, fish and wildlife in and on the body of water as provided in 6NYCRR Part 704.1(a). The thermal plume resulting from this facility's discharge may not exceed 90 $^{\circ}$F (Part 704.2(b)(5)(I) of the State Water Quality Thermal Criteria) except within a designated mixing zone area of 2,580,000 sq. ft. (60 acres).

7. Notwithstanding any other requirements in this permit, the permittee shall also comply with all of the Water Quality Regulations promulgated by the Interstate Environmental Commission, including Section 1.01 and 2.05(f) as they relate to oil and grease.

A. ADDITIONAL REQUIREMENTS (continued)

8. Dilution is prohibited as a substitute for treatment. Except where expressly authorized to do so by an applicable Categorical Standard or the Commissioner or his duly authorized representative, no Industrial User shall ever increase the use of process water or, in any other way, attempt to dilute a discharge as a partial or complete substitute for adequate treatment to achieve compliance with a permit effluent limitation requirement.

9. There shall be no discharge to groundwaters or surface waters of oil tank bottom water, PCBs, and/or any industrial or manufacturing process wastewater effluents from this facility. Included in the effluents categorized as industrial process effluents are wastewater resulting from vehicle maintenance or washing operations. Washing operations are those cleaning operations which involve the use of detergents or other emulsifying chemicals.

   Tank bottoms water, vehicle maintenance and washing wastewater are not likely to be effectively treated by gravity separation alone and therefore are not permitted to be discharged. After review of an Engineering Submission for the treatment of tank bottoms, maintenance and/or washing wastewater, these prohibitions may be altered

10. When conducting the periodic testing of the foam fire suppression system as required by the Fire Department of New York (FDNY) the permittee shall:

    a. notify regional water staff at least 3 business days prior to testing;

    b. direct all foam to a temporary containment system at the facility; and

    c. use best efforts to contain, collect and dispose of the foam.

B. BIOLOGICAL MONITORING REQUIREMENTS

All submissions under this section should provide:
Two (2) copies to the Steam Electric Unit Leader;
One (1) copy of the cover letter to the Division of Water
State Pollution Discharge Elimination System (SPDES)
Compliance Information Section; and
One (1) copy of the cover letter to the Regional Water Manager;
unless otherwise noted.

1. **Best Technology Available**
   The applicant has been required to perform the following mitigation activities to achieve best technology available (BTA) for the cooling water intake at the Ravenswood Generating Station. Installation of all technologies and or operational measures listed here have been completed.

   a. Installation of variable speed pumps and ancillary equipment at Ravenswood Units 10, 20 and 30 that will allow for a reduction in the volume of cooling water use;

   b. Upgrades to the existing traveling intake screens at Ravenswood Units 10, 20 and 30 to allow for the continuous operation of all traveling intake screens to increase impingement survival;

   c. Scheduling of a planned outage process that will require cooling water circulating pumps to be shut down to reduce the volume of cooling water use;

B. BIOLOGICAL MONITORING REQUIREMENTS (continued)

d. Low stress fish return lines, constructed at each unit, to return impinged fish directly to the East River.

2. **Performance Standards**

a. The technologies and operational procedures described in Condition B.1, Best Technology Available, must achieve a reduction in impingement mortality of 90% for all fish species combined and 90% for winter flounder alone from the calculation baseline. Compliance with this performance standard shall be determined through the studies conducted under the Verification Monitoring Plan required in Condition B.4.

b. The technologies and operational procedures described in Condition B.1, Best Technology Available, must achieve a 65% reduction in entrainment from the calculation baseline. Compliance with this performance standard shall be determined through the studies conducted under the Verification Monitoring Plan required in Condition B.4.

3. **Technology Installation and Operation Plan**

a. The permittee submitted a Technology Installation and Operation Plan (TIOP), which was approved on August 29, 2007. This plan included:

(1) A schedule for installing and implementing the technologies and/or operational measures in Condition B 1(a) through (d) to meet the BTA requirements of 6 NYCRR Part 704.5 and 316(b) of the Clean Water Act; and

(2) The methodology for assessing the efficacy of these technologies and operational measures.

b. The permittee submitted a Supplemental Technology and Operation Review/Plan, which was approved on May 3, 2011.

4. **Verification Monitoring Plan**

a. The Verification Monitoring Plan (VMP) was approved on December 9, 2011. The VMP includes procedures to confirm that the performance standards for reducing impingement and entrainment required by this permit in Condition B.2. are being achieved, and contains the following:

(1) Use of a five year averaging period (aka, the VMP Study) to verify the full-scale performance of all BTA measures specified in Condition B.2. The average estimated reductions in impingement mortality and entrainment shall be based on:

i) a minimum two years of additional in-plant impingement and entrainment monitoring,
ii) existing in-plant impingement and entrainment monitoring data,
iii) actual water use at the station during the averaging period, and
iv) any other relevant information;

(2) A description of the frequency and duration of monitoring, the parameters to be monitored, and the basis for determining the parameters and the frequency and duration for monitoring;

(3) A schedule of implementation; and

(4) A draft proposed Standard Operation Procedure (SOP) that describes the sampling protocols for these monitoring studies.

The plan and SOP shall be updated as required by the Department. The permittee shall complete the VMP in accordance with the approved schedule. The VMP and approved schedule are enforceable conditions of this SPDES permit.

B. BIOLOGICAL MONITORING REQUIREMENTS (continued)

b. **A Draft report shall be submitted to the Steam Electric Unit Leader no later than 6 months after the completion of each year of the VMP Study**, summarizing results of the previous year of study.

c. Within **6 months of the completion of the VMP Study, the permittee must submit an approvable report to the Steam Electric Unit Leader that demonstrates compliance with Condition B.2.** of this permit and 316(b) of the Clean Water Act. If the VMP study shows that compliance with Condition B.2. has not been met, then the report shall propose additional mitigative measures, including the use of modified Ristroph type screens, to meet the Performance Standards in Condition B.2. The implementation schedule requires approval by the Department and shall be an enforceable condition of this permit.

5. **Additional Reporting Requirements**

a. The permittee must maintain records of all data, reports and analysis pertaining to compliance with 6NYCRR Part 704 and Section 316(b) CWA for a period no less than 10 years from EDP (11/01/2012).

b. **The permittee must submit status reports at EDP + 2.5 years (11/01/2014) and ExDP (10/31/2017).** At a minimum, these status reports must include a description of the operational status of the facility during the preceding two years and compliance with Condition B.2. through B.5. of this permit.

6. Modification of the facility cooling water intake must not occur without prior Department approval. The permittee must submit written notification, including detailed descriptions and plans, to the NYSDEC Steam Electric Unit; the Director of the Bureau of Water Compliance Program; and both the Regional Permit Administrator and the Regional Water Engineer, Region 2, at least 60 days prior to any proposed change which would result in the alteration of the permitted operation, location, design, construction or capacity of the cooling water intake structure. The permittee must submit with the written notification a demonstration that the change reflects the best technology available for minimizing adverse environmental impacts pursuant to 6 NYCRR Part 704.5 and Section 316(b) of the Clean Water Act. As determined by NYSDEC, a permit modification application in accordance with 6 NYCRR Part 621 may be required.

C. SPECIAL CONDITIONS - INDUSTRY BEST MANAGEMENT PRACTICES

1. **General** - The permittee shall develop, maintain, and implement a Best Management Practices (BMP) plan to prevent releases of significant amounts of pollutants to the waters of the State through plant site runoff; spillage and leaks; sludge or waste disposal; and stormwater discharges including, but not limited to, drainage from raw material storage.

   The BMP plan shall be documented in narrative form and shall include the 13 minimum BMPs and any necessary plot plans, drawings, or maps. Other documents already prepared for the facility such as a Safety Manual or a Spill Prevention, Control and Countermeasure (SPCC) plan may be used as part of the plan and may be incorporated by reference. A copy of the current BMP plan shall be submitted to the Department as required in item (2.) below and a copy must be maintained at the facility and shall be available to authorized Department representatives upon request.

2. **Compliance Deadlines** - **The Permittee has already developed and implemented the BMP plan.** The BMP plan shall be reviewed annually and shall be modified whenever: (a) changes at the facility materially increase the potential for releases of pollutants, (b) actual releases indicate the plan is inadequate, or (c) a letter from the Department identifies inadequacies in the plan. The permittee shall certify in writing, as an attachment to the December Discharge Monitoring Report (DMR), that the annual review has been completed. All BMP plan revisions (with the exception of SWPPPs - see item (4.B.) below) must be submitted to the Regional Water Manager within 30 days. Note that the permittee is not required to obtain Department approval of the BMP plan (or of any SWPPPs) unless notified otherwise. Subsequent modifications to or renewal of this permit does not reset or revise these deadlines unless a new deadline is set explicitly by such permit modification or renewal.

3. **Facility Review** - The permittee shall review all facility components or systems (including but not limited to material storage areas; in-plant transfer, process, and material handling areas; loading and unloading operations; storm water, erosion, and sediment control measures; process emergency control systems; and sludge and waste disposal areas) where materials or pollutants are used, manufactured, stored or handled to evaluate the potential for the release of pollutants to the waters of the State. In performing such an evaluation, the permittee shall consider such factors as the probability of equipment failure or improper operation, cross-contamination of storm water by process materials, settlement of facility air emissions, the effects of natural phenomena such as freezing temperatures and precipitation, fires, and the facility's history of spills and leaks. The relative toxicity of the pollutant shall be considered in determining the significance of potential releases.

   The review shall address all substances present at the facility that are identified in Tables 6-10 of SPDES application Form NY-2C (available at *http://www.dec.state.ny.us/website/dcs/permits/olpermits/form2c.pdf*) or that are required to be monitored for by the SPDES permit.

4. A. **13 Minimum BMPs** - Whenever the potential for a release of pollutants to State waters is determined to be present, the permittee shall identify BMPs that have been established to prevent or minimize such potential releases. Where BMPs are inadequate or absent, appropriate BMPs shall be established. In selecting appropriate BMPs, the permittee shall consider good industry practices and, where appropriate, structural measures such as secondary containment and erosion/sediment control devices and practices. USEPA guidance for development of stormwater elements of the BMP is available in the September 1992 manual *Storm Water Management for Industrial Activities*, EPA 832-R-92-006 (available from NTIS, 703-487-4650, order #PB 92235969 or at http://cfpub.epa.gov/npdes/stormwater/swppp-msgp.cfm). As a minimum, the plan shall include the following BMPs:

   1. BMP Pollution Prevention Team
   2. Reporting of BMP Incidents
   3. Risk Identification & Assessment
   4. Employee Training
   5. Inspections and Records
   6. Security
   7. Preventive Maintenance
   8. Good Housekeeping
   9. Materials/Waste Handling, Storage, & Compatibility
   10. Spill Prevention & Response
   11. Erosion & Sediment Control
   12. Management of Runoff
   13. Street Sweeping

   Note that for some facilities, especially those with few employees, some of the above BMPs may not be applicable. It is acceptable in these cases to indicate "Not Applicable" for the portion(s) of the BMP Plan that do not apply to your facility, along with an explanation.

C. SPECIAL CONDITIONS - INDUSTRY BEST MANAGEMENT PRACTICES (continued)

B. **Stormwater Pollution Prevention Plans (SWPPPs) Required for Discharges of Stormwater From Construction Activity to Surface Waters** - As part of BMP #11, a SWPPP shall be developed prior to the initiation of any site disturbance of one acre or more of uncontaminated area. Uncontaminated area means soils or groundwater which are free of contamination by any toxic or non-conventional pollutants identified in Tables 6-10 of SPDES application Form NY-2C. Disturbance of any size contaminated area(s) and the resulting discharge of contaminated stormwater is not authorized by this permit unless the discharge is under State or Federal oversight as part of a remedial program or after review by the Regional Water Manager; nor is such discharge authorized by any SPDES general permit for stormwater discharges. SWPPPs are not required for discharges of stormwater from construction activity to groundwaters.

The SWPPP shall conform to the *New York Standards and Specifications for Erosion and Sediment Control* and *New York State Stormwater Management Design Manual,* unless a variance has been obtained from the Regional Water Manager, and to any local requirements. The permittee shall submit a copy of the SWPPP and any amendments thereto to the local governing body and any other authorized agency having jurisdiction or regulatory control over the construction activity **at least 30 days prior to soil disturbance**. The SWPPP shall also be submitted to the Regional Water Manager if contamination, as defined above, is involved and the permittee must obtain a determination of any SPDES permit modifications and/or additional treatment which may be required prior to soil disturbance. Otherwise, the SWPPP shall be submitted to the Department only upon request. When a SWPPP is required, a properly completed *Notice of Intent* (NOI) form shall be submitted (available at *www.dec.state.ny.us/website/dow/toolbox/swforms.html*) prior to soil disturbance. Note that submission of a NOI is required for informational purposes; the permittee is not eligible for and will not obtain coverage under any SPDES general permit for stormwater discharges, nor are any additional permit fees incurred. SWPPPs must be developed and submitted for subsequent site disturbances in accordance with the above requirements. The permittee is responsible for ensuring that the provisions of each SWPPP is properly implemented.

5. **Required Sampling For "Hot Spot" Identification** - Development of the BMP plan shall include sampling of waste stream segments for the purpose of pollutant "hot spot" identification. The economic achievability of effluent limits will not be considered until plant site "hot spot" sources have been identified, contained, removed or minimized through the imposition of site specific BMPs or application of internal facility treatment technology. For the purposes of this permit condition a "hot spot" is a segment of an industrial facility (including but not limited to soil, equipment, material storage areas, sewer lines etc.) which contributes elevated levels of problem pollutants to the wastewater and/or stormwater collection system of that facility. For the purposes of this definition, problem pollutants are substances for which treatment to meet a water quality or technology requirement may, considering the results of waste stream segment sampling, be deemed unreasonable. For the purposes of this definition, an elevated level is a concentration or mass loading of the pollutant in question which is sufficiently higher than the concentration of that same pollutant at the compliance monitoring location so as to allow for an economically justifiable removal and/or isolation of the segment and/or B.A.T. treatment of wastewaters emanating from the segment.

6. **Facilities with Petroleum and/or Chemical Bulk Storage (PBS and CBS) Areas** – Compliance must be maintained with all applicable regulations including those involving releases, registration, handling and storage (6 NYCRR 595-599 and 612-614). Stormwater discharges from handling and storage areas should be eliminated where practical.

A. Spill Cleanup - All spilled or leaked substances must be removed from secondary containment systems as soon as practical and for CBS storage areas within 24 hours unless written authorization is received from the Department. The containment system must be thoroughly cleaned to remove any residual contamination which could cause contamination of stormwater and the resulting discharge of pollutants to waters of the State. Following spill cleanup the affected area must be completely flushed with clean water three times and the water removed after each flushing for proper disposal in an on-site or off-site wastewater treatment plant designed to treat such water and permitted to discharge such wastewater. Alternately, the permittee may test the first batch of stormwater following the spill cleanup to determine discharge acceptability. If the water contains no pollutants it may be discharged. Otherwise it must be disposed of as noted above. See *Discharge Monitoring* below for the list of parameters to be sampled for.

C. SPECIAL CONDITIONS - INDUSTRY BEST MANAGEMENT PRACTICES (continued)

B. Discharge Operation - Stormwater must be removed before it compromises the required containment system capacity. Each discharge may only proceed with the prior approval of the permittee staff person responsible for ensuring SPDES permit compliance. Bulk storage secondary containment drainage systems must be locked in a closed position except when the operator is in the process of draining accumulated stormwater. Transfer area secondary containment drainage systems must be locked in a closed position during all transfers and must not be reopened unless the transfer area is clean of contaminants. Stormwater discharges from secondary containment systems should be avoided during periods of precipitation. A logbook shall be maintained on site noting the date, time and personnel supervising each discharge.

C. Discharge Screening - Prior to each discharge* from a secondary containment system the stormwater must be screened for contamination. All stormwater must be inspected for visible evidence of contamination. Additional screening methods shall be developed by the permittee as part of the overall BMP Plan, e.g. the use of volatile gas meters to detect the presence of gross levels of gasoline or volatile organic compounds. If the screening indicates contamination, the permittee must collect and analyze a representative sample** of the stormwater. If the water contains no pollutants it may be discharged. Otherwise it must either be disposed of in an on site or off site wastewater treatment plant designed to treat and permitted to discharge such wastewater or the Regional Water Manager can be contacted to determine if it may be discharged without treatment.

D. Discharge Monitoring - Unless the discharge from any bulk storage containment system outlet is identified in the SPDES permit as an outfall with explicit effluent and monitoring requirements, the permittee shall monitor the outlet as follows:

(i) *Bulk Storage Secondary Containment Systems:*

(a) The volume of each discharge from each outlet must be monitored. Discharge volume may be calculated by measuring the depth of water within the containment area times the wetted area converted to gallons or by other suitable methods. A representative sample shall be collected of the first discharge* following any cleaned up spill or leak. The sample must be analyzed for pH, the substance(s) stored within the containment area and any other pollutants the permittee knows or has reason to believe are present**.

(b) Every fourth discharge* from each outlet must be sampled for pH, the substance(s) stored within the containment area and any other pollutants the permittee knows or has reason to believe are present**.

(ii) *Transfer Area Secondary Containment Systems:*

The first discharge* following any spill or leak must be sampled for flow, pH, the substance(s) transferred in that area and any other pollutants the permittee knows or has reason to believe are present**.

E. Discharge Reporting - Any results of monitoring required above, excluding screening data, must be submitted to the Department by appending them to the corresponding DMR. Failure to perform the required discharge monitoring and reporting shall constitute a violation of the terms of the SPDES permit.

F. Prohibited Discharges - **In all cases, any discharge which contains a visible sheen, foam, or odor, or may cause or contribute to a violation of water quality is prohibited.** The following discharges are prohibited unless specifically authorized elsewhere in this SPDES permit: spills or leaks, tank bottoms, maintenance wastewaters, wash waters where detergents or other chemicals have been used, tank hydrotest and ballast waters, contained fire fighting runoff, fire training water contaminated by contact with pollutants or containing foam or fire retardant additives, and unnecessary discharges of water or wastewater into secondary containment systems.

* Discharge includes stormwater discharges and snow and ice removal. If applicable, a representative sample of snow and/or ice should be collected and allowed to melt prior to assessment.

** If the stored substance is gasoline or aviation fuel then sample for oil & grease, benzene, ethylbenzene, naphthalene, toluene and total xylenes (EPA method 602). If the stored substance is kerosene, diesel fuel, fuel oil, or lubricating oil then sample for oil & grease and polynuclear aromatic hydrocarbons (EPA method 610). If the substance(s) are listed in Tables 6-8 of SPDES application form NY-2C then sampling is required. If the substance(s) are listed in NY-2C Tables 9-10 sampling for appropriate indicator parameters may be required, e.g. BOD5 or toxicity testing. Contact the facility inspector for further guidance. In all cases flow and pH monitoring is required.

WATER TREATMENT CHEMICAL (WTC) REQUIREMENTS

New or increased use of a WTC requires prior DEC review and authorization. At a minimum, the permittee must notify the DEC in writing of its intent to change WTC use by submitting a completed WTCFX Form for each WTC. The DEC will review that submittal and determine if a SPDES permit modification is necessary or whether WTC review and authorization may proceed outside of the formal permit administrative process. **The majority of WTC authorizations do not require formal SPDES permit modification.** WTCs which are used in closed systems and cannot be discharged or those which are discharged to municipal STP do not require DEC review. **WTC use and discharge questions or requests for forms** should be directed to the DEC staff person who developed your SPDES permit. If you are not sure who that is, contact the DEC staff person who last inspected your facility.

Examples of WTCs include biocides, coagulants, conditioners, corrosion inhibitors, defoamers, flocculants, scale inhibitors, sequestrants, and settling aids. DEC staff may also direct you to use a WTCFX Form for review and authorization of substances other than WTCs, e.g. process chemicals.

The permittee must demonstrate that the use and discharge of any WTCs containing **phosphorus**, tributary to the Great Lakes Basin or other ponded waters, is necessary and that no acceptable alternatives exist. Please note that in some cases your permit may require modification to regulate phosphorus.

Generic WTC Usage Requirements

(b) WTC use shall not exceed the rate reported by the permittee or authorized below, whichever is less.

(c) The discharge shall not cause or contribute to a violation of water quality or an exceedance of ambient water quality criteria.

(d) **The permittee must maintain a logbook** of all WTC use, noting for each WTC the date, time, exact location, and amount of each dosage, and, the name of the individual applying or measuring the chemical. The logbook must also document that adequate process controls are in place to ensure that excessive levels of WTCs are not used and subsequently discharged through outfalls. The permittee shall retain the logbook data for a period of at least 5 years. This period may be extended by request of the DEC.

(e) **The permittee shall provide an annual report**, attached to the December DMR, containing the following information for each outfall: the current list of WTCs authorized for use and discharge by the DEC, for each WTC the amount in pounds used during the year, identification of authorized WTCs the permittee no longer uses, and any other pertinent information.

List of WTCs Authorized for Use and Discharge*

Affected Outfall(s)	Dosage (lbs/day) Avg	Max	WTC Manufacturer and Product Name	WTC Function
001 (via 01D & 01G)	10.8	52.3	Ashland, Amercor	Corrosion inhibitor
001 (via 01G)	2.3	11.3	ICL Performance Products, Disodium Phosphate	Scale inhibitor
001 (via 01G)	17.8	86.4	Ashland, Mekor 6701	Corrosion inhibitor
001 (via 01H)	844	2552	Basic Chemical Solutions, Sodium Hydroxide 50%	Demineralizer regeneration
001 (via 01H)	995	3069	Basic Chemical Solutions, Sulfuric Acid 97%	Demineralizer regeneration
001 (via 01G)	9.9	48	ICL Performance Products, Trisodium Phosphate	Scale inhibitor

* - Authorized WTCs must either be listed above or identified in a letter sent to the permittee by the DEC subsequent to issuance of this permit page. In cases where a WTC is listed above and in a letter from the DEC, the more recent document will control.

DISCHARGE NOTIFICATION REQUIREMENTS

(a) Except as provided in (c) and (f) of these Discharge Notification Act requirements, the permittee shall install and maintain identification signs at all outfalls to surface waters listed in this permit. Such signs shall be installed before initiation of any discharge.

(b.) Subsequent modifications to or renewal of this permit does not reset or revise the deadline set forth in (a) above, unless a new deadline is set explicitly by such permit modification or renewal.

(c.) The Discharge Notification Requirements described herein do not apply to outfalls from which the discharge is composed exclusively of storm water, or discharges to ground water.

(d) The sign(s) shall be conspicuous, legible and in as close proximity to the point of discharge as is reasonably possible while ensuring the maximum visibility from the surface water and shore. The signs shall be installed in such a manner to pose minimal hazard to navigation, bathing or other water related activities. If the public has access to the water from the land in the vicinity of the outfall, an identical sign shall be posted to be visible from the direction approaching the surface water.

The signs shall have **minimum** dimensions of eighteen inches by twenty four inches (18" x 24") and shall have white letters on a green background and contain the following information:

N.Y.S. PERMITTED DISCHARGE POINT

SPDES PERMIT No.: NY_____

OUTFALL No. :____

For information about this permitted discharge contact:

Permittee Name: _____

Permittee Contact: _____

Permittee Phone: ( ) - ### - ####

(e) For each discharge required to have a sign in accordance with a), the permittee shall, concurrent with the installation of the sign, provide a repository of copies of the Discharge Monitoring Reports (DMRs), as required by the **RECORDING, REPORTING AND ADDITIONAL MONITORING REQUIREMENTS** page of this permit. This repository shall be open to the public, at a minimum, during normal daytime business hours. The repository may be at the business office repository of the permittee or at an off-premises location of its choice (such location shall be the village, town, city or county clerk's office, the local library or other location as approved by the Department). In accordance with the **RECORDING, REPORTING AND ADDITIONAL MONITORING REQUIREMENTS** page of your permit, each DMR shall be maintained on record for a period of three years.

(f) If, upon November 1, 1997, the permittee has installed signs that include the information required by 17-0815-a(2)(a) of the ECL, but do not meet the specifications listed above, the permittee may continue to use the existing signs for a period of up to five years, after which the signs shall comply with the specifications listed above.

(g) The permittee shall periodically inspect the outfall identification signs in order to ensure that they are maintained, are still visible and contain information that is current and factually correct.

SCHEDULE OF COMPLIANCE

a) The permittee shall comply with the following schedule:

Action Code	Outfall Number(s)	Compliance Action	Due Date
	NA	Submit an approvable report to demonstrate compliance in accordance with permit condition in Biological Monitoring Requirement B.4.c.	VMP Study Completion + 6 months

The above compliance actions are one time requirements. The permittee shall comply with the above compliance actions to the Department's satisfaction once. When this permit is administratively renewed by NYSDEC letter entitled "SPDES NOTICE/RENEWAL APPLICATION/PERMIT", the permittee is not required to repeat the submission. The above due dates are independent from the effective date of the permit stated in the letter of "SPDES NOTICE/RENEWAL APPLICATION/PERMIT."

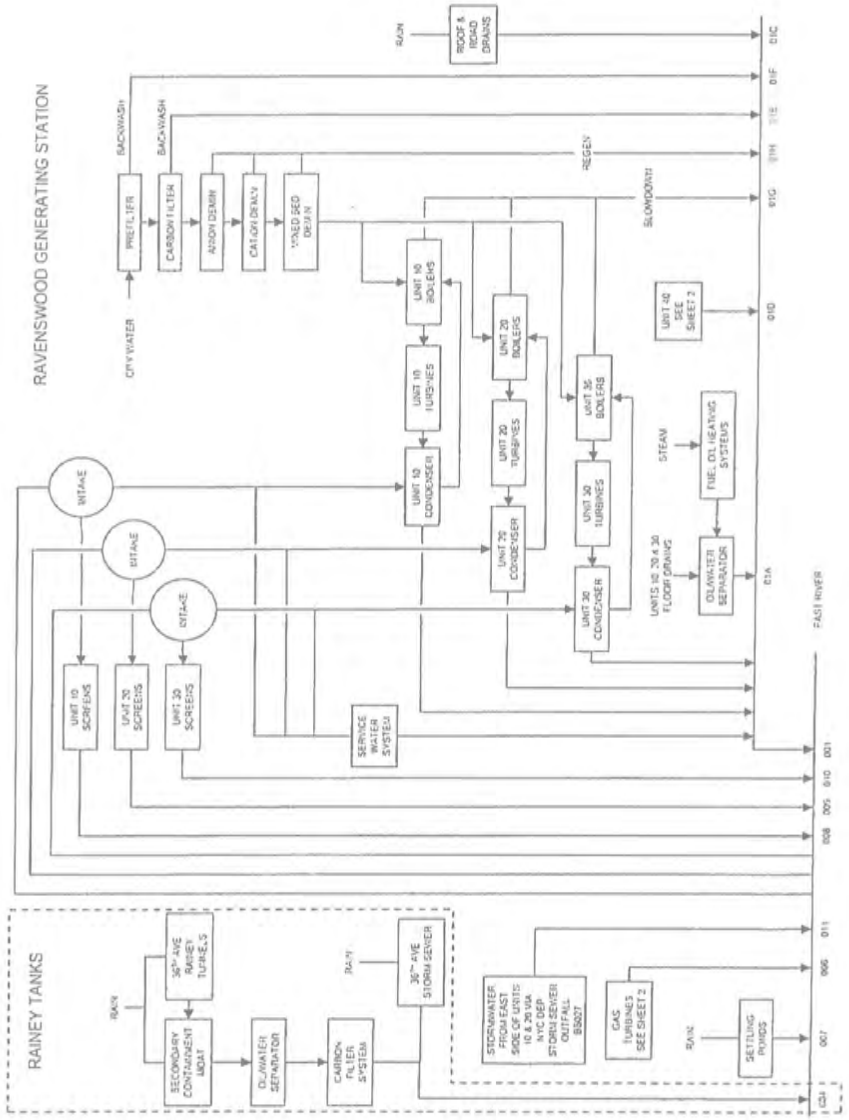
b) The permittee shall submit a written notice of compliance or non-compliance with each of the above schedule dates no later than 14 days following each elapsed date, unless conditions require more immediate notice as prescribed in 6 NYCRR Part 750-1.2(a) and 750-2. All such compliance or non-compliance notification shall be sent to the locations listed under the section of this permit entitled RECORDING, REPORTING AND ADDITIONAL MONITORING REQUIREMENTS. Each notice of non-compliance shall include the following information:

1. A short description of the non-compliance;
2. A description of any actions taken or proposed by the permittee to comply with the elapsed schedule requirements without further delay and to limit environmental impact associated with the non-compliance;
3. A description or any factors which tend to explain or mitigate the non-compliance; and
4. An estimate of the date the permittee will comply with the elapsed schedule requirement and an assessment of the probability that the permittee will meet the next scheduled requirement on time.

c) The permittee shall submit copies of any document required by the above schedule of compliance to NYSDEC Regional Water Manager at the location listed under the section of this permit entitled RECORDING, REPORTING AND ADDITIONAL MONITORING REQUIREMENTS and to the Bureau of Water Permits, 625 Broadway, Albany, N.Y. 12233-3505, unless otherwise specified in this permit or in writing by the Department.

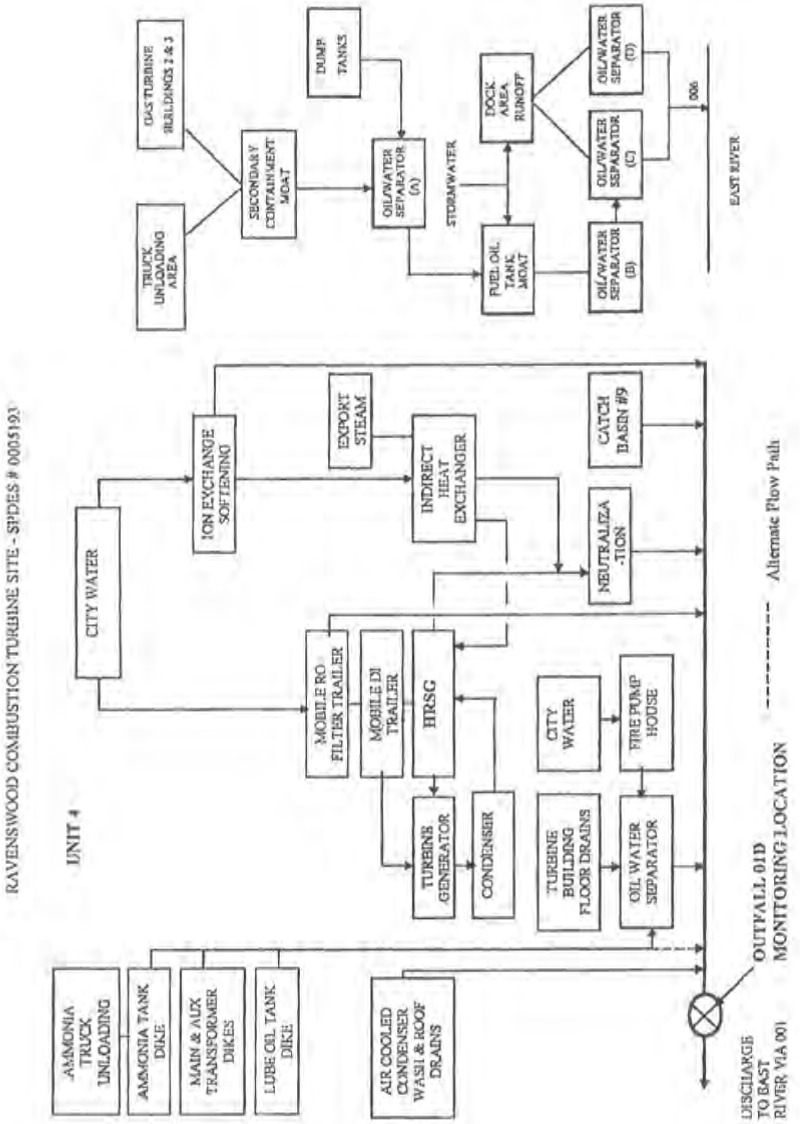
MONITORING LOCATIONS

The permittee shall take samples and measurements, to comply with the monitoring requirements specified in this permit, at the location(s) specified below.



MONITORING LOCATIONS

The permittee shall take samples and measurements, to comply with the monitoring requirements specified in this permit, at the location(s) specified below:



RECORDING, REPORTING AND ADDITIONAL MONITORING REQUIREMENTS

a) 6 NYCRR Part 750 is hereby incorporated by reference and its conditions are enforceable requirements of this permit. The permittee shall comply with all conditions set forth in this permit and with 6 NYCRR Part 750, including, but not limited to: additional monitoring and reporting requirements and conditions, including noncompliance reporting.

b) The monitoring information required by this permit shall be summarized, signed and retained for a period of at least five years from the date of the sampling for subsequent inspection by the Department or its designated agent. **Also, monitoring information required by this permit shall be summarized and reported by submitting;**

[X] (if box is checked) completed and signed Discharge Monitoring Report (DMR) forms for each __1__ month reporting period to the locations specified below. Blank forms are available at the Department's Albany office listed below. The first reporting period begins on the effective date of this permit and the reports will be due no later than the 28th day of the month following the end of each reporting period.

[ ] (if box is checked) an annual report to the Regional Water Engineer at the address specified below. The annual report is due by February 1 each year and must summarize information for January to December of the previous year in a format acceptable to the Department.

[ ] (if box is checked) a monthly "Wastewater Facility Operation Report..." (form 92-15-7) to the:
[ ] Regional Water Engineer and/or [ ] County Health Department or Environmental Control Agency specified below

Send the **original** (top sheet) of each DMR page to:
Department of Environmental Conservation
Division of Water, Bureau of Water Compliance
625 Broadway, Albany, New York 12233-3506
Phone: (518) 402-8177

Send an **additional copy** of each DMR page to:

Send the **first copy** (second sheet) of each DMR page to:
Department of Environmental Conservation
Regional Water Engineer, Region 2
One Hunters Point Plaza
47-20 21st Street
Long Island City, New York 11101
Phone: (718) 482-4930

c) Monitoring and analysis shall be conducted according to test procedures approved under 40 CFR Part 136, unless other test procedures have been specified in this permit.

d) More frequent monitoring of the discharge(s), monitoring point(s), or waters of the State than required by the permit, where analysis is performed by a certified laboratory or where such analysis is not required to be performed by a certified laboratory, shall be included in the calculations and recording of the data on the corresponding DMRs.

e) Calculations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified in this permit.

f) Unless otherwise specified, all information recorded on the DMRs shall be based upon measurements and sampling carried out during the most recently completed reporting period.

g) Any laboratory test or sample analysis required by this permit for which the State Commissioner of Health issues certificates of approval pursuant to section 502 of the Public Health Law shall be conducted by a laboratory which has been issued a certificate of approval. Inquiries regarding laboratory certification should be directed to the New York State Department of Health, Environmental Laboratory Accreditation Program.

RAVENSWOOD LETTER REGARDING CORRECTED ANNUAL WATER WITHDRAWAL REPORTS, DATED DECEMBER 18, 2013 [188-189]

HISCOCK & BARCLAY LLP

Danielle E. Mettler
Associate

December 18, 2013

Carol Conyers, Esq.
Office of General Counsel
New York State Department
of Environmental Conservation
625 Broadway,
Albany, NY 12233-1750

Re: Corrected Annual Water Withdrawal Reports 2009-2011
Ravenswood Generating Station
Water Withdrawal Permit (# 2-6304-00024/00054)

Dear Ms. Conyers,

As you know, we represent TC Ravenswood L.L.C ("Ravenswood") on the above referenced Water Withdrawal Permit (the "Permit") issued by the New York State Department of Environmental Conservation ("NYSDEC" or the "Department") on November 15, 2013.

As we discussed, the Annual Water Withdrawal Reports ("Annual Reports") submitted for the years 2009-2011 inadvertently omitted the water withdrawals for the low pressure saltwater cooling system from the maximum water withdrawal capacity calculations. As provided in the enclosed Professional Engineering certification, the low pressure saltwater cooling system has been a part of the Ravenswood Generating Station cooling system for over thirty (30) years. Please accept the enclosed corrected Annual Reports to replace those previously submitted by Ravenswood.

The following is a summary of the Ravenswood Generating Station water withdrawal sources, including the low pressure salt water cooling system:

Unit 10
- (2) Circulating Water Pumps (107,000 GPM each)
- (2) Low Pressure Salt Water Pumps (16,000 GPM each)

Unit 20
- (2) Circulating Water Pumps (107,000 GPM each)
- (2) Low Pressure Salt Water Pump (16,000 GPM each)

Unit 30 East River Intake
- (2) Circulating Water Pumps (268,500 GPM each)
- (2) Low Pressure Salt Water Pumps (16,000 GPM each)

Maximum Capacity of All Water Withdrawal Pumps: 1,061,000 GPM (1,527.84 MGD)
Maximum Capacity of Circulating Water Pumps ONLY: 965,000 GPM (1,389.6 MGD)

Ravenswood has been working collaboratively with the Department for years to install equipment to reduce its water withdrawals. Ravenswood's installation of variable speed equipment on the circulating water pumps has reduced Ravenswood's water withdrawals to the extent that, during normal operations, Ravenswood can operate well below the maximum capacity. However, the maximum water withdrawal capacity of 1,527.84 MGD is necessary to maintain the reliability of the electrical grid and to provide critical electric generation during natural disasters or other emergencies. This was exemplified during and in the aftermath of Superstorm Sandy, when Ravenswood provided approximately 50% of New York City's electric load, requiring all units to generate at maximum capacity. Accordingly, Ravenswood's water withdrawal was also at its maximum capacity during portions of this period.

Thank you for your attention to this matter. Please contact us if you have any questions or would like to discuss further.

Very truly yours,

Danielle E. Mettler

Danielle E. Mettler

cc: M. Holt (NYSDEC Division of Water)
D. O'Donnell (TC Ravenswood L.L.C)

RAVENSWOOD PROFESSIONAL ENGINEER CERTIFICATION REGARDING MAXIMUM WATER WITHDRAWAL CAPACITY, DATED DECEMBER 17, 2013

TransCanada
In business to deliver

Erwin Schaub PE
38-54 Vernon Blvd.
Long Island City, NY 11101

December 17, 2013

Ravenswood Generating Station
Water Withdrawal Permit ID 2-6304-00024/00054

The low pressure salt water pumps at The Ravenswood Generating Station for Units 10, 20, and 30 are part of the initial installation of equipment dating back to 1962. The low pressure salt water pumps are not part of a new installation; they were incorporated in the initial design and specifications for the Ravenswood Generating Station.

The maximum water withdrawal capacity of the Ravenswood Generating Station, which is required for operation of the station without affect to its reliability, is 1,527.84 million gallons per day, which includes withdrawals for the circulating water pumps and the low pressure salt water pumps.

Erwin Schaub, PE 12/18/13
Ravenswood Operations Manager

BWRM Oct 2011

New York State Department of Environmental Conservation
Division of Water, Bureau of Water Resources Management, 625 Broadway, Albany, NY 12233-3508

Water Withdrawal Reporting Form

2011 Water Withdrawal Information Due By February 1st, 2012

Annual $50 fee (if applicable) submitted: Yes ☐ or N/A ☐
Prior to filling out this form please read the instructions on page 4

Facility Name: Ravenswood G.S.	Facility Street Address: 38-54 Vernon Blvd			Reporting year: 2011
City: Long Island City	Zip: 11101		Town: N/A	County: Queens
Contact Name: Daniel O'Donnell	Email: daniel_odonnell@transcanada.com		Contact Telephone: (718) 706-2818	
Source Name: East River	Source Type: S	Well Depth:	Max Rate: 1,527.84	Units MGD
Source Name: NYC DEP	Source Type: P	Well Depth:	Max Rate:	Units
Source Name:	Source Type:	Well Depth:	Max Rate:	Units
Source Name:	Source Type:	Well Depth:	Max Rate:	Units
Source Name:	Source Type:	Well Depth:	Max Rate:	Units
Source Name:	Source Type:	Well Depth:	Max Rate:	Units
Source Name:	Source Type:	Well Depth:	Max Rate:	Units
Source Name:	Source Type:	Well Depth:	Max Rate:	Units
Source Name:	Source Type:	Well Depth:	Max Rate:	Units
Source Name:	Source Type:	Well Depth:	Max Rate:	Units
For additional source listings, check this box ☐ and go to page 3		If an "interbasin diversion" occurs, check this box ☐ and go to page 3		
2011 Ave Day Withdrawal: 583.8 MGD	2011 Max Day Withdrawal: 1,527.84 MGD		Max Potential Withdrawal Rate, or DEC permit rate 1,527.84 MGD	
Submitted by:		Title: Mgr EO Chemistry	Date: 12/10/2013	

Water Withdrawal Category (check all that apply)

- ☐ Agricultural
- ☐ Bottled / Bulk Water
- ☐ Commercial
- ☐ Environmental
- ☒ Industrial
- ☐ Institutional
- ☐ Mine Dewatering
- ☐ Oil / Gas Production
- Power Production:
  - ☒ Fossil Fuel
  - ☐ Nuclear
  - ☐ Other Pwr:
- ☐ Public Water Supply
- Recreation:
  - ☐ Golf Course
  - ☐ Snow Making
  - ☐ Other Rec:
- ☐ Other:

Reset Form | Print Form | Submit by Email

If you do not wish to submit this form via email, you may fill it out, then print and mail it to the address shown at the top of the page. Don't forget to fill out pages 2 and 3. Please include the $50 fee if applicable.

New York State Department of Environmental Conservation
Division of Water, Bureau of Water Resources Management, 625 Broadway, Albany, NY 12233-3508

Water Withdrawal Reporting Form (continued)

Use this page to report actual usage for the past year

Calculation Method: P (See instructions/definitions on p.4) **For Public Water Supplies Only --** Population Served: _____ Percent Water Unaccounted For: ____ %

UNITS: Must be gallons per month	January	February	March	April	May	June
Withdrawn	6,004,100,000	6,157,400,000	7,375,700,000	19,418,400,000	16,035,800,000	34,770,200,000
Transferred / Imported	13,672,241	10,667,418	9,741,032	16,351,070	14,869,385	16,386,887
Consumed	11,855,502	8,448,881	8,093,718	13,244,741	12,244,133	12,938,206
Returned	6,005,916,739	6,159,618,537	7,377,347,314	19,421,506,329	16,038,425,252	34,773,648,681
Diversions In/Out if any	0	0	0	0	0	0
Describe location of returned water	Water returned via SPDES outfall 001, 008, 009 and 010					
UNITS: Must be gallons per month	July	August	September	October	November	December
Withdrawn	35,235,500,000	29,975,000,000	25,613,700,000	19,433,200,000	7,218,400,000	5,865,800,000
Transferred / Imported	19,575,367	14,377,080	14,709,603	14,310,816	12,277,596	10,058,481
Consumed	16,567,206	11,852,787	12,435,670	12,244,026	10,615,603	9,559,560
Returned	35,238,508,107	29,977,524,293	25,615,973,933	19,435,266,790	7,220,061,993	5,867,138,252
Diversions In/Out if any	0	0	0	0	0	0

Go to Page 1 to submit form by email

New York State Department of Environmental Conservation
Division of Water, Bureau of Water Resources Management, 625 Broadway, Albany, NY 12233-3508

Water Withdrawal Reporting Form (continued)

Please see instructions on page 4

Additional Water Sources - Include Source Name, Source Type, Well Depth (if a well), Source Capacity with units used.

Source Name:	Source Type:	Well Depth:	Max Rate:
Source Name:	Source Type:	Well Depth:	Max Rate:
Source Name:	Source Type:	Well Depth:	Max Rate:
Source Name:	Source Type:	Well Depth:	Max Rate:
Source Name:	Source Type:	Well Depth:	Max Rate:
Source Name:	Source Type:	Well Depth:	Max Rate:
Source Name:	Source Type:	Well Depth:	Max Rate:
Source Name:	Source Type:	Well Depth:	Max Rate:
Source Name:	Source Type:	Well Depth:	Max Rate:
Source Name:	Source Type:	Well Depth:	Max Rate:

Units:

Interbasin Diversions - Fill out this section only if water is being transferred between major drainage basins. To determine basin ID, click the box highlighted in blue ("Click Here To Determine Basin ID"). Enter basin ID. Describe location of originating and receiving sites. (e.g. Town water intake on Smith Lake to Jones Reservoir).

Originating Major Drainage Basin			Receiving Major Drainage Basin	
Click Here To Determine Basin ID	Enter Basin ID Here	→	Click Here To Determine Basin ID	Enter Basin ID Here
Originating Site:		→	Receiving Site:	
		→		

Go to Page 1 to submit form by email

INSTRUCTIONS / DEFINITIONS

Annual Reporting Fee	$50 per year for all uses except for agricultural or public water supply. Please make all checks payable to "NYSDEC". Mail to the address shown at the top of the form.
Agricultural Purpose	The practice of farming for crops, plants, vines and trees, and the keeping, grazing or feeding of livestock, for sale of livestock or livestock products.
Public Water Supply	Supply water to the public. Examples include: municipality, hotel, apartment, restaurant, church, campground, etc.
Source Type	S = Stream or River. L = Pond or Lake. R = Reservoir. BW = Bedrock Well. UW = Unconsolidated Well. SP = Spring. P = Purchased
Max Potential Withdrawal Or Permitted Withdrawal	For public supplies show DEC permitted withdrawal rate. All others show absolute maximum rate that can be withdrawn.
Units, Source	Gallons per minute (gpm), gallons per day (gpd) or million gallons per day (mgd).
Well Name	Name of well water source (e.g. Well No.1, Main Street well).
Well Type	Rock vs. unconsolidated (sand and gravel) well.
Average Day Withdrawal	Total amount withdrawn during the past year, divided by total days withdrawn (e.g. 365,000,000 gallons / 365 days = 1 mgd).
Maximum Day Withdrawal	Largest single day withdrawal rate (e.g. 2.65 mgd) of the source during the past year.
Calculation Method	M - metered readings. W - flow through a weir or flume. P - flow through a pump or pump run time. E - estimated
Withdrawn	Amount of water removed from the source.
Transferred/Imported	Amount of water brought in from or sent to another facility. Includes bulk sales. For Transferred water, use a negative (-) sign.
Consumed	Amount of water not returned (e.g. water incorporated into a product or lost through evaporation). Public water suppliers must use metered sales to customer.
Returned	Amount of water discharged back to the environment or a wastewater system.
Diversions In/Out	Amount of water, if any, diverted from/to another major drainage basin. For Diversions Out, use a negative (-) sign.
Location of Returned Water	State the general area where returned water is discharged. Examples: "Hudson River near Poughkeepsie", "Groundwater near Auburn".
Major Drainage Basins	Report only "Major Basin" transfers. Use internet link (labelled "Click Here To Determine Basin ID") and enter ID into box indicated. Describe location of originating withdrawal and receiving discharge. Be as specific as possible.

New York State Department of Environmental Conservation
Division of Water, Bureau of Water Resources Management, 625 Broadway, Albany, NY 12233-3508

Water Withdrawal Reporting Form

2010 Water Withdrawal Information due by February 1st, 2011

Annual $50 fee (if applicable) submitted: Yes ☐ or N/A ☐

Prior to filling out this form please read the instructions on page 4

Facility Name: Ravenswood G.S.	Facility Street Address: 38-54 Vernon Blvd.				Reporting year: 2010
City: Long Island City	Zip: 11101		Town:		County: Queens
Contact Name: Daniel O'Donnell	Email: daniel_odonnell@transcanada.com		Contact Telephone: (718) 706-2818		
Source Name: East River	Source Type: S	Well Depth:	Max Rate: 1,527.84	Units MGD	
Source Name: NYC DEP	Source Type: P	Well Depth:	Max Rate:	Units	
Source Name:	Source Type:	Well Depth:	Max Rate:	Units	
Source Name:	Source Type:	Well Depth:	Max Rate:	Units	
Source Name:	Source Type:	Well Depth:	Max Rate:	Units	
Source Name:	Source Type:	Well Depth:	Max Rate:	Units	
Source Name:	Source Type:	Well Depth:	Max Rate:	Units	
Source Name:	Source Type:	Well Depth:	Max Rate:	Units	
Source Name:	Source Type:	Well Depth:	Max Rate:	Units	
Source Name:	Source Type:	Well Depth:	Max Rate:	Units	
For additional source listings, check this box ☐ and go to page 3		If an "interbasin diversion" occurs, check this box ☐ and go to page 3			
2010 Av Day Withdrawal: 667.2 MGD	2010 Max Day Withdrawal: 1,527.84 MGD		Max Potential Withdrawal Rate, or DEC permit rate 1,527.84 MGD		
Submitted by:		Title: Mgr. E.O Chemistry	Date: 12/10/2013		

Water Withdrawal Category (check all that apply)

- ☐ Agricultural
- ☐ Bottled / Bulk Water
- ☐ Commercial
- ☐ Environmental
- ☒ Industrial
- ☐ Institutional
- ☐ Mine Dewatering
- ☐ Oil / Gas Production
- Power Production:
  - ☒ Fossil Fuel
  - ☐ Nuclear
  - ☐ Other Pwr:
- ☐ Public Water Supply
- Recreation:
  - ☐ Golf Course
  - ☐ Snow Making
  - ☐ Other Rec:
- ☐ Other:

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If you do not wish to submit this form via email, you may fill it out, then print and mail it to the address shown at the top of the page. Don't forget to fill out pages 2 and 3. Please include the $50 fee if applicable.

New York State Department of Environmental Conservation
Division of Water, Bureau of Water Resources Management, 625 Broadway, Albany, NY 12233-3508

Water Withdrawal Reporting Form (continued)

Use this page to report actual usage for the past year

Calculation Method: P (See instructions/definitions on p.4) **For Public Water Supplies Only** -- Population Served: ____ Percent Water Unaccounted For: ____ %

UNITS: Must be gallons per month	January	February	March	April	May	June
Withdrawn	3,054,200,000	8,695,800,000	14,635,800,000	15,601,000,000	27,482,400,000	37,969,200,000
Transferred / Imported	6,898,416	9,773,550	16,916,006	12,770,874	19,597,445	20,732,871
Consumed	5,711,414	8,304,893	15,085,359	10,661,569	16,696,774	17,972,247
Returned	3,055,387,002	8,697,268,657	14,637,630,647	15,603,109,305	27,485,300,671	37,971,960,624
Diversions In/Out if any						
Describe location of returned water	Water returned via SPDES outfalls 001, 008, 009 and 010					
UNITS: Must be gallons per month	July	August	September	October	November	December
Withdrawn	44,371,100,000	43,113,600,000	26,874,700,000	12,427,900,000	2,468,200,000	6,820,600,000
Transferred / Imported	22,292,459	24,448,482	24,132,436	7,088,369	5,753,790	7,570,858
Consumed	19,983,275	21,815,676	21,782,484	5,677,386	4,641,608	6,101,362
Returned	44,373,409,184	43,116,232,806	26,877,049,952	12,429,310,983	2,469,312,182	6,822,069,496
Diversions In/Out if any						

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New York State Department of Environmental Conservation
Division of Water, Bureau of Water Resources Management, 625 Broadway, Albany, NY 12233-3508

Water Withdrawal Reporting Form (continued)

Please see instructions on page 4

Additional Water Sources - Include Source Name, Source Type, Well Depth (if a well), Source Capacity with units used.			
Source Name:	Source Type:	Well Depth:	Max Rate: Units:
Source Name:	Source Type:	Well Depth:	Max Rate: Units:
Source Name:	Source Type:	Well Depth:	Max Rate: Units:
Source Name:	Source Type:	Well Depth:	Max Rate: Units:
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Source Name:	Source Type:	Well Depth:	Max Rate: Units:
Source Name:	Source Type:	Well Depth:	Max Rate: Units:
Source Name:	Source Type:	Well Depth:	Max Rate: Units:
Source Name:	Source Type:	Well Depth:	Max Rate: Units:
Source Name:	Source Type:	Well Depth:	Max Rate: Units:

Interbasin Diversions - Type name & location of the sites that are originating and receiving the water being transferred out of a major drainage basin. Consult drainage basin map to determine if an inter-basin diversion exists; map and definition of "major drainage basin" at DEC's Water Withdrawal Reporting webpage.: http://www.dec.ny.gov/lands/55509.html

Originating Major Drainage Basin	Receiving Major Drainage Basin
	→
	→
	→

Go to Page 1 to submit form by email

INSTRUCTIONS / DEFINITIONS

Annual Reporting Fee	$50 per year for all uses except for agricultural or public water supply. Please make all checks payable to "NYSDEC". Mail to the address shown at the top of the form.
Agricultural Purpose	The practice of farming for crops, plants, vines and trees, and the keeping, grazing or feeding of livestock, for sale of livestock or livestock products.
Public Water Supply	Supply water to the public. Examples include: municipality, hotel, apartment, restaurant, church, campground, etc.
Source Type	S = Stream or River. L = Pond or Lake. R = Reservoir. BW = Bedrock Well. UW = Unconsolidated Well. SP = Spring. P = Purchased
Max Potential Withdrawal Or Permitted Withdrawal	For public supplies show DEC permitted withdrawal rate. All others show absolute maximum rate that can be withdrawn.
Units, Source	Gallons per minute (gpm), gallons per day (gpd) or million gallons per day (mgd).
Well Name	Name of well water source (e.g. Well No.1, Main Street well).
Well Type	Rock vs. unconsolidated (sand and gravel) well.
Average Day Withdrawal	Total amount withdrawn during the past year, divided by total days withdrawn (e.g. 365,000,000 gallons / 365 days = 1 mgd).
Maximum Day Withdrawal	Largest single day withdrawal rate (e.g. 2.65 mgd) of the source during the past year.
Calculation Method	M - metered readings. W - flow through a weir or flume. P - flow through a pump or pump run time. E - estimated
Withdrawn	Amount of water removed from the source.
Transferred/Imported	Amount of water brought in from or sent to another facility. Includes bulk sales. For Transferred water, use a negative (-) sign.
Consumed	Amount of water not returned (e.g. water incorporated into a product or lost through evaporation).
Returned	Amount of water discharged back to the environment or a wastewater system.
Diversions In/Out	Amount of water, if any, diverted from/to another major drainage basin. For Diversions Out, use a negative (-) sign.
Location of Returned Water	State the general area where returned water is discharged. Examples: "Hudson River near Poughkeepsie", "Groundwater near Auburn".
Major Drainage Basins	Only "Major Basin" transfers are required to be reported. Enter name & location of the sites that are oirginating AND receiving water being transferred out of a major drainage basin. Consult the drainage basin map at http://www.dec.ny.gov/lands/55509.html to determine if an inter-basin diversions exists.

New York State Department of Environmental Conservation
Division of Water, Bureau of Water Resources Management, 625 Broadway, Albany, NY 12233-3508

Water Withdrawal Reporting Form

~~2011~~ 2009 Water Withdrawal Information ~~Due By February 1st, 2012~~ cr

Annual $50 fee (if applicable) submitted: Yes ☐ or N/A ☐

Prior to filling out this form please read the instructions on page 4

Facility Name: Ravenswood G.S.	Facility Street Address: 38-54 Vernon Blvd			Reporting year: 2009
City: Long Island City	Zip: 11101		Town: N/A	County: Queens
Contact Name: Daniel O'Donnell	Email: daniel_odonnell@transcanada		Contact Telephone: (718) 706-2818	
Source Name: East River	Source Type: S	Well Depth:	Max Rate: 1,527.84	Units MGD
Source Name: NYC DEP	Source Type: P	Well Depth:	Max Rate:	Units
Source Name:	Source Type:	Well Depth:	Max Rate:	Units
Source Name:	Source Type:	Well Depth:	Max Rate:	Units
Source Name:	Source Type:	Well Depth:	Max Rate:	Units
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Source Name:	Source Type:	Well Depth:	Max Rate:	Units
Source Name:	Source Type:	Well Depth:	Max Rate:	Units
Source Name:	Source Type:	Well Depth:	Max Rate:	Units
For additional source listings, check this box ☐ and go to page 3		If an "interbasin diversion" occurs, check this box ☐ and go to page 3		
~~2011~~ 2009 Ave Day Withdrawal: 568.8 MGD	~~2011~~ 2009 Max Day Withdrawal: 1,504.8 MGD		Max Potential Withdrawal Rate, or DEC permit rate 1,527.84 MGD	
Submitted by:		Title: Mgr EO Chemistry	Date: 12/10/2013	

Water Withdrawal Category (check all that apply)

- ☐ Agricultural
- ☐ Bottled / Bulk Water
- ☐ Commercial
- ☐ Environmental
- ☒ Industrial
- ☐ Institutional
- ☐ Mine Dewatering
- ☐ Oil / Gas Production
- Power Production:
  - ☒ Fossil Fuel
  - ☐ Nuclear
  - ☐ Other Pwr:
- ☐ Public Water Supply
- Recreation:
  - ☐ Golf Course
  - ☐ Snow Making
  - ☐ Other Rec:
- ☐ Other:

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New York State Department of Environmental Conservation
Division of Water, Bureau of Water Resources Management, 625 Broadway, Albany, NY 12233-3508

Water Withdrawal Reporting Form (continued)

Use this page to report actual usage for the past year

Calculation Method: P (See instructions/definitions on p.4) **For Public Water Supplies Only** -- Population Served: ____ Percent Water Unaccounted For: ____ %

UNITS: Must be gallons per month	January	February	March	April	May	June
Withdrawn	8,418,200,000	8,833,000,000	6,022,100,000	7,269,000,000	21,284,600,000	29,116,800,000
Transferred / Imported	12,258,304	9,076,975	10,683,768	11,317,559	12,842,171	18,354,960
Consumed	10,300,558	7,460,477	9,068,109	9,551,539	13,591,687	14,646,072
Returned	8,420,157,746	8,834,616,498	6,023,715,659	7,270,766,020	21,287,144,196	29,119,487,242
Diversions In/Out if any	0	0	0	0	0	0
Describe location of returned water	Water returned via SPDES outfall 001, 008, 009 and 010					
UNITS: Must be gallons per month	July	August	September	October	November	December
Withdrawn	18,819,400,000	41,229,400,000	21,179,500,000	11,607,000,000	19,853,300,000	13,988,800,000
Transferred / Imported	15,645,738	26,964,723	14,873,131	14,907,119	13,136,392	11,582,228
Consumed	17,686,038	12,956,337	13,528,428	13,327,842	11,699,419	9,559,560
Returned	18,821,535,443	41,232,301,990	21,181,718,897	11,608,433,885	19,855,142,277	13,990,725,731
Diversions In/Out if any	0	0	0	0	0	0

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New York State Department of Environmental Conservation
Division of Water, Bureau of Water Resources Management, 625 Broadway, Albany, NY 12233-3508

Water Withdrawal Reporting Form (continued)

Please see instructions on page 4

Additional Water Sources - Include Source Name, Source Type, Well Depth (if a well), Source Capacity with units used.

Source Name:	Source Type:	Well Depth:	Max Rate:
Source Name:	Source Type:	Well Depth:	Max Rate:
Source Name:	Source Type:	Well Depth:	Max Rate:
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Source Name:	Source Type:	Well Depth:	Max Rate:
Source Name:	Source Type:	Well Depth:	Max Rate:
Source Name:	Source Type:	Well Depth:	Max Rate:
Source Name:	Source Type:	Well Depth:	Max Rate:
Source Name:	Source Type:	Well Depth:	Max Rate: Units:

Interbasin Diversions - Fill out this section only if water is being transferred between major drainage basins. To determine basin ID, click the box highlighted in blue ("Click Here To Determine Basin ID"). Enter basin ID. Describe location of originating and receiving sites. (e.g. Town water intake on Smith Lake to Jones Reservoir).

Originating Major Drainage Basin			Receiving Major Drainage Basin	
Click Here To Determine Basin ID	Enter Basin ID Here	→	Click Here To Determine Basin ID	Enter Basin ID Here
Originating Site:		→	Receiving Site:	
		→		

Go to Page 1 to submit form by email

INSTRUCTIONS / DEFINITIONS

Annual Reporting Fee	$50 per year for all uses except for agricultural or public water supply. Please make all checks payable to "NYSDEC". Mail to the address shown at the top of the form.
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Public Water Supply	Supply water to the public. Examples include: municipality, hotel, apartment, restaurant, church, campground, etc.
Source Type	S = Stream or River. L = Pond or Lake. R = Reservoir. BW = Bedrock Well. UW = Unconsolidated Well. SP = Spring. P = Purchased
Max Potential Withdrawal Or Permitted Withdrawal	For public supplies show DEC permitted withdrawal rate. All others show absolute maximum rate that can be withdrawn.
Units, Source	Gallons per minute (gpm), gallons per day (gpd) or million gallons per day (mgd).
Well Name	Name of well water source (e.g. Well No.1, Main Street well).
Well Type	Rock vs. unconsolidated (sand and gravel) well.
Average Day Withdrawal	Total amount withdrawn during the past year, divided by total days withdrawn (e.g. 365,000,000 gallons / 365 days = 1 mgd).
Maximum Day Withdrawal	Largest single day withdrawal rate (e.g. 2.65 mgd) of the source during the past year.
Calculation Method	M - metered readings. W - flow through a weir or flume. P - flow through a pump or pump run time. E - estimated
Withdrawn	Amount of water removed from the source.
Transferred/Imported	Amount of water brought in from or sent to another facility. Includes bulk sales. For Transferred water, use a negative (-) sign.
Consumed	Amount of water not returned (e.g. water incorporated into a product or lost through evaporation). Public water suppliers must use metered sales to customer.
Returned	Amount of water discharged back to the environment or a wastewater system.
Diversions In/Out	Amount of water, if any, diverted from/to another major drainage basin. For Diversions Out, use a negative (-) sign.
Location of Returned Water	State the general area where returned water is discharged. Examples: "Hudson River near Poughkeepsie", "Groundwater near Auburn".
Major Drainage Basins	Report only "Major Basin" transfers. Use internet link (labelled "Click Here To Determine Basin ID") and enter ID into box indicated. Describe location of originating withdrawal and receiving discharge. Be as specific as possible.

202

DEC NOTICE REGARDING CORRECTION TO RAVENSWOOD INITIAL PERMIT, DATED FEBRUARY 19, 2014 [203- 204]

New York State Department of Environmental Conservation
Division of Environmental Permits, 4th Floor
625 Broadway, Albany, NY 12233-1750
Phone: (518) 402-9167 • **Fax:** (518) 402-9168
Website: www.dec.ny.gov

Joe Martens
Commissioner

CERTIFIED MAIL RETURN RECEIPT REQUESTED

February 19, 2014

Mr. Ken Yager
Ravenswood Generating Station
38-54 Vernon Boulevard
Long Island City, NY 11101

Re: Notice of Intent to Modify
DECID# 2-6304-00024/00054
Ravenswood Generating Station
Correction to Initial Water Withdrawal Permit

Dear Mr. Yager;

On December 18, 2013 the Department received a letter and supporting documentation from Danielle Mettler to Carol Conyers of our Office of General Council, providing additional corrected information as to the actual equipment in operation at the facility in 2011. Previously submitted reports omitted existing low pressure salt water pumps that are part of the initial design and specifications for the Ravenswood Generating Station.

Based upon the new information provided, the Department has determined it is necessary to modify the above referenced permit by correcting the maximum permitted withdrawal from 1,390 MGD to 1,527.84 MGD.

If we do not hear from you within 15 days, we will assume that you have no objection to the revised amount, and we will issue you a revised permit. If you have any objection to these revisions, you may either contact us to discuss your objections, and/or you may request a hearing, by writing to the Chief Permit Administrator at the above address within 15 days of the date of this letter. Your request must contain specific reasons why you believe these revised conditions should not be included in your permit. If you have any questions or would like to discuss this further, please feel free to contact me.

Should TC Ravenswood LLC have no objection to the modification you may countersign below and return a copy for our records. The revised permit would be issued upon our receipt of your response.

Sincerely,

Kent P. Sanders
Deputy Chief Permit Administrator
Division of Environmental Permits

Cc: C. Conyers Esq. NYSDEC OGC
M. Holt Div. of Water

TC Ravenswood LLC has no objection to the modification of the Initial Water Withdrawal Permit for the Ravenswood Generating Station correcting the Maximum daily withdrawal to 1,527.84 MGD.

Signature
Kenneth Yager
Compliance Manager

Date: 2/27/2014

205

DEC COVER LETTER FOR CORRECTED RAVENSWOOD INITIAL PERMIT, DATED MARCH 7, 2014

Kent/file

New York State Department of Environmental Conservation
Division of Environmental Permits, 4th Floor
625 Broadway, Albany, NY 12233-1750
Phone: (518) 402-9167 • Fax: (518) 402-9168
Website: www.dec.ny.gov

Joe Martens
Commissioner

March 7, 2014

Mr. Daniel O'Donnell
TC Ravenswood LLC.
38-55 Vernon Boulevard
Long Island City, NY 11101

RE: DEC #2-6304-0002400054
Ravenswood Generating Station
38-54 Vernon Blvd, Queens County

Dear Mr. O'Donnell;

The Department Initiated Modification of your facility's Initial Water Withdrawal Permit is enclosed. The maximum withdrawal has been corrected from 1,390 MGD to 1,527.84 MGD. All other permit terms and conditions remain in effect. This permit will run concurrently with the facilities SPDES Permit (NY-0005193) and **expire on October 31, 2017**. Withdrawals beyond the scope of the permit and the approved project plans may be considered a violation of the law and subject to appropriate enforcement action.

Also note that this permit does not eliminate the need to obtain any other federal, state or local permits or approvals that may be required for this project.

Should you have any questions regarding your obligations under the permit, please feel free to contact me by phone at (518) 402-9178 or by email at kpsander@gw.dec.state.ny.us.

Sincerely,

Kent P. Sanders

Kent P. Sanders
Deputy Chief Permit Administrator

Enclosures: Permit
cc: M. Holt, DOW
C. Conyers, OGC

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
Facility DEC ID 2-6304-00024

PERMIT
Under the Environmental Conservation Law (ECL)

Permittee and Facility Information

Permit Issued To:
TC RAVENSWOOD LLC
110 TURNPIKE RD STE 203
WESTBOROUGH, MA 01581
(508) 871-1850

Facility:
RAVENSWOOD GENERATING STATION
38-54 VERNON BLVD
QUEENS, NY 11101

Facility Location: in QUEENS COUNTY **Village:** Long Island City
Facility Principal Reference Point: NYTM-E: 588.961 NYTM-N: 4512.613
Latitude: 40°45'34.8" Longitude: 73°56'45.8"
Project Location: 38-54 Vernon Boulevard
Authorized Activity: This permit authorizes the withdrawal of a supply of water up to 1,527,840,000 gallons per day (GPD) from the East River for once through cooling and other processes related to electrical generation.

Permit Authorizations

Water Withdrawal Non-public - Under Article 15, Title 15
Permit ID 2-6304-00024/00054 (WWA No. 11,660)

New Permit	Effective Date: 11/15/2013	Expiration Date: 10/31/2017
Modification # 1	Effective Date: 3/7/2014	Expiration Date: 10/31/2017

NYSDEC Approval

By acceptance of this permit, the permittee agrees that the permit is contingent upon strict compliance with the ECL, all applicable regulations, and all conditions included as part of this permit.

Permit Administrator: KENT P SANDERS, Deputy Chief Permit Administrator
Address: NYSDEC HEADQUARTERS
625 BROADWAY
ALBANY, NY 12233

Authorized Signature: Kent P. Sanders Date 3/7/2014

Permit Components

WATER WITHDRAWAL NON-PUBLIC PERMIT CONDITIONS

GENERAL CONDITIONS, APPLY TO ALL AUTHORIZED PERMITS

NOTIFICATION OF OTHER PERMITTEE OBLIGATIONS

WATER WITHDRAWAL NON-PUBLIC PERMIT CONDITIONS

1. **Approval of Completed Works from NYS P.E.** Any new works constructed or modified pursuant to this water withdrawal permit shall be constructed under the general supervision of a person licensed to practice engineering in this state (professional engineer). Upon completion of construction and pre-operational testing, such works may not commence final operation until the professional engineer first certifies in writing to the Department that the works have been constructed in accordance with the issued permit.

2. **Permit Expiration and Renewal** Any permittee who intends to continue to operate a water withdrawal system beyond the period of time covered in the applicable water withdrawal permit must apply for a renewal of the permit at least 30 days prior to its expiration.

3. **Transfer of Ownership of Water Withdrawal Systems** Unless otherwise specified in this permit, a new water withdrawal permit application is required for the acquisition or condemnation of the approved water withdrawal system.

4. **Cooling Water Withdrawals Regulated by SPDES** Nothing in this water withdrawal permit shall supercede the need to, where necessary, obtain an appropriate SPDES permit that allows for the operation of a cooling water intake structure and the discharge of the amounts of water approved by this water withdrawal permit. If any modifications to the location, or capacity of the intake structure are required by the permittee's SPDES permit, permittee must also apply for a modification of this water withdrawal permit to reflect such changes.

5. **Incorporation of the SPDES Water Conservation and Fisheries Protection Measures** Required measures for water conservation and the reduction of impacts to the fisheries resource contained in the Biological Monitoring Requirement Section of the facilities SPDES permit # NY0005193 are hereby incorporated by reference into this permit.

6. **Annual Water Withdrawal Reports** The permittee must submit a Water Withdrawal Reporting Form to the Department's Division of Water, Albany, NY. by March 31st of each year. The form is available on the Department's website and includes information regarding approved sources of water supply, source capacities, average and maximum day water use data and water conservation and efficiencies employed during the past calendar year.

7. **Source Meter Calibration** All source meters or measuring devices shall be calibrated for accuracy at least once each year.

8. **Meter All Sources** The permittee must install and maintain meters or other appropriate measuring devices on all sources of supply used in the system. Source master meters or measuring devices are to be read, and records kept of those readings, on at least a weekly basis. The permittee must maintain records of water withdrawn and consumptive use for each calendar year.

GENERAL CONDITIONS - Apply to ALL Authorized Permits:

1. **Facility Inspection by The Department** The permitted site or facility, including relevant records, is subject to inspection at reasonable hours and intervals by an authorized representative of the Department of Environmental Conservation (the Department) to determine whether the permittee is complying with this permit and the ECL. Such representative may order the work suspended pursuant to ECL 71- 0301 and SAPA 401(3).

The permittee shall provide a person to accompany the Department's representative during an inspection to the permit area when requested by the Department.

A copy of this permit, including all referenced maps, drawings and special conditions, must be available for inspection by the Department at all times at the project site or facility. Failure to produce a copy of the permit upon request by a Department representative is a violation of this permit.

2. **Relationship of this Permit to Other Department Orders and Determinations** Unless expressly provided for by the Department, issuance of this permit does not modify, supersede or rescind any order or determination previously issued by the Department or any of the terms, conditions or requirements contained in such order or determination.

3. **Applications For Permit Renewals, Modifications or Transfers** The permittee must submit a separate written application to the Department for permit renewal, modification or transfer of this permit. Such application must include any forms or supplemental information the Department requires. Any renewal, modification or transfer granted by the Department must be in writing. Submission of applications for permit renewal, modification or transfer are to be submitted to:

Deputy Chief Permit Administrator
NYSDEC HEADQUARTERS
625 BROADWAY
ALBANY, NY12233

4. **Permit Modifications, Suspensions and Revocations by the Department** The Department reserves the right to exercise all available authority to modify, suspend or revoke this permit. The grounds for modification, suspension or revocation include:

a. materially false or inaccurate statements in the permit application or supporting papers;

b. failure by the permittee to comply with any terms or conditions of the permit;

c. exceeding the scope of the project as described in the permit application;

d. newly discovered material information or a material change in environmental conditions, relevant technology or applicable law or regulations since the issuance of the existing permit;

e. noncompliance with previously issued permit conditions, orders of the commissioner, any provisions of the Environmental Conservation Law or regulations of the Department related to

the permitted activity.

5. **Permit Transfer** Permits are transferrable unless specifically prohibited by statute, regulation or another permit condition. Applications for permit transfer should be submitted prior to actual transfer of ownership.

NOTIFICATION OF OTHER PERMITTEE OBLIGATIONS

Item A: Permittee Accepts Legal Responsibility and Agrees to Indemnification
The permittee, excepting state or federal agencies, expressly agrees to indemnify and hold harmless the Department of Environmental Conservation of the State of New York, its representatives, employees, and agents ("DEC") for all claims, suits, actions, and damages, to the extent attributable to the permittee's acts or omissions in connection with the permittee's undertaking of activities in connection with, or operation and maintenance of, the facility or facilities authorized by the permit whether in compliance or not in compliance with the terms and conditions of the permit. This indemnification does not extend to any claims, suits, actions, or damages to the extent attributable to DEC's own negligent or intentional acts or omissions, or to any claims, suits, or actions naming the DEC and arising under Article 78 of the New York Civil Practice Laws and Rules or any citizen suit or civil rights provision under federal or state laws.

Item B: Permittee's Contractors to Comply with Permit
The permittee is responsible for informing its independent contractors, employees, agents and assigns of their responsibility to comply with this permit, including all special conditions while acting as the permittee's agent with respect to the permitted activities, and such persons shall be subject to the same sanctions for violations of the Environmental Conservation Law as those prescribed for the permittee.

Item C: Permittee Responsible for Obtaining Other Required Permits
The permittee is responsible for obtaining any other permits, approvals, lands, easements and rights-of-way that may be required to carry out the activities that are authorized by this permit.

Item D: No Right to Trespass or Interfere with Riparian Rights
This permit does not convey to the permittee any right to trespass upon the lands or interfere with the riparian rights of others in order to perform the permitted work nor does it authorize the impairment of any rights, title, or interest in real or personal property held or vested in a person not a party to the permit.

210

MEMORANDUM OF LAW IN SUPPORT OF VERIFIED PETITION, DATED MARCH 21, 2014 [210- 247]

SUPREME COURT OF THE STATE OF NEW YORK
COUNTY OF QUEENS

In the Matter of the Application of SIERRA CLUB and the HUDSON RIVER FISHERMEN'S ASSOCIATION NEW JERSEY CHAPTER, INC., Petitioners, For a Judgment Pursuant to Article 78 of the Civil Practice Laws and Rules -against- JOSEPH MARTENS, COMMISSIONER, NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION, Respondent, T.C. RAVENSWOOD L.L.C., Necessary Party.	:	Index No. 2949-14

PETITIONERS' MEMORANDUM OF LAW

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PRELIMINARY STATEMENT

This is a case of first impression regarding the interpretation of the permitting requirements of the New York State Water Supply Law, Environmental Conservation Law ("ECL") Article 15, Title 15, as amended by the Water Resources Protection Act of 2011, and the regulations promulgated pursuant thereto. The new law is the first statutory provision in New York law to require that users other than public water supply systems obtain water withdrawal permits. Water withdrawal permits have been required for public water supply systems since 1905.

This is also a case of first impression regarding the application of the New York State Environmental Quality Review Act, ECL Article 8, ("SEQRA"), the federal Coastal Zone Management Act, 16 U.S.C.A. § 1453, the New York State Waterfront Revitalization of Coastal Areas and Inland Waterway Act and the New York City Waterfront Revitalization Program, the New York State Constitution and common law public trust principles to DEC's new water withdrawal permitting process.

STATEMENT OF FACTS

Ravenswood Water Withdrawal Permit

On May 31, 2013, TransCanada Ravenswood LLC applied to DEC on behalf of its Ravenswood Generating Station located on the bank of the East River in Long Island City for a permit to withdraw up to 1.535 billion gallons of water per day ("GPD") from the East River in New York Harbor (Administrative Record 1-35). Notice of the Ravenswood application was published in DEC's Environmental Notice Bulletin ("ENB") on August 7, 2013 (AR 37-45). A revised notice was published in the ENB on August 28, 2013 (AR 46-50).

The Ravenswood application is the first application for a non-public water withdrawal permit processed by DEC under DEC's regulations implementing New York's new water withdrawal permitting program. The regulations became effective April 1, 2013 (6 NYCRR Part 601).

DEC determined that the Ravenswood application was complete on August 1, 2013 (AR 36), and on November 15, 2013, DEC issued a permit to Ravenswood to withdraw up to 1.39 billion GPD from the East River (AR 53-56). On December 18, 2013, Ravenswood's attorney wrote a letter to DEC stating that the actual total maximum capacity of all its water withdrawal pumps was 1,527.84 million GPD, and submitting revised Annual Water Withdrawal Reports for the years 2009-2011 (AR 137-151). On February 19, 2014, DEC notified Ravenswood that DEC had determined it was necessary to modify the Ravenswood water withdrawal permit to correct the maximum permitted withdrawal amount to 1,527.84 million GPD, and on March 7, 2014, DEC issued a revised permit to Ravenswood. The activity authorized by the revised permit is "the withdrawal of a supply of water up to 1,527,840,000 gallons per day (GPD) from the East River for once through cooling and other processes related to electrical generation" (AR 155-158).

The water withdrawal permit issued by DEC to Ravenswood is four pages in length (AR 155-158). The permit was issued for a period of four years, expiring on October 31, 2017 (AR 155). The water conservation measures required in the permit are as follows:

> 5. Incorporation of the SPDES Water Conservation and Fisheries Protection Measures. Required measures for water conservation and the reduction of impacts to the fisheries resource contained in the Biological Monitoring Requirement Section of the facilities SPDES permit #NY0005 193 are hereby incorporated by reference into this permit. . . .
>
> 7. Source Meter Calibration. All source meters or measuring devices shall be calibrated for accuracy at least once each year.

> 8. Meter All Sources. The permittee must install and maintain meters or other appropriate measuring devices on all sources of supply used in the system. Source master meters or measuring devices are to be read, and records kept of those readings, on at least a weekly basis. The permittee must maintain records of water withdrawn and consumptive use for each calendar year.

(AR 156). Thus, the conditions in the permit address only two of Ravenswood's negative responses to seven of the questions on the Water Conservation Program Form ("WCPF") contained in its permit application:

> 1. In response to the question, "Are all sources of supply including major interconnections equipped with master meters?" Ravenswood responded "No."
>
> 2. In response to the question, "How often are they calibrated?" Ravenswood responded "Meters are not calibrated at this time."
>
> 3. In response to the question, "Do you regularly survey your facility for leakage?" Ravenswood responded "No."
>
> 4. In response to the question, "Do you regularly survey underground piping for water leakage?" Ravenswood responded "No."
>
> 5. In response to the question, "Do you conduct a water audit at least once each year?" Ravenswood responded "No."
>
> 6. In response to the question, "Does your facility reuse or recycle primary use water?" Ravenswood responded "No."
>
> 7. In response to the question, "Does your facility use reclaimed rainwater, storm water runoff or wastewater?" Ravenswood responded "No."

(AR 13-17). Regular surveys for leakage, regular surveys of underground piping for water leakage, annual water audits, the recycling of water (such as a closed-cycle cooling system) or the use of reclaimed water are not required by the permit.

The East River and the Hudson River Estuary

The East River, from which the Ravenswood plant withdraws the water for its once-through cooling system, is an integral part of the Hudson River estuary. The biological richness of the estuary is described in a 2011 Sierra Club report:

> [T]he Hudson begins . . . in the Adirondack Mountains and flows more than three hundred miles before emptying into New York Harbor at the southern tip of Manhattan. . . . .
>
> The lower Hudson's unique configuration as a narrow, 154-mile-long estuary creates a huge, diverse nursery that supports a mix of freshwater and saltwater fish. The river's marshes and tidal flats contribute essential minerals and nutrients to the food chain, allowing its quiet backwaters to become an essential nursery habitat for many types of wildlife. In fact, the Hudson is one of the two principal spawning grounds for aquatic life in the East Coast.
>
> More than two hundred species of fish are found in the Hudson and its tributaries, which make up one of the most biodiverse temperate estuaries on the planet. The river is a refuge for rare and endangered species such as the shortnose sturgeon and heartleaf plantain. The Hudson is also part of the great Atlantic flyway for migratory birds; and ducks, geese and osprey, among others, stop to feed in its shallows.
>
> The ecological influence of the Hudson estuary extends far into the Atlantic Ocean and along the coast. For vast schools of migratory sturgeon, herring, blue crab, mackerel and striped bass, the Hudson is a nearly unimpeded corridor from the Atlantic to their ancestral spawning grounds. These fish support a 350-year-old recreational and commercial fishery along the Atlantic coast that's worth hundreds of millions of dollars. . . .
>
> The New York State Legislature has declared the estuary "of statewide and national importance as a habitat for marine, anadromous, catadromous, riverine and freshwater fish species," and two federal agencies—the U.S. National Oceanographic and Atmospheric Administration and the U.S Fish and Wildlife Service— have designated the Hudson as an Essential Fish Habitat because it sustains large numbers of commercially important fish species (footnotes omitted).

(Giant Fish Blenders: How Power Plants Kill Fish & Damage Our Waterways, Sierra Club, July 2011, at 17-18, attached as Exhibit A to the affidavit of Roger Downs, Conservation Director of Petitioner Sierra Club's Atlantic Chapter, March 21, 2014).

The East River plays a critical role in the estuary. Gilbert Hawkins, president of Petitioner Hudson River Fishermen's Association, points out in his affidavit that "the East River is one of the main fish migration routes between the Atlantic Ocean and both the Hudson River and Long Island Sound" (Hawkins Affidavit , March 21, 2014, ¶ 10). He says, "Because the East River is constantly filled with moving water, it is a very attractive location for fish. There are two tides a day in the East River, which means that there are strong currents in the river four time a day—the incoming and outcoming flows for each tide. Millions of fish are riding on these flows in the migratory seasons." (*Id*. at ¶ 11.)

Operation of the Ravenswood Cooling System

The water withdrawn by Ravenswood from the East River is used principally for cooling the plant's gas-fired electric generating units. The Ravenswood facility is the largest gas-fired power plant in New York State, and provides about 20% of New York City's electricity needs.[1] The amount of water drawn from the river to cool the plant is staggering: 1.53 billion GPD is 153% of the water used by the entire New York City water supply system, which provides nearly half the population of all New York State with drinking water.[2] The reason the plant takes so much water is because it uses a once-through cooling system.

[1] See "How TransCanada's Natural Gas Fired Ravenswood Unit 40 Powers New York City," http://www.youtube.com/watch?v=9ak8Ug7wz0o [accessed March 9, 2014].

[2] See *New York City 2012 Drinking Water Supply and Quality Report*, http://www.nyc.gov/html/dep/pdf/wsstate12.pdf, p. 2. One and a half billion gallons of water per day is more than twice as much water as the 650 million gallons per day estimated to be used by all the coal and gas power plants in the states of Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah, and Wyoming. See *The Last Straw: Water Use by Power Plants in the Arid West*, Clean Air Task Force and Land and Water Fund of the Rockies, April 2003, http://www.catf.us/resources/publications/ files/The_Last_Straw.pdf.

Power plants generally use either once-through cooling systems or closed-cycle cooling systems. A once-through cooling system withdraws water from the source waterbody, runs it through the condenser system, and then discharges it without recirculation. In contrast, closed-cycle cooling -systems recirculate and reuse cooling water. As with once-through cooling, cooling water in closed-cycle systems is passed through the condenser system where it is heated in the process of converting steam back to water. After passing through the condenser system, however, the cooling water is transported to cooling towers or to some other process to be cooled. Once cooled, the water is returned to the condenser system.[3] A 2010 report on the impact of once-through cooling systems in New York power plants concludes, "Closed-cycle cooling is a proven technology that reduces power plant water intake by up to 98 percent, thereby reducing the damage to aquatic life by up to 98 percent." (*Reeling in New York's Aging Power Plants: The Case for Fish-Friendlier Power*, Kyle Rabin, Network for New Energy Choices, June 2010, http://www.gracelinks.org/141/reeling-in-new-york-s-aging-power-plants [accessed March 7, 2014.])

Fish Impingement and Entrainment

A law review article by James R. May and Maya K. van Rossum explains how fish and other aquatic organisms are harmed by power plant cooling water intake systems ("CWIS"):[4]

> CWIS remove trillions of aquatic organisms annually, including plankton, eggs, larvae, fish, and any other animals or organisms that live in the water. The unfortunate predicament of being sucked into a CWIS is usually accompanied by a death sentence. For instance, . . . , it is estimated that one powerplant alone in New Jersey accounts for productivity losses from the Delaware Estuary of nearly one billion fish annually and is responsible for more

[3] See description of power plant cooling in "The Quick and the Dead: Fish Entrainment, Entrapment, and the Implementation and Application of Section 316(b) of the Clean Water Act," James R. May and Maya K. van Rossum, *Vermont Law Review* [Vol. 20:373, 378-380 1995]

[4] *Id*.

> annual loss of some fish populations than all commercial and recreational fishing pursuits in the estuary combined. Collectively, the power industry constitutes the country's single largest consumer of aquatic life.
>
> Adult fish and larger organisms drawn into the powerplant by the CWISs are entrapped ("impinged") against "intake screens." Intake screens are designed to filter out debris that would interfere with the operation of, or cause damage to, condenser systems. Impinged organisms usually die or suffer injury as a result of starvation, exhaustion, descaling by screen wash sprays, or "asphyxiation when forced against a screen by velocity forces which prevent proper gill movement . . . for prolonged periods of time. " If an organism or fish impinged against an intake screen is lucky enough to be removed from the screen while it is alive, it still has a diminished chance of survival. These fish may suffocate in the fish return system, be terminally injured, or otherwise be more susceptible to predation.
>
> Aquatic organisms not removed from the cooling water by the intake screens are "entrained," meaning they are carried through the powerplant's condenser system. The organisms which become entrained are "relatively small benthic, planktonic and nektonic forms. " Entrained aquatic organisms are subject to their own perils and are usually euthanized as a result of: physical impact in the pump and condenser tubing; pressure changes which result in embolisms, or rupturing of fish ballast air bladders caused by diversion of the cooling water into the plant or by the hydraulic effects of the condensers; thermal shock, as cooling water is heated in the cooling process; and by chemical toxemia induced by antifouling agents such as chlorine. As EPA has noted "[f]or some species of fish, the intake represents a double jeopardy situation where the same population will be subject to increased mortality through entrainment of eggs and larvae" as well as through impingement if they ever live to be juveniles and adults.
>
> In addition to the impacts caused to organisms drawn into the cooling system, aquatic organisms may also be harmed as the result of damage to their aquatic habitat caused by a powerplant's discharge of heated water. The thermal discharges consist of water which is released back to the source waterbody after it has proceeded through the powerplant's condenser system." Clearly, the cooling process adversely impacts aquatic ecosystems.

The entrainment of fish and other aquatic organisms by the Ravenswood plant has been documented over the years in studies conducted on behalf of previous owners of the plant. The

most recent report Petitioners have been able to obtain is *Ravenswood Generating Station, Impingement Survival Monitoring Studies, Final Report, June 2006 – February 2007*, prepared for KeySpan Corporation by ASA Analysis & Communication, Inc., October 2007. The report is attached as Exhibit C to the Hawkins Aff. This study shows that Ravenswood's water intake system sucks in and kills millions of eggs, larvae and young fish each year. Millions of larger fish are injured or killed annually when they are trapped on the intake screens of the cooling towers.

The Sierra Club report referred to above discusses the impact of the once-through cooling systems in New York power plants on the Hudson River:

> [The] power plants using once-through cooling on the Hudson have a huge, detrimental impact on the ecology of the estuary—and this impact goes well beyond the loss of large numbers of individual fish. In a 2007 report, New York State found that the cumulative impact of multiple facilities on the river substantially reduces the population of young fish in the entire river. In certain years those plants have entrained between 33 and 79 percent of the eggs and larvae spawned by striped bass, American shad, Atlantic tomcod and five other important species. Over the time the plants have been operating, the ecology of the Hudson River has been altered, with many fish species in decline and populations becoming less stable. Of the 13 key species subject to intensive study, ten have declined in abundance, some greatly. Power plants have played a considerable role in that decline (footnotes omitted).

(Giant Fish Blenders at 17.)

Ravenswood SPDES Permit

The Ravenswood facility has held a permit for discharge of cooling and process water from the plant into the East River for some years. The most recent Ravenswood State Pollution Discharge Elimination System ("SPDES") permit was issued effective November 1, 2013, and has an expiration date of October 31, 2017, the same date as the expiration of the Ravenswood water withdrawal permit (AR 118-138). The Ravenswood SPDES permit is referenced in Conditions 4 and 5 of the Ravenswood water withdrawal permit (AR156). As noted above,

Condition 5 of the water withdrawal permit states, "Required measures for water conservation and the reduction of impacts to the fisheries resource contained in the Biological Monitoring Requirement Section of the facilities SPDES permit #NY0005193 are hereby incorporated by reference into this permit." The Biological Monitoring Requirements Section of the SPDES permit provides as follows:

> The applicant has been required to perform the following mitigation activities to achieve best technology available (BTA) for the cooling water intake at the Ravenswood Generating Station. Installation of all technologies and or operational measures listed here have been completed.
>
> Installation of variable speed pumps and ancillary equipment at Ravenswood Units 10, 20 and 30 that will allow for a reduction in the volume of cooling water use;
>
> Upgrades to the existing traveling intake screens at Ravenswood Units 10, 20 and 30 to allow for the continuous operation of all traveling intake screens to increase impingement survival;
>
> Scheduling of a planned outage process that will require cooling water circulating pumps to be shut down to reduce the volume of cooling water use;
>
> Low stress fish return lines, constructed at each unit, to return impinged fish directly to the East River.

(AR 125-126.)

No SEQRA Reviews Conducted of Withdrawal Permit or SPDES Permit

In the notices of the Ravenswood water withdrawal permit application published in the ENB, DEC states that the project is not subject to review under the State Environmental Quality Review Act, known as SEQR or SEQRA (AR 38, 48). The notice published in the ENB on August 7, 2013 states, "Project is not subject to SEQR because it is a Type II action." *Id*. This statement is amplified in the revised notice published on August 28, 2013. The revised notice states, "NYS DEC has determined that the issuance of "initial permits" under ECL section 15-

501.9 as implemented by 6 NYCRR 601.7 is a ministerial action and therefore subject to the Type II exemption set out in 6 NYCRR 617.5(c)(19)" (AR 48).

Public comments were made on the Ravenswood permit application objecting to this determination and stating that a review of the Ravenswood permit application was required because water withdrawals of more than two million GPD are classified as Type I actions under SEQRA (AR 58). DEC provided the following response to these comments:

> As provided by ECL § 15-1501.9 the Department has no discretion but to issue "initial permits" for the amount of the water withdrawals for users that were in operation and properly reported their withdrawals to the Department as of February 15, 2012.
>
> Under these circumstances, the issuance of the water withdrawal permit here is covered by the Type II category for ministerial actions set out in section 617.5(c)(19) of the Department's SEQR regulations. "Ministerial action" is defined [under the SEQR regulations] as "an action performed upon a given state of facts in a prescribed manner imposed by law without the exercise of any judgment or discretion as to the propriety of the act. " Here, above and beyond the amount of the permitted withdrawal (which is prescribed by statute), the Legislature has restricted the Department's discretion to the standard form permit and the imposition of sound water conservation measures. Generally, an action may be deemed ministerial, if it could not have been approved or denied on the basis of SEQR's broader environmental concerns. The fact that the withdrawal is for an amount that exceeds the Type I threshold does not remove it from the Type II classification. Items on the Type II list under 617.5(c) provide exemptions from SEQRA irrespective of whether the action is also present on the Type I list unless they contain a limitation that the action cannot "meet or exceed any threshold on the Type I list".

(*Id*.)

Similarly, it appears that SEQRA reviews were not conducted in connection with the issuance or renewal of the Ravenswood SPDES permit. Copies of such reviews were sought on August 13, 2013, in a FOIL request by one of Petitioners' attorneys (Exhibit A to the attorney affirmation of Rachel Treichler, March 21, 2014). DEC's response to the request stated that,

"The results of [the SEQRA] process are primarily documented by the permit application and issued permit have been provided." (Treichler Aff., Exhibit B).

No Coastal Zone Consistency Reviews Conducted of Withdrawal Permit or SPDES Permit

The location of the Ravenswood plant in a Coastal Management area is acknowledged in the revised notice of the Ravenswood water withdrawal application given by DEC on August 28, 2013: "This project is located in a Coastal Management area and is subject to the Waterfront Revitalization and Coastal Resources Act" (AR 48). In response to public comments on the Ravenswood permit application observing that coastal consistency reviews needed to be conducted of the Ravenswood application, DEC responded, "NYS DEC has determined that the issuance of "initial permits" under ECL section 15-1501.9 as implemented by 6 NYCRR 601.7 is a ministerial action and therefore subject to the Type II exemption set out in 6 NYCRR § 617.5(c)(19)" (AR 58).

DEC did not conduct a coastal consistency review prior to issuing the new Ravenswood SPDES permit, either. The notice of Ravenswood's 2012 SPDES permit application published in the ENB states (incorrectly) that "This project is not located in a Coastal Management area and is not subject to the Waterfront Revitalization and Coastal Resources Act." (ENB Region 2 Completed Applications 07/18/2012, http://www.dec.ny.gov/enb/20120718_reg2.html#263040002400004, [accessed 03/19/14].)

ARGUMENT

POINT ONE
DEC HAS DISCRETION UNDER THE WATER SUPPLY LAW WHEN ISSUING AN "INITIAL" PERMIT

The plain wording of the Water Supply Law (ECL, Article 15, § 15-1501 *et seq.)* makes clear that, when issuing an "initial" water withdrawal permit pursuant to the Law, DEC has

discretion over various provisions of the permit. A review of the provisions of the Ravenswood permit also makes clear that DEC exercised that discretion when issuing the Ravenswood permit.

Overview of the Water Supply Law and Regulations

The Water Resources Protection Act of 2011 ("WRPA"), amending the Water Supply Law, was signed into law by Governor Cuomo on August 15, 2011 with the support of many of New York's largest environmental and conservation organizations, including the Sierra Club. WRPA amended the ECL to require that any person taking 100,000 gallons or more per day from any of the state's waters obtain a water withdrawal permit, with certain exemptions not relevant here. The new law is the first statutory provision in New York law to require that users other than public water supply systems obtain water withdrawal permits. Water withdrawal permits have been required for public water supply systems since 1905. The purpose of the legislation is outlined in the Assembly Memorandum in support of the bill:

> Pursuant to the ECL, DEC has been entrusted with the responsibility to conserve and control New York State's water resources for the benefit of all the inhabitants of the State.
>
> However, the water supply provisions of Title 15 derive primarily from statutes written in the first half of last century, and therefore are outdated. Under the provisions of Title 15, DEC generally only has authority to regulate public water supplies to ensure adequate quantities of potable water. As a result, consumptive uses of water for agricultural, commercial and industrial consumptive uses remain largely unregulated.
>
> Moreover, since the provisions of Article 15 were enacted, population growth, pressures to keep water instream for fisheries and the environment, and increased use of water for commercial, industrial and other purposes have resulted in substantially increased demands on the State's water resources. In addition, potential impacts from climate change, and proposals to export vast amounts of water from New York to other states and abroad could pose new threats to the State's water supply. These issues have served to highlight the limitations on the State's water resources program and DEC's limited .ability to regulate water withdrawals for many

> purposes. In contrast, neighboring states of Connecticut, New Jersey, Rhode Island and Massachusetts all have programs that regulate industrial, commercial and agricultural water withdrawals.
>
> Another important recent development is enactment of the Great Lakes, St. Lawrence River Basin Water Resources Compact (Compact) . . . .
>
> These developments, and the potential adverse effects of climate change, support the need to implement more effective measures proposed by this bill to protect and conserve New York's water resources.
>
> In addition, this bill, by authorizing DEC to implement a statewide permitting program for all water withdrawals of equal or greater than 100,000 gpd, would allow New York to meet one if its significant responsibilities under the Compact: implementation of a regulatory program for water withdrawals in the Great Lakes Basin. Further, this bill would result in a strengthening of the water conservation elements of the current permitting program and encourage water reuse, consistent with the Compact and sound resource management.5

As noted in the sponsor's bill memo quoted above, a major impetus for passage of the WRPA was to implement the requirements of the Great Lakes-St. Lawrence River Basin Water Resources Compact (the "Compact") (ECL § 21-1001). The legislation applied key elements of the Compact's decision-making standards to water withdrawal permits issued throughout the state; including the Compact requirements that withdrawals must "incorporate environmentally sounds and economically feasible water conservation measures" and "result in no significant individual or cumulative adverse impacts to the quantity or quality of "the waters and water-dependent resources in the source watershed."(*Id*., Section 4.11.)

At the time he signed WRPA into law, Governor Cuomo emphasized the protections offered by the new law. "The preservation and protection of New York's water resources is vital

[5] See pp. 9-10 in the Assembly Sponsor's Memorandum in Support of Bill Number A5318A, contained in the Bill Jacket for A5318A/S3798 2012, attached as Exhibit E to the Treichler Aff. Identical statements are made in a DEC Memorandum to Mylan L. Denerstein, Esq., Counsel to the Governor, by Maureen A. Coleman, DEC Legislative Counsel, dated August 3, 2011, recommending approval for the legislation, pp. 15-16 of the Bill Jacket. *Id.*

to the state's residents, farmers and businesses," the Governor said. "This law will enhance the state's ability to manage its water to promote economic growth and address droughts while protecting the environment."[6]

DEC's new regulations implementing WRPA became effective April 1, 2013 (6 NYCRR Part 620). The regulations provide an expedited permitting process for existing water users, and provide that existing users will be permitted on a staggered schedule over a four-year period, with the largest users being permitted first (6 NYCRR § 601.7). Under the regulations, only the very largest existing users were required to apply for a permit in 2013, i.e., users withdrawing 100 million GPD or more (6 NYCRR § 601.7). Such users were required under the regulations to have submitted their applications for a water withdrawal permit by June 1, 2013, or 180 days before their existing SPDES permit is scheduled to expire, whichever occurs later (6 NYCRR § 601.7 [b]). It is Petitioners' understanding that the only existing users that meet the 100 million GPD threshold and are not exempt from the permitting are 16 large thermo-electric power plants, including four taking water from New York harbor. To date, DEC has given public notice of the water withdrawal permit applications for only two of these 16 power plants: Ravenswood and the Astoria Generating Facility, each of which is located in Queens County and each of which draws water from the East River.[7]

The Approval Process for an "Initial" Permit Requires the Exercise of Discretion

As noted above, DEC asserts it has no discretion under the water withdrawal program but to issue "initial" permits to existing users, and that "the Legislature has restricted the

[6] *Governor Cuomo to Sign Law to Protect New York's Waters: New Legislation Creates a Comprehensive Conservation Management System for Significant Withdrawals from New York's Rivers, Lakes, Streams and Groundwater Law's Requirements Fulfill New York's Obligation to the Great Lakes Compact*, Press Release Governor's Press Office, August 15, 2011; http://www.governor.ny.gov/press/08152011LawtoProtectNewYorksWaters [accessed March 9, 2014].

[7] Notice of the Astoria application to withdraw up to 1.2 billion GPD was published in the ENB on February 26, 2014. http://www.dec.ny.gov/enb/20140226_not2.html [accessed 03/10/14].

Department's discretion to the standard form permit and the imposition of sound water conservation measures" (AR 58). However, ECL § 15-1501.9, which authorizes the issuance of "initial" permits to existing users, states that "initial" permits are to be subject to "appropriate terms and conditions."[8] The determination of what terms and conditions are" appropriate" for a given permit is discretionary. Moreover, despite DEC's assertion that "the Legislature has restricted the Department's discretion to the standard form permit," no such restriction is contained in the statute. As for DEC's claim that the Legislature restricted DEC's discretion to "the imposition of sound water conservation measures," that is a very broad grant of discretion, as discussed in greater detail below. The only aspect of "initial" permitting that is non-discretionary under ECL § 15-1501.9 is the size of the withdrawals permitted. Section 15-1501.9 provides that "initial" permits shall be issued to existing users for the maximum water withdrawal capacity reported to DEC on or before February 15, 2012. Being constrained in the size of the maximum capacity permitted does not limit DEC as to what conditions may be provided in the permit.

The legislature's intent that DEC exercise broad discretion in specifying the terms and conditions of all water withdrawal permits, including "initial" permits, [9] is made clear in ECL § 15-1503.2:

> 2. In making its decision to grant or deny a permit or to grant a permit with conditions, the department shall determine whether:
>
> a. the proposed water withdrawal takes proper consideration of other sources of supply that are or may become available;
>
> b. the quantity of supply will be adequate for the proposed use;

[8] The exact wording of Section 15-1501(9) is as follows: "9. The department shall issue an initial permit, subject to appropriate terms and conditions as required under this article, to any person not exempt from the permitting requirements of this section, for the maximum water withdrawal capacity reported to the department pursuant to the requirements of title sixteen or title thirty-three of this article on or before February fifteenth, two thousand twelve." The meaning of the term "initial permit" is not defined in Article 15 of the ECL.

[9] There is no exemption from the requirements of Section 15-1503.2 for "initial" permits.

c. the project is just and equitable to all affected municipalities and their inhabitants with regard to their present and future needs for sources of potable water supply;

d. the need for all or part of the proposed water withdrawal cannot be reasonably avoided through the efficient use and conservation of existing water supplies;

e. the proposed water withdrawal is limited to quantities that are considered reasonable for the purposes for which the water use is proposed;

f. the proposed water withdrawal will be implemented in a manner to ensure it will result in no significant individual or cumulative adverse impacts on the quantity or quality of the water source and water dependent natural resources;

g. the proposed water withdrawal will be implemented in a manner that incorporates environmentally sound and economically feasible water conservation measures; and

h. the proposed water withdrawal will be implemented in a manner that is consistent with applicable municipal, state and federal laws as well as regional interstate and international agreements.

Making each of these eight determinations and implementing them with appropriate conditions requires the exercise of very significant amounts of discretion by DEC. To take just one example, the determination required under Subsection (g) of Section 15-1503.2, is whether "the proposed water withdrawal will be implemented in a manner that incorporates environmentally sound and economically feasible water conservation measures." "Environmentally sound and economically feasible water conservation measures," are defined in ECL § 15-1502.9 as measures to reduce water use that "(i) are environmentally sound; (ii) reflect best practices applicable to the water use sector; (iii) are technically feasible and available; (iv) are economically feasible and cost effective based on an analysis that considers direct and avoided economic and environmental costs; and (v) consider the particular facilities and processes involved, taking into account the environmental impact, age of equipment and facilities involved,

the processes employed, energy impacts and other appropriate factors." The definition makes clear that the determination of "environmentally sound and economically feasible water conservation measures," is complex and that implementation of these measures in appropriate terms and conditions requires the exercise of substantial amounts of discretion. In the case of a power plant like Ravenswood that is withdrawing water for a once-through cooling system, DEC is mandated to issue an "initial" permit at the plant's maximum reported capacity, but that does not preclude DEC from requiring very specific "environmentally sound and economically feasible water conservation measures" tailored to the circumstances of the plant to reduce the amount of water needed by the plant. Such conditions would "ensure [the plant's water withdrawals] will result in no significant individual or cumulative adverse impacts on the quantity or quality of the water source and water dependent natural resources," as required by ECL § 15-1503.2(f).

It is not apparent that the Biological Monitoring Requirements Section of the SPDES permit (AR 125-126), which are incorporated by reference in the Ravenswood water withdrawal permit (AR 156, Condition 5) as noted above, meet the stringent standards for "environmentally sound and economically feasible water conservation measures" contained in the WRPA. There are no regulatory requirements in the SPDES regulations for water conservation measures applicable to non-publicly owned treatment works, such as the Ravenswood facility.[10] The only water conservation measures required in the SPDES regulations, 6 NYCRR Part 750, are applicable to publicly owned treatment works, not privately owned power plants, and these

[10] Section 316(b) of the federal Clean Water Act, applicable to water discharge permits that involve "thermal discharges," requires that the location, design, construction and capacity of cooling water intake structures reflect the best technology available for minimizing adverse environmental impact (33 USC § 1326 [b]), but the EPA rules implementing this requirement for large existing electric generating plants have not yet been finalized. (See EPA,"Criteria and Standards for Cooling Water Intake Structures," [Spring 2013], available at https://www.federalregister.gov/regulations/2040-AE95/criteria-and-standards-for-cooling-water-intake-structures [last accessed 03/17/14]).

measures are not nearly as stringent as the WRPA water conservation standards. Section 750-2.9(c)(1)(ii)(a) provides that, for publicly owned treatment works:

> (ii) The flow management plan required by subparagraph (i) of this paragraph shall also include provisions for implementation of any or all of the following that are necessary to stabilize influent flows below design flows:
>
> (a) Water conservation measures to reduce customer usage by measures including but not limited to customer metering, meter calibration, retrofitting existing plumbing fixtures with water conservation fixtures and revision of water rate structures; . . .

Furthermore, nowhere in the WRPA nor in its implementing regulations is DEC authorized to substitute water conservation measures from a SPDES permit for the conservations measures required in a water withdrawal permit. DEC's decision to effect such a substitution, moreover, was an act of discretion.

In approving the Ravenswood permit application and granting the Ravenswood permit, DEC also ignored the detailed mandate of its own water withdrawal regulations. DEC exercised discretion to ignore Section 601.10 of the water withdrawal regulations, which provides that an application for a water withdrawal permit shall include a "Water conservation program. A completed form as made available by the Department or, if acceptable to the Department, a detailed plan, that demonstrates the applicant's water conservation and efficiency measures that are environmentally sound and economically feasible and that minimize inefficiencies and water losses. Such measures must include but are not limited to: source and customer metering; frequent system water auditing; system leak detection and repair; recycling and reuse; and ability to enforce water restrictions during drought." (6 NYCRR § 601.10). The Water Conservation Program Form contained in the Ravenswood water withdrawal application demonstrated that the plant did not have a compliant water conservation program (AR 13-18), yet the application was

determined to be complete and the permit issued without requiring many of the conservation measures listed as minimal requirements in 6 NYCRR § 601.1.

In addition, DEC exercised discretion in issuing the Ravenswood permit for a term of four years (AR 155) when it could have chosen a longer term. Section 601.7(e) of the regulations provides that "initial" permits may be issued for a term up to 10 years.

Finally, the ECL and the water permitting regulations give DEC discretion to deny a permit application, even an application for an initial permit (ECL § 15-1503.2 and 6 NYCRR §601.11 [a]), and DEC exercised discretion in granting the Ravenswood permit.

In conclusion, DEC's claim that it has no discretion in setting the terms and conditions contained in an "initial" permit is directly contrary to the clear wording of ECL §§ 15-1501.9 and 15-1503.2, and is contradicted by the discretion DEC exercised in setting the terms and conditions of the Ravenswood permit.

POINT TWO
DEC'S FAILURE TO CONDUCT AN ENVIRONMENTAL REVIEW VIOLATED SEQRA

DEC, as lead agency, violated the requirements of SEQRA when it failed to conduct a review of the environmental impacts of issuing the Ravenswood water withdrawal permit in accordance with the requirements of the Act. If an environmental impact statement ("EIS") had been prepared, DEC and the public could have properly evaluated the application. The permit application by itself fails to provide the information necessary to evaluate the application and the conditions that should be placed on the permit. To approve the water withdrawal permit without conducting a review of its environmental impacts is contrary to the requirements of SEQRA.

The Statutory Scheme of SEQRA

In 1976, New York State enacted the New York State Environmental Quality Review Act. While SEQRA was patterned after its Federal counterpart, the National Environmental Policy Act ("NEPA") (42 USCA 4332 *et seq*.), the New York State Legislature recognized that NEPA was merely a procedural statute that assures that environmental issues are considered by a decision maker prior to taking any action. NEPA does not require substantive decisions by the decision maker. New York wished to provide greater protection to the environment when it passed SEQRA, and therefore, made significant changes from NEPA, including the requirement that environmental impact statements must be prepared in a much broader category of actions, and the requirement of substantive duties on the part of the decision maker to assure that environmental consequences that are identified will be avoided or mitigated.

As pointed out in *City of Buffalo v New York State Department of Environmental Conservation* (184 Misc2d 243 [Erie Cty 2000]):

> "The substantive mandate of SEQRA is much broader than that NEPA. 42 USCA Section 4332 requires federal agencies to prepare an EIS [Environmental Impact Statement] for 'any major federal action significantly affecting the quality of the human environment.' This should be contrasted with Section 8-0109 of SEQRA which is more expansive it its terms. Subdivision 2 of this Section requires an EIS for 'any action which is proposed or approved which *may* have a significant effect on the environment.' Only a 'low threshold' is required to trigger SEQRA review." (citations omitted, emphasis added).

(Id. at 249.) The Legislature has declared that the purpose of SEQRA is to:

> "Declare a State policy which will encourage productive and enjoyable harmony between man and his environment; to promote efforts which will prevent or eliminate damage to the environment and enhance human and community resources; and to enrich the understanding of the ecological systems, natural, human and community resources important to the people of the State."

(ECL § 8-0101.)

The heart of SEQRA lies in its provision regarding Environmental Impact Statements. As previously indicated, the law provides that whenever an action may have a significant impact on the environment, an EIS shall be prepared. (ECL § 8-0109 [2]). This document is to contain all of the information necessary to assure that the decision-making body, called the "lead agency," can ultimately determine to go forward or not with a project in a manner that will create the least negative impact to the environment. The "lead agency," that agency having principle responsibility for carrying out or approving the project or activity, in this case DEC, is charged with the responsibility of determining whether the project under consideration may have significant adverse environmental effects, and if so, must prepare an EIS. The EIS is also made available to the public so that they are apprised of the adverse environmental consequences that might ensue and may comment and propose mitigating measures. (*Id*.)

The "lead agency" is also the entity that is charged with carrying out the procedures mandated by SEQRA. Therefore, the lead agency must "act and choose alternatives which, consistent with social, economic and other essential considerations, to the maximum extent practicable, minimize or avoid environmental effects…." (ECL § 8-0109 [1]).

Since the early landmark cases of *Town of Henrietta v Department of Environmental Conservation*, (76 AD2d 215 [4th Dept 1980]), and *H.O.M.E.S. v New York State Urban Development Corporation*, (69 AD2d 222 [4th Dept 1979]), the courts of New York State have had numerous occasions to comment upon the requirements and responsibilities of agencies pursuant to SEQRA. The courts early on in these cases recognized that because of the importance placed upon SEQRA responsibilities by the Legislature, substantial compliance with SEQRA will not suffice; rather the statute must be strictly and literally construed, and compliance with the procedural requirements must be enforced. (6 NYCRR Part 617, *Matter of Rye Town/King Civic*

Association v Town of Rye, 82 AD2d 474 [2nd Dept 1981], *app. dism*. 56 NY2d 985 [1982]; *Schenectady Chemicals v Flack*, 83 AD2d 460 [3rd Dept 1991]). In the oft-cited quotation from *Schenectady Chemicals*, the court stated:

> By enacting SEQRA, the Legislature created a procedural framework which was specifically designed to protect the environment by requiring parties to identify possible environmental changes 'before they have reached ecological points of no return.' At the core of this framework is the EIS, which acts as an environmental 'alarm bell.' It is our view that the substance of SEQRA cannot be achieved without its procedure, and that *any attempt to deviate from its provisions will undermine the law's express purposes. Accordingly, we hold that an agency must comply with both the letter and spirit of SEQRA before it will be found that it has discharged its responsibility thereunder* (citations omitted, emphasis added).

(83 AD2d at 478.) The courts in New York State continue to adhere to this strict and literal compliance standard as necessary to fulfill the goals of SEQRA, and not just because the Legislature mandated that the act be carried out "to the fullest extent" practicable (ECL 8-0103 [6]). In addition, the courts have recognized that to assure that both the spirit and letter of SEQRA are followed, courts cannot allow a lead agency the rubric of "substantial compliance" to escape the environmental goals of the Act. (See, *e.g., Stony Brook Village v Reilly*, 294 AD2d 481 [2d Dept 2002], *Matter of Rye Town*, 82 AD2d 474.)

Moreover, if a lead agency is allowed to rectify a SEQRA procedural violation without voiding the actions taken after the violation occurred and requiring it to be done properly, the lead agency could treat the renewed work as a mere post-hoc rationalization of what had gone on before. The Court of Appeals decision in *Tri-County Taxpayers Association v Town of Queensbury* (55 NY2d 41 [1982]) is instructive. In that case, the Appellate Division, with two judges dissenting on the issue of remedy, determined that nullifying a vote of the electorate that took place prior to SEQRA compliance "would serve no useful purpose to undo what has already

been accomplished . . . .” (79 AD2d 337 [3d Dept 1981] at 342). However, the Court of Appeals adopted the position of the dissenters, holding that in order to properly insure that the goals of SEQRA would be met, the vote had to be nullified. The Court stated:

> It is accurate to say, of course, that by actions of rescission later adopted the Town Board could have reversed the action authorizing the establishment of the sewer district. As a practical matter, for several reasons, however, the dynamics and freedom of decision-making with respect to a proposal to rescind a prior action are significantly more constrained than when the action is first under consideration for adoption.

(55 NY2d at 64.) Therefore, where a procedural violation of SEQRA is found, in order to assure that the goals of SEQRA are met, the decision must be annulled.

While SEQRA requires a strict standard of compliance, the lead agency is allowed to fulfill substantive duties in making its final decision and choosing from appropriate alternatives is within their discretion. However, the broader discretion that resides with an agency concerning its substantive duties does not insulate the agency from judicial review. Indeed, in the case of *Akpan v Koch* (75 NY2d 561, 571 [1990]), the court elucidated the standard of review concerning substantive matters:

> Nevertheless, an agency, acting as a rationale decision-maker, must have conducted an investigation and reasonably exercised its discretion so as to make a reasoned elaboration as to the affect of a proposed action on a particular environmental concern. Thus, while a court is not free to substitute its judgment for that of the agency on substantive matters, the court must insure that, in light of the circumstances of a particular case, the agency has given due consideration to pertinent environmental factors (citations omitted).

The standard that is universally applied in determining whether or not a lead agency has fulfilled its SEQRA requirements was first espoused in the *H.O.M.E.S.* case, and eventually memorialized in the SEQRA regulations at 6 NYCRR 617.7(b), commonly called the “hard look standard.” That standard requires that the agency must:

(1) Identify all areas of relevant environmental concern;

(2) Take a “hard look” at the environmental issues identified; and

(3) Present a reasoned elaboration for why these identified environmental impacts will not adversely affect the environment, in the event that it is determined that an Environmental Impact Statement need not be drafted.

In determining whether an Environmental Impact Statement needs to be prepared, the SEQRA regulations provide a detailed road map concerning the obligations of the lead agency. Therefore, after a lead agency is designated, the lead agency must first determine whether or not the proposed action falls within the categories of “Type I”, “Unlisted”, or “Type II”. Type II actions are those actions that are identified in Section 617.5 of the regulations, which have already been determined not to have an adverse effect on the environment, and therefore no further SEQRA review is required. They include minor actions such as painting yellow lines on a highway or maintaining a public building. By contrast, Type I actions are those actions that because of their size, scope or type, are determined that more likely than not they may have adverse environmental consequences, and therefore require the drafting of an Environmental Impact Statement. Unlisted actions are those actions that are neither Type I nor Type II.

In the instant proceeding, DEC designated itself as the “lead agency” to make SEQRA determinations for the Ravenswood water withdrawal application. As lead agency, it is DEC’s responsibility to assure that all laws and regulations pursuant to SEQRA are carried out whenever DEC takes action subject to SEQRA. The SEQRA regulations require that a lead agency determine whether or not a proposed project is a “Type I action”, which is an action that is more likely than not to require an environmental impact statement, or an “unlisted action.” As indicated in the regulations:

> The purpose of the list of type I actions in this section is to identify, for agencies, project sponsors and the public, those actions and projects that are more likely to require the preparation of an EIS than unlisted actions. All agencies are subject to this type I list. (1) This type I list is not exhaustive of those actions that an agency determines may have a significant adverse impact on the environment and requires the preparation of an EIS. However, the fact that an action or project has been listed as a type I action, carries with it the presumption that it is likely to have a significant adverse impact on the environment and may require an EIS….

(6 NYCRR § 617.4 [a].)

An environmental impact statement must be prepared if a proposed action "may include the potential for at least one significant adverse environmental impact" (6 NYCRR § 617.7 [a] [1]). Conversely, to determine that an EIS will not be required for an action, "the lead agency must determine either that there will be no adverse environmental impacts or the identified adverse environmental impacts will not be significant" (6 NYCRR § 617. [a] [2]).

In the instant action, it is apparent that there will be at least one significant adverse environmental impact, since Ravenswood has been permitted to withdraw up to 1,527.84 million gallons of water per day from the East River into the plant's cooling mechanisms. This water contains fish, fish eggs and other aquatic life. Passage through the cooling systems destroys most of these organisms and damages the aquatic life of the East River, the entire harbor estuary of which the East River estuary is a part, and the entire Hudson River watershed because of the fish that migrate seasonally through the East River into the Hudson River.

Water Withdrawals Exceeding 2,000,000 GPD Are Type I Actions under SEQRA

Section 617.4(b)(6)(ii) of the SEQRA regulations provides that "a project or action that would use ground or surface water in excess of 2,000,000 gallons per day" is a Type I action. The Ravenswood permit amount of 1,527,840,000 GPD, involves withdrawals that are *764 times* the threshold provided in Section 617.4(b)(6)(ii).

A Type I Action Cannot Be a Type II Action

In view of the explicit categorization of water withdrawals over 2,000,000 GPD as Type I actions, the decision of DEC to categorize the Ravenswood permitting process as a Type II action is invalid. An action categorized as a Type I action, cannot be a Type II action. To be categorized as a Type II action, Section 617.5(b) of the SEQRA regulations provides that "Each of the actions on an agency Type II list must: (1) *in no case, have a significant adverse impact on the environment based on the criteria contained in subdivision 617.7(c)* of this Part; and (2) *not be a Type I action as defined in section 617.4* of this Part (emphasis added)." An action cannot be a Type II action if it meets either criterion. The Ravenswood water withdrawal project meets both criteria. It is a Type I action as defined in Section 617.4 of the SEQRA regulations because it is for more than 2,000,000 GPD. In addition, it has a significant adverse impact on the environment under the criteria in Section 617.7(c). The criteria for determining significance contained in that subdivision include:

> (ii) the removal or destruction of large quantities of vegetation or fauna; substantial interference with the movement of any resident or migratory fish or wildlife species; impacts on a significant habitat area; substantial adverse impacts on a threatened or endangered species of animal or plant, or the habitat of such a species; or other significant adverse impacts to natural resources; . . . .

The destruction of aquatic life by the cooling water intake structures of the Ravenswood power plant outlined above clearly meets this criterion. For each of these reasons, the DEC's processing of the Ravenswood water withdrawal application cannot be a Type II action.

Issuance of the Ravenswood Permit Was Not a Ministerial Action

Even if the Ravenswood water withdrawals were not categorized as a Type I action under Section 617.4(b)(6)(ii), and did not meet the criteria for a "significant adverse impact on the environment" contained in Section 617.7(c)(ii), the issuance of the Ravenswood water withdrawal

permit cannot properly be categorized as a Type II action under the "ministerial action" exemption provided in Section 617.5(c)(19) for the reasons discussed under "Point One" above.

Section 617.5(c)(19) includes as Type II actions "official acts of a ministerial nature" and requires that such acts involve "*no exercise of discretion*, including building permits and historic preservation permits where issuance is predicated solely on the applicant's compliance or noncompliance with the relevant local building or preservation code(s) [emphasis added]."[11] A "ministerial act" is defined in Section 617.2(w) of the SEQRA regulations to mean "an action performed upon a given state of facts in a prescribed manner imposed by law without the exercise of any judgment or discretion as to the propriety of the act, such as the granting of a hunting or fishing license." As discussed above, DEC exercised discretion with respects to various aspects of the terms and conditions of the Ravenswood water withdrawal permit. The issuance of an "initial" water withdrawal permit with various water conservation measures and other requirements tailored to the applicant is not comparable to issuance of a hunting or fishing license. As discussed in detail above, DEC has discretion in connection with various aspects of "initial" water withdrawal permit applications.

By issuing a Type II determination for the Ravenswood water withdrawal permit, DEC failed to perform its duty, proceeded in excess of its jurisdiction, rendered an arbitrary and capricious decision, and abused its discretion. Petitioners request that the Ravenswood permit be annulled and DEC be required to conduct a full environmental impact review of the Ravenswood permit application.

[11] 6 NYCRR §617.5(c)(19) provides that: "(c) The following actions are not subject to review under this Part: . . . (19) official acts of a ministerial nature involving no exercise of discretion, including building permits and historic preservation permits where issuance is predicated solely on the applicant's compliance or noncompliance with the relevant local building or preservation code(s)."

POINT THREE
DEC'S FAILURE TO CONDUCT A COASTAL CONSISTENCY REVIEW VIOLATED FEDERAL, STATE AND CITY COASTAL ZONE LAWS AND SEQRA

DEC's failure to conduct a coastal consistency review of the Ravenswood water withdrawal permit violated the federal Coastal Zone Management Act, the state Waterfront Revitalization of Coastal Areas and Inland Waterway Act, the regulations implementing the Act, the New York City Waterfront Revitalization Program incorporated into the Act, SEQRA and the regulations implementing SEQRA.

Coastal Zone Regulatory Framework

Federal Coastal Zone Management Act

In recognition of the importance of meeting the challenges of continued growth in the nation's coastal areas, Congress enacted the Coastal Zone Management Act ("CZMA") (16 USCA § 1453) on October 27, 1972. The overall program objectives of the CZMA include "to preserve, protect, develop, and where possible, to restore or enhance the resources of the nation's Coastal Zone" and "to encourage and assist the states to exercise effectively their responsibilities in the Coastal Zone through the development and implementation of management programs to achieve wise use of the land and water resources of the Coastal Zone." The CZMA emphasizes the primacy of state decision making regarding the Coastal Zone. (*Id*.)

New York State Waterfront Revitalization of Coastal Areas and Inland Waterway Act

New York State's Waterfront Revitalization of Coastal Areas and Inland Waterway Act, (the "Act") (Executive Law, Article 42) authorizes the creation of the state's coastal management program. The implementing regulations of the Act and the state's coastal area policies are contained in the Department of State regulations at 19 NYCRR Part 600. The Act designates the Department of State (DOS) as the administrator of New York's Coastal Management Program (CMP). In recognition of the state policy to encourage the revitalization of waterfront areas in a

manner consistent with local objectives, the Act allows for the creation of optional local government waterfront revitalization programs ("LWRPs"). Once a local waterfront revitalization program is approved by the State as consistent with the state's coastal policies, the local coastal area management policies contained in an approved LWRP become incorporated into the state's CMP. Accordingly, pursuant to the Act and the regulations adopted pursuant to the Act, state agency actions which are likely to affect the achievement of an LWRP must be reviewed for consistency with the local coastal area management policies (Executive Law § 916.1 [b], 19 NYCRR §§ 600.3 [c], 600.4).

Consistency determinations of state program actions likely to affect the achievement of the policies and purposes of the NYC WRP are coordinated with the SEQRA process (6 NYCRR § 617.6 [a] [5]). State agencies must complete a state Coastal Assessment Form (CAF) for actions occurring in New York City's Coastal Zone prior to the agency's determination of significance pursuant to SEQRA, so that the CAF can supplement other information used by state agencies in making determinations of significance (19 NYCRR§ 600.4).

New York City Waterfront Revitalization Program

In response to the Federal Coastal Zone Management Act of 1972 and the New York State Waterfront Revitalization and Coastal Resources Act of 1981, New York City developed a LWRP. The City's original Waterfront Revitalization Program ("NYC WRP") was adopted by the New York City Board of Estimate in 1982 as a local plan in accordance with Section 197-a of the City Charter. Pursuant to state regulations, the NYC WRP was approved by New York State for inclusion in the New York State Coastal Management Program and then approved by the U. S. Secretary of Commerce on September 30, 1982, in accordance with federal regulations. As a result of these approvals, federal and state program actions identified by the Secretary of State are

required to be undertaken in a manner that is consistent "to the maximum extent practicable" with the NYC WRP. (Executive Law § 916.1 [b], 19 NYCRR §§ 600.3 [c], 600.4.)

DEC Water Withdrawal Permits Are Subject to Consistency Reviews under NYC WRP

Section 916.1 of the Executive Law provides that, "where a local government waterfront revitalization program has been approved pursuant to [Executive Law §§ 915 or 915-a]," the secretary of state shall " identify actions under . . . state agency programs which are likely to affect the achievement of the policies and purposes of such approved program." The section also provides that"[t]he state agency program actions so identified shall be undertaken in a manner which is consistent to the maximum extent practicable with the approved waterfront revitalization program." The current list of state agency actions that should be undertaken in a manner consistent with the NYC WRP is attached as Appendix A to the recent revisions to the NYC WRP approved October 30, 2013 by the City Council, 114-123, http://www.nyc.gov/html/dcp/pdf/wrp/revisions/nyc_wrp_city_approved.pdf, [accessed 03/19/14]. Water withdrawal permits are listed in Appendix A as one of the types of DEC permit actions that requires review under the NYC WRP: "10 Permit and Approval Programs . . .Water Resources . . . 10.60 Permit—Article 15, Title 15 (Water Supply)." (*Id*. at 118.)

Section 600.4 of the state waterfront revitalization regulations provides, in relevant part:

> [A]s soon as a State agency receives an application for a[n] . . . approval action, it shall determine whether the action is located within the coastal area. . . . At the time it is determined that the action is located within the coastal area the State agency shall follow the review procedures set forth in this Part, including the completion of a coastal assessment form (CAF) in a form prescribed by the Secretary. The CAF shall be completed prior to the agency's determination of significance pursuant to SEQR (6 NYCRR Part 617) so that it can then supplement other information used by State agencies in making determinations of significance pursuant to such Part 617.

(19 NYCRR § 600.4.)

Similarly Section 617.6(a)(5) of the SEQRA regulations provides that "For state agencies only, determine whether the action is located in the coastal area. If the action is either Type I or Unlisted and is in the coastal area, the provisions of 19 NYCRR Part 600 also apply. This provision applies to all state agencies, whether acting as a lead or involved agency." (6 NYCRR § 617.6 [a] [5]). As discussed in Point Two above, issuance of a water withdrawal permit to Ravenswood is a Type I action under SEQRA. Thus the SEQRA regulations also require that a consistency review under the NYC WRP be conducted.

DEC's claim that issuance of the Ravenswood permit is a ministerial action and therefore subject to the Type II exemption set out in 6 NYCRR § 617.5(c)(19) is not supported by the plain wording of the SEQRA regulations, as discussed in Point Three above.

For these reasons, DEC's failure to conduct an assessment of the Ravenswood water withdrawal permit under the NYC WRP violated the federal Coastal Zone Management Act, the state Waterfront Revitalization of Coastal Areas and Inland Waterway Act, the regulations implementing the Act, the NYC WRP incorporated into the Act, and the SEQRA regulations.

POINT FOUR
ISSUANCE OF THE RAVENSWOOD PERMIT VIOLATED DEC'S PUBLIC TRUST RESPONSIBILITIES

DEC's issuance of a permit that allows the destruction billions of fish and other aquatic organisms in the East River by the once-through cooling system of the Ravenswood generating station and allows Ravenswood to take unnecessary amounts of water for the plant's cooling system violated the agency's public trust responsibilities under the common law, the New York Constitution and numerous statutory provisions.

Overview of the Public Trust Doctrine

The public trust doctrine refers to the duty of the state government to hold and preserve certain natural resources, including water and fish, for the benefit of its citizens. The natural resources protected by the public trust doctrine are of inestimable value to the public as a whole. Their protection and preservation is a public interest that is recognized in numerous state and federal statutory provisions.

The common law public trust doctrine has long been recognized in New York and has been incorporated in the State Constitution, Article XIV, and in our state Environmental statutes, including Articles 8, 11 and 15 of the ECL and Article 42 of the Executive Law.

Common law public trust principles were applied in *W.J.F. Realty Corp. v New York*, 176 Misc2d 763 [Suffolk Cty 1998], *aff'd* 267 AD2d 233 [2nd Dept 1999] (upholding the Long Island Pine Barrens Act, which protects the Long Island aquifer, against a takings challenge by applying the public trust doctrine), and *Smithtown v Poveromo*, 71 Misc2d 524 [Suffolk Cty 1972], *rev'd on other grounds*, 79 Misc2d 42 [App.Term Suffolk Cty 1973] ("The control and regulation of navigable waters and tideways was a matter of deep concern to sovereign governments dating back to the Romans . . . . The entire ecological system supporting the waterways is an integral part of them (the waterways) and must necessarily be included within the purview of the trust.").

DEC has a Duty under the Public Trust Doctrine to Protect Fish and Water Resources

Historically, the purpose of the public trust doctrine was to protect water resources for navigation and commerce when waterways were the principal means of transportation and a source of food. The doctrine has been extended to apply to the protection of wildlife, parks and other natural resources. In the case of *Barrett v. New York*, 220 NY 423 [1917], the court stated:

> [T]he general right of the government to protect wild animals is too well established to be now called in question. Their ownership

> is in the state in its sovereign capacity, for the benefit of all the people. Their preservation is a matter of public interest. They are a species of natural wealth which without special protection would be destroyed. Everywhere and at all times governments have assumed the right to prescribe how and when they may be taken or killed. As early as 1705 New York passed such an act as to deer. (Colonial Laws, vol. 1, p. 585.) A series of statutes has followed protecting more or less completely game, birds and fish.

Similarly, the court in *In re Del. River at Stilesville*, 115 NYS 745, 753 [App Div 1909] stated, "[t]he state, the representative of the people, the common owner of all things *ferœ naturœ*, not only has the right, but is under a duty, to preserve and increase such common property." In the *Stilesville* case, the court rejected a dam owner's challenge to a requirement that it construct a fish ladder around the dam. The court observed that "[t]he people of the state have . . . as an easement in this stream the right to have fish inhabit its waters and freely pass to their spawning beds and multiply . . . and no riparian proprietor upon the stream has the right to obstruct the free passage of the fish up the stream to the detriment of other riparian proprietors or of the public. The court said that requiring the owner to add a fishway was not a taking of private property because "the petitioner cannot be deprived of a right which it never possessed. *Id.* at 754.

Public trust principles were added to the state constitution by the vote of the people of New York in 1969, with the addition of Section 4 of Article XIV. Section 4 provides that: "The policy of the state shall be to conserve and protect its natural resources and scenic beauty . . . . The legislature, in implementing this policy, shall include adequate provision for the abatement of air and water pollution and of excessive and unnecessary noise, . . . and regulation of water resources."

The state legislature has incorporated public trust principles in a number of sections of the ECL, including Article 8, the State Environmental Review Act, Article 11, the Fish and Wildlife Law and Article 15, the Water Resources Law, as well as the Waterfront Revitalization of Coastal

Areas and Inland Waterways Law contained in Article 42 of the Executive Law. The legislative declarations contained in these laws make these public trust purposes clear. In ECL § 8-0103 "The legislature finds and declares:"

> 5. The capacity of the environment is limited, and it is the intent of the legislature that the government of the state take immediate steps to identify any critical thresholds for the health and safety of the people of the state and take all coordinated actions necessary to prevent such thresholds from being reached.
>
> 6. It is the intent of the legislature that to the fullest extent possible the policies, statutes, regulations, and ordinances of the state and its political subdivisions should be interpreted and administered in accordance with the policies set forth in this article. However, the provisions of this article do not change the jurisdiction between or among state agencies and public corporations. . . .
>
> 8. It is the intent of the legislature that all agencies conduct their affairs with an awareness that they are stewards of the air, water, land, and living resources, and that they have an obligation to protect the environment for the use and enjoyment of this and all future generations.
>
> 9. It is the intent of the legislature that all agencies which regulate activities of individuals, corporations, and public agencies which are found to affect the quality of the environment shall regulate such activities so that due consideration is given to preventing environmental damage.

ECL § 11-0105 provides:

> The State of New York owns all fish, game, wildlife, shellfish, crustacea and protected insects in the state, except those legally acquired and held in private ownership. Any person who kills, takes or possesses such fish, game, wildlife, shellfish, crustacea or protected insects thereby consents that title thereto shall remain in the state for the purpose of regulating and controlling their use and disposition.

ECL § 15-0105 states: "In recognition of its sovereign duty to conserve and control its water resources for the benefit of all inhabitants of the state, it is hereby declared to be the public policy of the state of New York that:

> 1. The regulation and control of the water resources of the state of New York be exercised only pursuant to the laws of this state;
>
> 2. The waters of the state be conserved and developed for all public beneficial uses;
>
> 3. Comprehensive planning be undertaken for the protection, conservation, equitable and wise use and development of the water resources of the state to the end that such water resources be not wasted and shall be adequate to meet the present and future needs for domestic, municipal, agricultural, commercial, industrial, power, recreational and other public, beneficial purposes. . . .

As noted above, the Water Resources Protection of Act was passed in 2011 to strengthen the protections contained in Article 15.

Public trust principles are also incorporated in the state Waterfront Revitalization of Coastal Areas and Inland Waterway Act. Executive Law § 910 provides:

> The legislature hereby finds that New York state's coastal area and inland waterways are unique with a variety of natural, recreational, industrial, commercial, ecological, cultural, aesthetic and energy resources of statewide and national significance.
>
> The resources of the state's coastal areas and inland waterways are increasingly subject to the pressures of population growth and economic development, which include requirements for industry, commerce, residential development, recreation and for the production of energy.
>
> These competing demands result in the loss of living marine resources and wildlife, the diminution of open space areas, shoreline erosion, permanent, adverse changes to ecological systems and a loss of economic opportunities.
>
> The social and economic well-being and the general welfare of the people of the state are critically dependent upon the preservation, enhancement, protection, development and use of the natural and man-made resources of the state's coastal area and inland waterways. . . .

Public trust interests are explicitly referenced in Policy 8.5 set forth in the NYC Waterfront Revitalization Program:

> 8.5 Preserve the public interest in and use of lands and waters held in public trust by the state and city. . . .
>
> > G. Re-establish public trust interests where appropriate in existing grants not used in accordance with the terms of the grant or the public trust doctrine.
> >
> > H. Minimize interference with public trust rights to the extent practicable, when exercising riparian interests. Provide mitigation to the extent appropriate where public access would be substantially impeded by the proposed activity.

(New Waterfront Revitalization Program, as approved by the Council of the City of New York and the NYS Department of State with the concurrence of the US Department of Commerce, September 2002, 26 [http://www.nyc.gov/html/dcp/pdf/wrp/wrp_full.pdf, last accessed 03/219/14]).

DEC violated these public trust obligations when it issued a water withdrawal permit to Ravenswood without consideration of alternatives that would reduce fish impingement and entrainment and conserve water, as evidenced by its failure to conduct an environmental review or a coastal consistency review, or to impose adequate water conservation measures.

CONCLUSION

For the foregoing reasons, DEC failed its statutory responsibilities under SEQRA, WRPA, the ECL, and the Coastal Zone laws, as well as its public trust duties. Petitioners respectfully request that the Court enter an Order in this proceeding:

(1) Annulling Respondent's issuance of a water withdrawal permit to Ravenswood;

(2) Annulling Respondent's Type II determination for the Ravenswood water withdrawal permit application and instructing Respondent that the application is properly categorized as a Type I action under SEQRA;

(3) Requiring Respondent to conduct the required coastal consistency review of the Ravenswood water withdrawal permit application before making determination of significance pursuant to SEQRA;

(4) Requiring Respondent to perform a full environmental assessment of the Ravenswood permit application in compliance with SEQRA;

(5) Allowing costs and disbursements; and

(6) Granting such other and further relief as the Court may deem just, proper and equitable.

DATED: Buffalo, New York
March 21, 2014

Respectfully submitted,

Richard J. Lippes /RT

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Attorneys for Petitioners

AFFIDAVIT OF ROGER DOWNS IN SUPPORT OF VERIFIED PETITION, SWORN MARCH 21, 2014 [248- 251]

SUPREME COURT OF THE STATE OF NEW YORK
COUNTY OF QUEENS

In the Matter of the Application of SIERRA CLUB and the HUDSON RIVER FISHERMEN'S ASSOCIATION NEW JERSEY CHAPTER, INC., Petitioners, For a Judgment Pursuant to Article 78 of the Civil Practice Laws and Rules -against- JOSEPH MARTENS, COMMISSIONER, NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION, Respondent, T.C. RAVENSWOOD L.L.C., Necessary Party.	**AFFIDAVIT IN SUPPORT OF PETITIONERS' MEMORANDUM OF LAW** Index No. 2949-14

State of New York)
Albany County) ss.:

Roger Downs, being duly sworn, deposes and says:

1. I am the Conservation Director of the Atlantic Chapter of the Sierra Club, a Petitioner in the above-captioned proceeding.

2. The Sierra Club is a not-for-profit corporation organized under the laws of the State of California. It is the oldest and largest environmental organization in the country.

3. The Sierra Club has more than 600,000 members nationwide, including approximately 37,000 members in New York State, many of whom live in the Hudson

River watershed. The protection of water resources is a key aspect of the Sierra Club's work, at the national, state and local levels.

4. In particular, the Sierra Club has focused on the issue of fish kills by thermoelectric power plants, including power plants in New York. In 2011, the Club released a report, *Giant Fish Blenders: How Power Plants Kill Fish & Damage Our Waterways (And What Can Be Done to Stop Them)* as part of a campaign to end the devastating impacts that large water withdrawals can have upon aquatic ecosystems. The report is attached as **Exhibit A.**

5. The report has a section on "How Power Plant Intake Structures Harm the Hudson River, Long Island Sound and New York Harbor." The section states:

> A total of 17 power plants using once-through cooling are located in the region: four on the Hudson River, eight on the Long Island Sound and five in New York Harbor. New York has 12 of these plants, and Connecticut five. Two of these plants are nuclear, and the rest burn natural gas or oil, with the exceptions of the Bridgeport Harbor plant in Connecticut and Danskammer plant in New York, both of which have coal-fired units. All these plants use exorbitant amounts of water. The two nuclear plants, the Indian Point plant on the Hudson and the Millstone plant on the Sound, can withdraw 2.5 billion and 2.19 billion gallons per day, respectively. The Hudson River plants have a combined intake capacity of nearly 5 billion gallons per day; the Long Island Sound plants have a combined intake capacity exceeding 5 billion gallons per day; and the New York Harbor and East River plants have a combined intake capacity of more than 3.5 billion gallons per day. Altogether, the 17 plants can withdraw almost 14 billion gallons per day from the two estuaries and the harbor. . . .
>
> Because of these waters' importance as spawning and nursery grounds, it is unsurprising that entrainment of eggs and larvae occur in astronomic numbers. . . .
>
> Indian Point and the other three power plants using once-through cooling on the Hudson have a huge, detrimental impact on the ecology of the estuary—and this impact goes well beyond the loss of large numbers of individual fish. In a 2007 report, New York State found that the cumulative impact of multiple facilities on the river substantially reduces the population of young fish in the

> entire river. In certain years those plants have entrained between 33 and 79 percent of the eggs and larvae spawned by striped bass, American shad, Atlantic tomcod and five other important species. Over the time the plants have been operating, the ecology of the Hudson River has been altered, with many fish species in decline and populations becoming less stable. Of the 13 key species subject to intensive study, ten have declined in abundance, some greatly. Power plants have played a considerable role in that decline. [Footnotes omitted.]

6. I have personal experience in fish entrainment and impingement issues. From 1996 -2006 I served as project manager for a shad (Alosa sapidissima) restoration effort on the Hudson River, which involved the harvesting, fertilization and care of fish eggs. In addition, I collected data on spawning behavior, habitat and egg mortality in support of this project to restore a wild shad population to the Susquehanna River using stock from the Hudson River. As a result of that expertise I became interested in fish entrainment and impingement issues involving the cooling water Hudson River power plants. I participated in public comment periods for SPDES permits, legal challenges and environmental impact statements for electrical generating facilities that use vast quantities of water from the river. In general, I have advocated that the long term health of Hudson River fisheries will be jeopardized if we continue to destroy generations of shad, striped bass, Atlantic sturgeon and winter flounder through cooling intake structures.

7. My expertise on this issue has been useful in work on behalf of the Sierra Club Atlantic Chapter. Chapter members have done substantial work on fish entrainment and impingement issues over the years.

8. In 2011, as Conservation Director for the Sierra Club Atlantic Chapter, I lobbied for passage of A5318A/S3798, New York's water resources law. This law requires any entity that withdraws more than 100,000 gallons of water a day to apply for a permit. Such a permit requires any user to responsibly withdrawal water in a way that conserves the resource, protects the needs of aquatic ecosystems, and promotes equity among all users.

9. Granting a water withdrawal permit to the Ravenswood facility for 1 billion gallons a day without an environmental assessment under SEQRA defies the intent and purpose of the water resources law – especially as there are many practical alternatives to once through wet cooling that use significantly less water without killing fish. The intent of the newly enacted legislation is not to duplicate existing SPDES permits for excessive withdrawals, but to provide the Department of Environmental Conservation with tools to manage New York's water resources in a comprehensive manor. A primary tool to facilitate this goal is the environmental impact assessment process.

10. I have personal knowledge of all facts set out in this affidavit.

Roger Downs

ROGER DOWNS
353 Hamilton Street, Albany, NY 12210

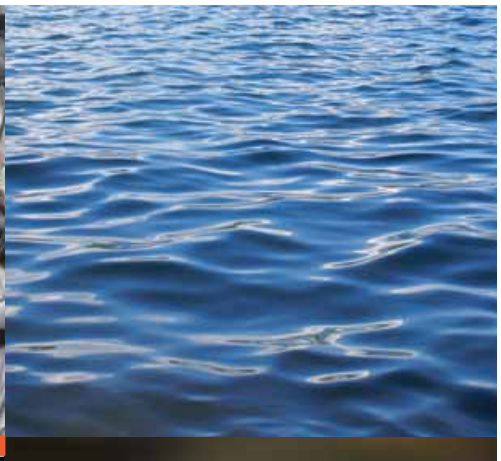
Sworn to before me this
21st day of March, 2014

Stephen F. Downs

Notary Public

STEPHEN F. DOWNS
Notary Public, State of New York
Qualified in Albany County
No. 4682086
Commission Expires November 30, 20 16

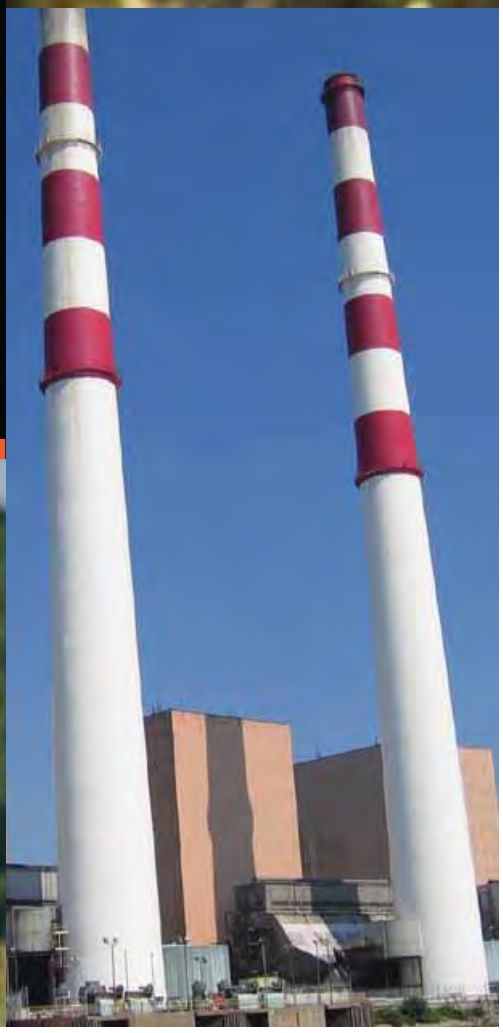
EXHIBIT A TO DOWNS AFFIDAVIT — GIANT FISH BLENDERS: HOW POWER PLANTS KILL FISH & DAMAGE OUR WATERWAYS, SIERRA CLUB REPORT, DATED 2011 [252- 268]



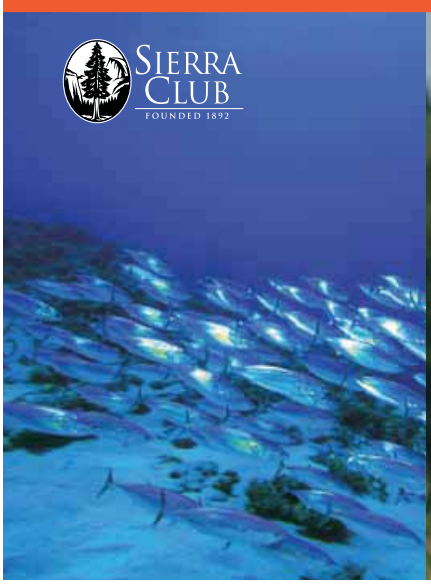
GIANT FISH BLENDERS:

HOW POWER PLANTS KILL FISH & DAMAGE OUR WATERWAYS

(AND WHAT CAN BE DONE TO STOP THEM)



SIERRA CLUB
FOUNDED 1892



GIANT FISH BLENDERS: HOW POWER PLANT INTAKE STRUCTURES KILL FISH AND DAMAGE ECOSYSTEMS (AND WHAT CAN BE DONE TO STOP THEM)

This report is a publication of the Sierra Club

Sierra Club recognizes the following people and organizations for their valuable work in researching, drafting, editing, and designing this report. We thank them for making this report possible:

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JULY 2011

CONTENTS

3 EXECUTIVE SUMMARY

5 INTRODUCTION

6 GREAT LAKES

10 GULF OF MEXICO

12 MISSISSIPPI RIVER

14 HUDSON RIVER, LONG ISLAND SOUND AND NEW YORK HARBOR

18 CALIFORNIA COAST

20 CHESAPEAKE BAY

23 CONCLUSION

24 APPENDIX

27 ENDNOTES

PHOTO: PISCES CONSERVATION, LTD

EXECUTIVE SUMMARY

From an airplane window, you might see power plants lining the banks of the Mississippi River, our coastal shores or the Great Lakes. It is no coincidence that power plants are located along some of our mightiest rivers and most treasured waterways: steam-electric power plants using older technologies need an extraordinary amount of water to operate. The power industry uses more water than any other sector in the United States, withdrawing more than 200 billion gallons of water each day. Nearly all this water is used for "once-through cooling," an antiquated technology were power plants suck enormous volumes of water to cool down their systems and then discharge it at an elevated temperature.

A power plant with once-through cooling draws hundreds of millions, in some cases billions, of gallons of water each day from the closest lake, river or ocean and indiscriminately sucks in whatever aquatic life is near the intake pipe. In this process, fish and other aquatic life are smashed and mutilated against crude screens (known as "impingement") or are sucked into the cooling system itself (known as "entrainment"). It is estimated that billions of fish and other aquatic organisms at all stages of life are killed each year by power plants' water-intake systems.

The full spectrum of aquatic species are impacted by once-through cooling, as are the other wildlife that rely on the complex food web—from phytoplankton to fish, birds, and marine mammals, including species that are threatened or endangered. Power plants' intake structures kill billions of fish and destabilize wildlife populations. A single power plant can obliterate billions of fish eggs and larvae and millions of adult fish in a single year, and the heated water it discharges also alters surrounding ecosystems, compounding the damage. The death toll of wildlife from power plant intakes is staggeringly high. Some areas face devastating economic impacts as fisheries are threatened and recreational uses are diminished.

This report looks at the impact of once-through cooling systems on some of the nation's most iconic waterways: the Great Lakes; the Gulf of Mexico; the Mississippi River; the Hudson River, New York Harbor and Long Island Sound; the California Coast; and the Chesapeake Bay. These great American waterways are at risk of losing untold species and ecosystems that have shaped the history, economy and culture of the surrounding areas.

We also look at the history of and actions taken by decision makers in regulating once-through cooling systems. Almost 40 years after Congress identified cooling water intake as a threat to our waterways and the life sustained by them, the U.S. Environmental Protection Agency (EPA) has failed to force the owners of power plants—the nation's largest water users—to reduce their destructive impact.

Today, the EPA is proposing regulations that, unfortunately, fail to set a clear, consistent national policy and fail to modernize our electric sector by phasing out once-through cooling systems. Even though the EPA has identified cost-effective alternatives, which are already being used in new power plants across the country, industry lobbyists are fighting hard to prevent any modernization of the outdated cooling systems at power plants, many built more than 30 years ago. This report highlights why the EPA must move quickly to strengthen proposed regulations and phase out the most destructive water-cooling practices by putting in place common-sense protections for fisheries and waterways across the United States.

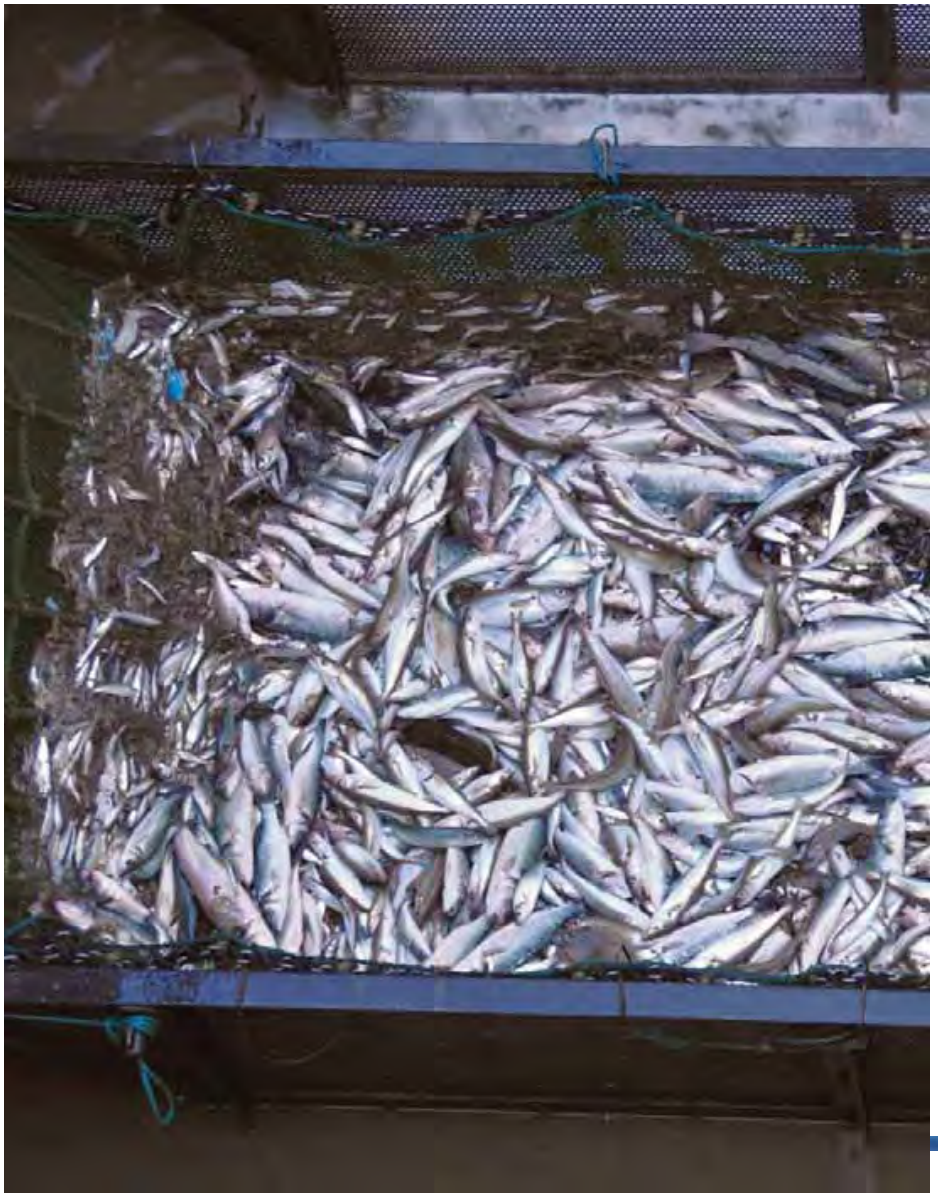


PHOTO: PISCES CONSERVATION, LTD

INTRODUCTION

POWER PLANTS USE WATER—and lots of it. In the United States, more than 500 power plants withdraw billions of gallons of water each day to use in the most antiquated and destructive type of cooling system, known as "once-through cooling." Once-through cooling systems draw water from a nearby waterbody and then discharge it at an elevated temperature, causing severe ecosystem destruction.

Collectively, steam-electric power plants have the capacity to withdraw more than 370 billion gallons per day—more than 135 trillion gallons per year—from our nation's waters for cooling.[1] Currently, those plants' average withdrawal exceeds 200 million gallons each day.[2] This accounts for 93 percent of the country's total saltwater use, 41 percent of total freshwater use, and 49 percent of all water use. That's more water than all irrigation and public water supplies combined.[3]

One-through cooling systems use large pipes as water-intake structures. These pipes sit below the water's surface and suck in not only water but also anything else in the vicinity. After the water is drawn through the power plant to help cool systems that have generated heat during the energy-making process, it is discharged at an elevated temperature back into the waterbody. This process affects the full spectrum of wildlife in the aquatic ecosystem at all life stages—eggs, larvae, juveniles and adults—from tiny photosynthetic organisms to fish, shrimp, crabs, birds and marine mammals, including threatened and endangered species.[4]

How Power Plant Intake Structures Harm Our Waterways

Power plants' intake structures kill billions of fish and destabilize wildlife populations. Since intake structures sit well below the surface of the water, fish and other aquatic life are hit the hardest. A single power plant can destroy billions of fish eggs and larvae and millions of adult fish in a single year, and its heated discharges alter the surrounding ecosystems, compounding the damage. In addition to fish, these outdated intake structures also kill or harm sea turtles, seals, sea lions and numerous other larger animals.[5]

This excessive mortality occurs despite rudimentary attempts to filter extraneous materials, including fish, from the cooling water stream. Fish eggs, larvae and other organisms are too small to be filtered out by even the best screens. The destruction is twofold: Larger fish and wildlife must fight against "impingement," or getting trapped on intake screens. And aquatic organisms too small to be trapped against these screens become "entrained," or sucked through plants' heat exchangers, where most are smashed and boiled to death before being dumped back into a waterbody.

The EPA has found that the loss of large numbers of aquatic wildlife may affect the overall health of ecosystems.[6] Once-through cooling not only reduces adult populations of the species, but also kills their eggs and larvae, causing disruptions to the food chain. These antiquated intake structures also reduce the species' ability to survive other unfavorable environmental conditions such as drought and climate change.[7]

The History of Once-through Cooling Destruction

In the late 1960s, Congress first considered the impacts of power plants' massive water usage during extensive hearings on the effects of waste heat discharged from industrial facilities.[8] Senator Warren Magnuson warned that "by 1980 thermal power plants throughout the nation will require an amount of cooling water greatly in excess of the average flow of the mighty Mississippi at St. Louis."[9] Around the same time, the White House issued a report explaining that "the large volumes of water withdrawn in once-through cooling processes [can have] as much or more effect on aquatic life than the waste discharges on which control measures are required."[10]

In the early 1970s, a number of well-publicized massive fish kills occurred at intake structures around the country. In response to the fish kills and other threats to our waterways, Congress voted overwhelmingly to pass the Clean Water Act of 1972 into law. While it focuses mostly on the discharge of pollution, the law also specifically regulates cooling water intake structures.

Section 316(b) of the Clean Water Act requires the EPA to issue regulations requiring that "the location, design, construction, and capacity of cooling water intake structures reflect the best technology available for minimizing adverse environmental impact."[11] Those adverse environmental impacts are primarily the entrainment and impingement of fish, shellfish and other forms of aquatic life, along with thermal pollution in the discharge of cooling water.

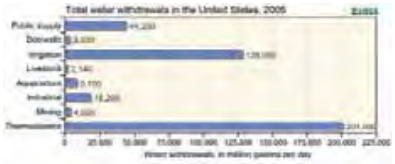
In 2001, after decades of delay, the EPA took an important step forward by ordering new plants to use "closed-cycle cooling" and prohibiting once-through cooling for new projects except in extremely limited circumstances.[12] In a closed-cycle cooling system, water withdrawn from a natural waterbody is circulated through condensers to remove the plant's excessive heat, then circulated through cooling towers, and then recirculated (i.e., recycled) back to the condensers. Compared with a once-through system—in which water is drawn into the condenser and then sent back to the waterbody from which it came—closed-cycle cooling can reduce total water withdrawals by about 95 percent. Because closed-cycle cooling is a better and newer technology, Clean Water Act permits issued by states and the EPA's regional offices for the construction of new power plants invariably require that it be installed.

However, the EPA has failed to follow through on its legal obligation to require existing power plants to modernize and phase out once-through cooling. Industry lobbyists have successfully stalled EPA action for a decade after it set new standards for new power plants. As a result, outdated power plants across the U.S. continue to kill billions of fish and other aquatic organisms annually on our nation's most iconic waterways.

About This Report

In the pages that follow, we provide specific examples of how antiquated cooling water intake structures are directly impacting some of our nation's most iconic waterways and their ecosystems: the Gulf of Mexico; the Mississippi River; the Hudson River, New York Harbor and Long Island Sound; the California Coast; the Great Lakes and the Chesapeake Bay. While we discuss only a handful of examples, there are many other waterways around the country being similarly harmed by antiquated power plants.

We must stop the giant fish blenders that line our shores, lakes and rivers. By phasing out once-through cooling, the EPA can help begin the process to restore and preserve our waterways for generations to come.



LEFT: Just one outdated power plant can trap and kill millions of fish and other aquatic animals against crude water intake screens, like the ones shown here.

THE GREAT LAKES

THE GREAT LAKES—Superior, Michigan, Huron, Erie and Ontario—and their connecting channels form the largest freshwater system on Earth. Covering more than 94,000 square miles, and draining twice as much land area, these freshwater bodies hold about 6 quadrillion gallons of water, about one-fifth of the world's fresh surface water supply and 90 percent of the U.S. freshwater supply. The Great Lakes provide drinking water to more than 40 million people.[13]

The Great Lakes region possesses a mosaic of connected ecosystems containing diverse communities of species, including about 180 native fish species such as brook trout, lake sturgeon, lake trout, lake herring, largemouth bass, northern pike, whitefish, smallmouth bass, walleye and yellow perch.

Each species within the Great Lakes has its place within the food chain and is dependent on the abundance and health of the whole ecosystem. At the base of the food chain are the primary producers, like algae, that collect energy from light. Feeding on these are the small zooplankton amphipods and other organisms that are, in turn, eaten by larger invertebrates such as shrimp. The next link includes fishes such as alewives, shiners and lake herring, which provide sustenance to the predatory fish, like lake trout and bass. All these fish then provide food for birds, reptiles, amphibians and mammals that live by the Great Lakes, including humans.

The Great Lakes are linked to coastal wetland and bordering terrestrial ecosystems that support many threatened and endangered animals, including the whooping crane, Canadian lynx, gray wolf, bog turtle, as well as plants such as the dwarf lake iris. They also provide essential habitat to a symbol of our country, the once-endangered bald eagle.

Because of the importance of these lakes, many underwater preserves and parks have been established throughout the area, and outdoor recreation is a major part of life in the region. With pristine wilderness in close proximity to major cities in eight states—Illinois, Indiana, Michigan, Minnesota, New York, Ohio, Pennsylvania and Wisconsin—as well as the Canadian province of Ontario, the Great Lakes region provides abundant opportunities for fishing, boating, swimming, bird-watching and tourism.

The Great Lakes states have about 3.7 million registered recreational boats, about a third of the nation's total,[14] and the commercial and sport fishing industry is collectively valued at more than $7 billion annually.[15]

PHOTO: LAKE ERIE WATERKEEPER

A 2007 report by the Brookings Institution determined that a healthy, restored Great Lakes could generate some $50 billion in long-term economic benefits for the region, not only for industries like fishing, which rely on clean, healthy ecosystems, but also for the tourist industry and for homeowners, in the form of higher property values.[16]

Most lake ecosystems are dependent on their shores and shallows for their productivity, and the Great Lakes are no different. However, the Great Lakes are unique because of their size: Only a small proportion of their volume is within these productive shallow zones. The Great Lakes are therefore particularly vulnerable to any damage to their shallows, where shoreline power plant intake structures are located.

How Power Plant Intake Structures Harm the Great Lakes

At least 42 power plants using once-through cooling systems ring the Great Lakes. Lake Michigan has the largest number of these plants, with 19, followed by Lake Erie's 11, Lake Huron's six, Lake Ontario's five, and Lake Superior's one. Thirty-three of the plants run on coal, six are nuclear, and the rest burn natural gas or oil. These plants withdraw massive volumes of water, ranging from the relatively small Harbor Beach plant on Lake Huron, which can withdraw 129 million gallons per day, to the behemoth D.C. Cook plant on Lake Michigan and the Monroe plant on Lake Erie, both of which can withdraw more than 2 billion gallons.[17] The 42 Great Lakes plants have a combined intake flow of more than 30 billion gallons per day. (See Appendix, Table 1, for a full list of Great Lakes plants and their intake flow rates.)

These plants' intake structures kill huge numbers of fish and shellfish of virtually every species present and at every life stage. All links in the Great Lakes food chain are adversely affected by these power plants. For example, when operating at full capacity, the Bayshore plant in Ohio sucks up more than 700 million gallons of water per day from the middle of Maumee Bay, in western Lake Erie, the most productive fishery in the Great Lakes.

LEFT: Scenic Lake Erie has 12 antiquated power plants on its shores that use almost 10 billion gallons of water everyday.

ABOVE: Bayshore power plant in Ohio has been known to kill 60 million fish in just one year because of outdated water intake structures.

A 2005–6 study conducted by Bayshore's owner estimated that more than 60 million adult fish and more than 2.5 billion fish eggs and larvae were killed per year.[18] A later study of the Bayshore plant by the University of Toledo put the number of fish eggs and larvae killed at more than 12 billion per year. The plant's once-through cooling system also dumps hot water into western Lake Erie, contributing to foul-smelling, toxic algal blooms and causing further harm to fish populations in a vital but already heavily stressed ecosystem.

On the shores of Lake Michigan in Wisconsin, the Oak Creek power plant was estimated by its operator to impinge well over 2 million fish weighing 57-plus tons in a single year on its intake screens. In addition, between April and October of 2002, it entrained over 6 million larvae and over 9 million fish eggs.[19]

New York's Huntley Generating station, located along the Niagara River, which connects Lake Ontario to Lake Erie near the world-famous Niagara Falls, is estimated to entrain over 105 million fish eggs and larvae per year, with annual impingement of well over 96 million adult and juvenile fish—the largest of any power plant in the state.[20]

A clear illustration of the ecological benefits that could be obtained by installing closed-cycle cooling at the 42 Great Lakes plants is evident from the experience of the Palisades nuclear power plant on Lake Michigan, which was built with once-through cooling and later installed closed-cycle cooling. When operating in once-through mode, the plant impinged almost half a million fish per year, but this figure was reduced by an astounding 98 percent once the plant switched to closed-cycle cooling. [21]

Ecosystems in the Great Lakes face many other stresses, including pollution and destructive invasive species. This makes mortality from once-though intake structures more potentially detrimental to native species than it would be in healthy ecosystems. Since so many fish and other aquatic creatures are killed, their populations become smaller, weaker, and more vulnerable to collapse.

The Great Lakes are an important resource for the nation. The region's unique environment includes wetlands, marshes, swamps and bogs that play a critical role in linking land with water. These lakes enrich the lives of communities around them and define the region. They are a haven for hunters, anglers and all outdoor enthusiasts, and also an economic driver of the nation. Updating the 42 power plants on the shores of the Great Lakes would help ensure that they remain clean and healthy for future generations.

ABOVE: Endangered whooping cranes, like these, are dependent on healthy fish populations in the Great Lakes.

CENTER: On Lake Michigan in Wisconsin, the Oak Creek power plant was estimated by its operator to impinge well over 2 million fish weighing 57-plus tons in a single year.

BELOW: The Great Lakes communities have about 3.7 million registered recreational boats, about a third of the nation's total.

FAR RIGHT: A healthy Great Lakes, such as Lake Heron pictured here, could yield $50 billion in long-term economic benefit for the region.

GULF OF MEXICO

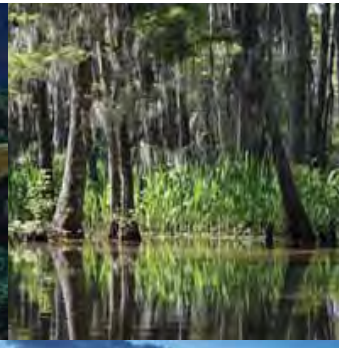


PHOTO: PISCES CONSERVATION, LTD

THE GULF OF MEXICO is the ninth-largest body of water in the world, covering 600,000 square miles, and it receives water from 33 major rivers, including the Mississippi and Rio Grande.[22] More than half of the coastal wetlands within the continental United States are in the Gulf of Mexico, including 15,316 square miles of estuarine habitat along the shoreline in the Gulf Coast states of Alabama, Florida, Louisiana, Mississippi and Texas. This important coastal habitat is essential for healthy fisheries, migrating waterfowl, seabirds and wading birds. Wetlands also play an irreplaceable role in protecting shoreline communities from increasingly dangerous storms.

The Gulf's estuaries, with their associated mangrove and seagrass habitats, are essential feeding and nursery grounds for large numbers of fish and other wildlife, including threatened and endangered species such as sea turtles, Gulf sturgeon and manatees. Mangroves defend coastlines from flooding and erosion and provide essential habitat for reptiles such as the American crocodile and American alligator; sea turtles such as the loggerhead; fish such as snapper and tarpon; crustaceans such as shrimp and crabs; and coastal and migratory birds, including pelicans, spoonbills and bald eagles. Seagrass beds are also fish nurseries, where manatees and sea turtles feed and thrive. Additionally, the Gulf of Mexico yields more shrimp and shellfish annually than the mid-Atlantic, Chesapeake and New England areas combined.[23]

Of the 28 species of marine mammals known to inhabit the Gulf of Mexico, three are protected species of dolphin (Atlantic spotted, Risso's and bottlenose).[24] A number of endangered fish live in the coastal and estuarine waters, including the Gulf sturgeon, Alabama shad, saltmarsh topminnow and mangrove rivulus. The Gulf's threatened and endangered sea turtles include the loggerhead and leatherback, which thrive in the Gulf's expansive and unique waterways.

Besides being home to all types of wildlife, the Gulf supports major fishing industries.[25] Gulf fisheries are among the most productive in the world, with commercial fish and shellfish valued at $661 million annually.[26] In 2008, recreational fishers took more than 24 million trips, catching 190 million fish, in the Gulf of Mexico and surrounding waters.[27] The Gulf of Mexico's shores and beaches, an ideal location for swimming, sun and all water sports, support a $20 billion tourism industry.[28]

How Power Plant Intake Structures Harm the Gulf of Mexico

The Gulf coastal region has at least 17 power plants that use once-through cooling systems: seven in Florida, seven in Texas, two in Louisiana, and one in Mississippi. Four of the plants—the Big Bend, Crystal River and Lansing Smith plants in Florida, and the Jack Watson plant in Mississippi—burn coal; the Crystal River plant site also has a nuclear reactor. The rest of the plants along the Gulf burn natural gas or oil.

These plants withdraw billions of gallons of water each day from the Gulf of Mexico and its coastal bays, entraining and impinging huge numbers of fish and shellfish of virtually every species present—at every life stage—and discharging heated water back into the Gulf. The largest-flow plants are the Anclote plant, north of St. Petersburg, Florida, at more than 2.8 billion gallons per day; the Crystal River plant complex, just 50 miles up the west coast of Florida from Anclote, at more than 2.1 billion gallons per day; and the P. H. Robinson power plant in Galveston Bay, Texas, which is designed to take in more than 1.7 billion gallons per day. Combined, the 17 Gulf plants can withdraw nearly 13 billion gallons of water per day, and there are many other power plants withdrawing even larger volumes of freshwater from the rivers that feed the Gulf, killing aquatic life and discharging heated water back into the ecosystem as well. (See Appendix, Table 2, for a full list of Gulf plants and their intake flow rates.)

In the Gulf especially, thermal pollution can directly impact plants and animals, degrading habitat and reducing biodiversity. Both mangrove and seagrass beds are sensitive to power plants' thermal pollution. For example, the Thalassia seagrass beds in Florida estuaries are drastically affected when contacted by discharges 41 degrees Fahrenheit or more above the ambient summer temperature. These overly warm discharges on the seagrass beds can result in total destruction of this plant life and in turn damage the populations of wildlife that depend on it.[29]

A number of protected fish and sea turtle species live in waters impacted by power plants and are impinged or trapped on intake screens. For example, the Crystal River plant has impinged five species of endangered sea turtles—loggerhead, green, Kemp's ridley, leatherback and hawksbill.[30] At the Big Bend generating station in Tampa Bay, Florida, the annual impingement from 1976 to 1977 was estimated to be more than a quarter of a million fish.[31]

Entrainment of young species is a major problem in productive coastal and estuarine waters. At the Big Bend plant, the annual entrainment of a single species, the bay anchovy, was estimated at more than 68 billion from 1976 to 1977.[32] The Big Bend power plants still uses that same once-through cooling system today, 30-plus years later.

The Gulf of Mexico is one of the most biodiverse bodies of water on the planet and one of the most economically productive regions in the world.[33] It is home to a range of sea life including dolphins, oysters and coral reefs. Its coastline encompasses wetlands and includes tidal flats, mangrove swamps, estuaries and bays. Power plants along the Gulf should be required to update their cooling system technologies to protect aquatic life, coastal communities, tourism and commercial fishing in the region.

CLOCKWISE FROM UPPER LEFT: The Gulf of Mexico yields more shrimp and shellfish annually than the mid-Atlantic, Chesapeake and New England areas combined. However, outdated water intake structures can trap and kill them, as shown here. Not only fish are killed by power plants. Turtles, like the endangered loggerhead shown here can become trapped on crude intake screens. The Gulf is not only known for its wildlife, but also as a destination for many outdoor enthusiasts such as beach combers and boaters.

MISSISSIPPI RIVER

ONE OF THE MOST FAMOUS RIVERS in the world, the Mississippi is the largest river system in North America, draining almost one-third of the total U.S. land mass. At approximately 2,350 miles long, the Mississippi is the third-longest river in North America,[34] is the fifth largest river in the world by volume and has the third largest drainage basin in the world,[35] covering more than a million square miles.[36] The river basin drains all or parts of 31 states and two Canadian provinces, and flows through ten states: Arkansas, Illinois, Iowa, Kentucky, Louisiana, Minnesota, Mississippi, Missouri, Tennessee, and Wisconsin.

By virtue of its great size and other geographic factors, the Mississippi river system is one of North America's most important environmental resources, containing a variety of habitats and an extraordinarily great aquatic biodiversity. The river basin supports at least 375 species of native fish, which are rather evenly distributed across the region.[37]

The Mississippi is noted for its numerous large river fish, which include the shovelnose sturgeon, gar, and bowfin. Other native fish of the Mississippi are the shad, chub, perch and bass.[38] Migratory birds visiting the river include Canadian geese, swans, bluebirds, and pelicans, many types of songbirds, and mallard, widgeon, pintail and ring - necked ducks.

The upper river valley contains large wetland areas, magnificent hardwood forests and some of the richest soils and most pristine habitats for wildlife found in the United States. Species living within the upper river valley's catchments include white-tailed deer, wild turkeys, mink, muskrats and otters—all of which depend on a healthy Mississippi River.

The Lower Mississippi, below the Ohio River confluence, lies within the lowland gulf coastal plain, a basin between the Appalachians to the east and the Ozark and Ouachita Mountains to the west. The Lower Mississippi is distinguished by its extraordinary richness of species, particularly fish, shellfish and crayfish. It is also home to nearly 70 species of amphibians and aquatic reptiles, including the American alligator and two common turtles—the ringed map turtle and yellow-blotched map turtle. Among the numerous marine species commonly recorded in the Mississippi's lower reaches, where it meets the saltwater environment of the Gulf of Mexico, are minnows, catfish, killifish and darters.

Because of its rich diversity and beautiful scenery, the Mississippi River has seven National Park sites along its banks; in 1997, two portions of the Mississippi were designated as American Heritage Rivers. In 2009, the Upper Mississippi River floodplains, which include the 240,000-acre Upper Mississippi River National Wildlife and Fish Refuge, were designated as a Wetland of International Importance.

In addition to its ecological and social values, the Mississippi has significant economic value as the nation's chief navigable water route for commerce. It provides many states with drinking water and has spurred the growth of the its neighboring cities and economies. The Mississippi provides abundant hunting, fishing, canoeing, camping and other recreational opportunities for millions of Americans. Its riverside parks and trails are popular spots for hiking, biking, fishing and bird-watching. A healthy Mississippi River is vital to the quality of life in its nearby communities.

How Power Plant Intake Structures Harm the Mississippi River

At least 28 power plants still using once-through cooling systems are located on the Mississippi River. Louisiana is home to six of these plants; Iowa has five; Minnesota, Missouri and Wisconsin each have four; Illinois has two; and Arkansas, Mississippi and Tennessee each have one. Seventeen of these plants burn coal; seven burn natural gas or oil; three are nuclear; and one, the Waterford plant in Louisiana, has a nuclear unit as well as oil or gas units. These 28 plants have a combined cooling water withdrawal capacity of more than 15 billion gallons per day, and their massive water withdrawals entrain and impinge enormous numbers of fish and shellfish of virtually every species and at every life stage. (See Appendix, Table 3, for a full list of Mississippi River plants and their intake flow rates.)

Mississippi power plants using once-through cooling range from the relatively small Burlington plant in Iowa, which can withdraw 116 million gallons per day, to the behemoth Nine Mile Point plant in Illinois and the Quad Cities plant in Louisiana, which each withdraw well more than a billion gallons per day.[39]

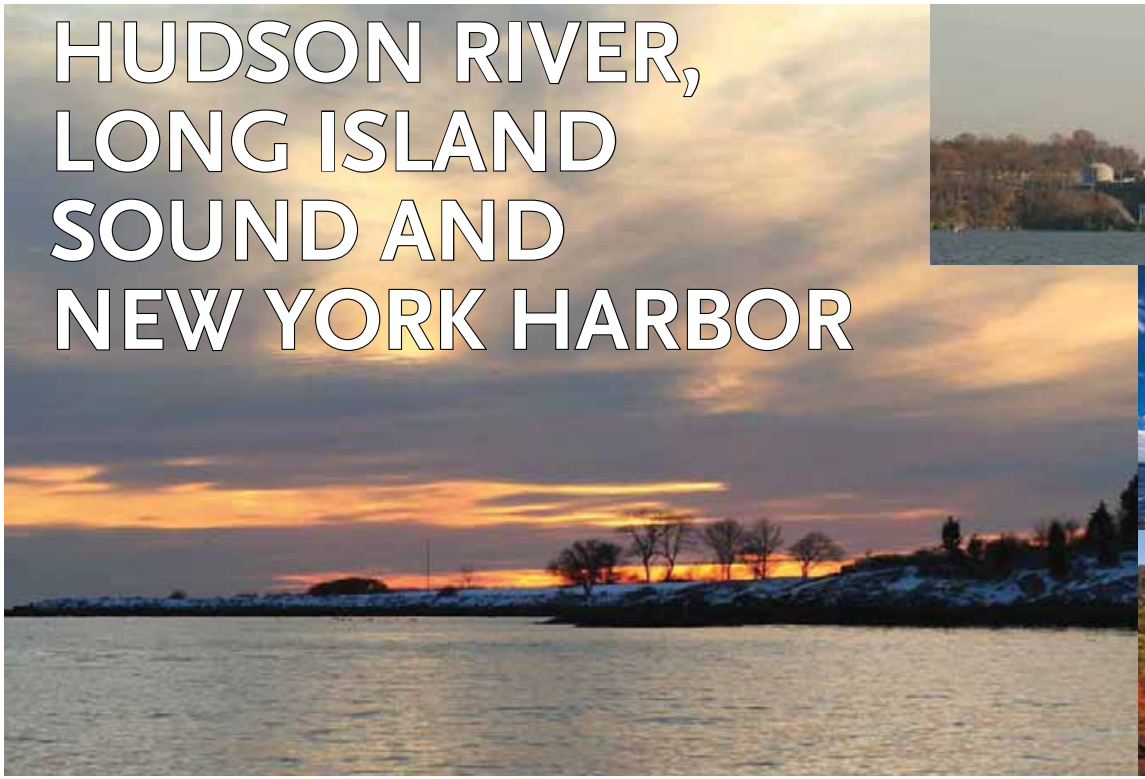
As just one example of the impact of these power plants on fish, consider the coal-fired Meramec power plant, located 16 miles south of St. Louis, Missouri, at the confluence of the Mississippi with the Meramec Rivers. Impingement and entrainment studies conducted there in the 1970s, when the plant's maximum flow was about 550 million gallons per day, an estimated annual impingement of almost a million fish, including the vulnerable shovel-nosed sturgeon.

Meramec's entrainment of fish eggs was greatest in July, when an average of 70.7 fish eggs was entrained per 100,000 gallons. Given that the plant utilized more than 9.5 billion gallons of cooling water in July 1974 during the study period, the estimated entrainment for that one month alone was well over a half a million eggs.[40] Since Merrimac's intake capacity has increased to 675 million gallons per day, with no change to its outdated intake structures, the impingement and entrainment impacts are likely even worse today.

The Mississippi River, from the small headwaters in the Northwoods of Minnesota to the large ecosystem of the Gulf of Mexico, is a true national treasure that has played a large role in shaping American culture and history. Power plants along the Mighty Mississippi should use the best and most modern technology to protect the wildlife and the economy the river provides.

CLOCKWISE FROM UPPER LEFT: Meramec power plant, located 16 miles south of St. Louis, Missouri, at the confluence of the Mississippi with the Meramec Rivers, impinges and entrains almost a million fish per day. The Mississippi River needs healthy fish populations for the next generation of anglers. The 28 power plants on the mighty Mississippi have a combined cooling water withdrawal capacity of more than 15 billion gallons of water per day. A healthy Mississippi River is vital to the quality of life in its nearby communities and wildlife.

HUDSON RIVER, LONG ISLAND SOUND AND NEW YORK HARBOR



INDIAN POINT PHOTO: RIVERKEEPER, INC.

Clockwise from left: Long Island Sound, pictured here has eight outdated power plants that use over 5 billion gallons of water per day. At the Indian Point power plant, situated in a narrow section of the Hudson River estuary and pictured here, has entrained 1.2 to 1.3 billion fish eggs and larvae in a year. Ospreys, like these in Long Island, depend on healthy fish populations for survival. The Long Island Sound isn't only a sanctuary for wildlife, like the starfish pictured here, but also for people and communities who enjoy the outdoors. The Hudson River, pictured here has four outdated power plants on its shores that use well over 4 billion gallons of water per day.

Hudson River

Known as "America's First River," the Hudson begins at Lake Tear of the Clouds in the Adirondack Mountains and flows more than three hundred miles before emptying into New York Harbor at the southern tip of Manhattan. Called *Muhheakantuck* ("the river that flows both ways") by Native Americans and now named for the British explorer Henry Hudson, the historic Hudson River played a starring role in the American Revolution and provided a crucial transportation link from the eastern seaboard through the Erie Canal to the country's interior.

The lower Hudson's unique configuration as a narrow, 154-mile-long estuary creates a huge, diverse nursery that supports a mix of freshwater and saltwater fish. The river's marshes and tidal flats contribute essential minerals and nutrients to the food chain, allowing its quiet backwaters to become an essential nursery habitat for many types of wildlife. In fact, the Hudson is one of the two principal spawning grounds for aquatic life in the East Coast.

More than two hundred species of fish are found in the Hudson and its tributaries, which make up one of the most biodiverse temperate estuaries on the planet. The river is a refuge for rare and endangered species such as the shortnose sturgeon and heartleaf plantain.[41] The Hudson is also part of the great Atlantic flyway for migratory birds; and ducks, geese and osprey, among others, stop to feed in its shallows.

The ecological influence of the Hudson estuary extends far into the Atlantic Ocean and along the coast. For vast schools of migratory sturgeon, herring, blue crab, mackerel and striped bass, the Hudson is a nearly unimpeded corridor from the Atlantic to their ancestral spawning grounds. These fish support a 350-year-old recreational and commercial fishery along the Atlantic coast that's worth hundreds of millions of dollars.[42]

In 1998, the Hudson River was designated as one of the nation's first American Heritage Rivers, a much-deserved recognition of its central place in American history and culture. The New York State Legislature has declared the estuary "of statewide and national importance as a habitat for marine, anadromous, catadromous, riverine and freshwater fish species,"[43] and two federal agencies—the U.S. National Oceanographic and Atmospheric Administration and the U.S Fish and Wildlife Service—have designated the Hudson as an Essential Fish Habitat because it sustains large numbers of commercially important fish species.[44]

LEFT: New York Harbor, pictured here, has five antiquated power plants on its shores that use well over 3 billion gallons of water per day.

RIGHT: Outdated coal power plants on our rivers, like Danskammer on the Hudson River, suck in almost half a billion gallons of water per day.

PHOTO: GILES ASHFORD

Long Island Sound

The Long Island Sound is a 110-mile-long estuary bordered by the Connecticut coastline and the north shore of Long Island, New York. It receives the flow of several major rivers that drain freshwater from Massachusetts, New Hampshire, Vermont and other states. The Sound is a unique estuary in that it has two connections to the sea: to the east, it opens to the Atlantic Ocean, and to the west, it connects to New York Harbor and the Hudson and East Rivers. The Sound provides feeding, breeding, nesting and nursery areas for a broad diversity of plant and animal life, including marine fish and shellfish species such as winter flounder, Atlantic menhaden, blue crab, shrimp and lobster.

The extensive tidal marshes bordering the sound are some of the most productive biological systems in the world. They produce between three and seven tons per acre per year of vegetation; much of this eventually enters the waters of the sound to support fish and shellfish habitat.

More than eight million people live in the Long Island Sound watershed, which contributes an estimated $8 billion per year to the regional economy through boating, commercial fishing and sportfishing, swimming and tourism.[45] Long Island Sound was designated as an Estuary of National Significance, and some of its harbors have been designated as a Significant Coastal Fish and Wildlife Habitat Area or Essential Fish Habitat under the Magnuson-Stevens Fishery Conservation and Management Act.

New York Harbor

In the shadow of Manhattan's skyscrapers, New York Harbor and the East River connect the metropolitan area's two major estuary systems, the Hudson and Long Island Sound. The National Marine Fisheries Service has noted that four species of sea turtles may inhabit the vicinity of New York: Kemp's Ridley, green, leatherback and loggerhead; the first three are listed as endangered.

How Power Plant Intake Structures Harm the Hudson River, Long Island Sound and New York Harbor

A total of 17 power plants using once-through cooling are located in the region: four on the Hudson River, eight on the Long Island Sound and five in New York Harbor. New York has 12 of these plants, and Connecticut five. Two of these plants are nuclear, and the rest burn natural gas or oil, with the exceptions of the Bridgeport Harbor plant in Connecticut and Danskammer plant in New York, both of which have coal-fired units. All these plants use exorbitant amounts of water. The two nuclear plants, the Indian Point plant on the Hudson and the Millstone plant on the Sound, can withdraw 2.5 billion and 2.19 billion gallons per day, respectively.

The Hudson River plants have a combined intake capacity of nearly 5 billion gallons per day; the Long Island Sound plants have a combined intake capacity exceeding 5 billion gallons per day; and the New York Harbor and East River plants have a combined intake capacity of more than 3.5 billion gallons per day. Altogether, the 17 plants can withdraw almost 14 billion gallons per day from the two estuaries and the harbor. (See Appendix, Table 4, for a full list of the Hudson River, Long Island Sound and New York Harbor plants and their intake flow rates.)

Because of these waters' importance as spawning and nursery grounds, it is unsurprising that entrainment of eggs and larvae occur in astronomic numbers.

According to Soundkeeper's calculations, based on available data, the Millstone plant is responsible for killing 154 billion fish in all life stages over the span of more than three decades.[46] These calculations are very conservative, considering that the data only include seven species found in the Sound—winter flounder, cunner, bay anchovies, tautog, menhaden, grubby and American sand lance—and do not include lobsters, crabs, shellfish and other area fish.[47] In particular, Millstone killed nearly 42 billion tautog eggs and larvae between 1979 and 2002 and well over 4 billion winter flounder between 1976 and 2003.[48]

Huge numbers of fish are also entrained at the Indian Point power plant, situated in a narrow section of the Hudson River estuary just south of Peekskill. As reported by the New York State Department of Environmental Conservation, 1.2 to 1.3 billion fish eggs and larvae are entrained at Indian Point each year.[49] Further, an average of 1.18 million fish per year was impinged by Indian Point from 1986 to 1990.[50] The Indian Point plant impinges the endangered shortnose sturgeon and the Atlantic sturgeon, a candidate for threatened species status, thereby negatively contributing to the already low populations of these fish.[51] These devastating impacts were understood decades ago: In the 1970s, the Atomic Energy Commission, and its successor, the Nuclear Regulatory Commission, directed the owners of Indian Point to install closed-cycle cooling because of the anticipated damage to the Hudson's fisheries and ecosystem.[52]

Indian Point and the other three power plants using once-through cooling on the Hudson have a huge, detrimental impact on the ecology of the estuary—and this impact goes well beyond the loss of large numbers of individual fish. In a 2007 report, New York State found that the cumulative impact of multiple facilities on the river substantially reduces the population of young fish in the entire river. In certain years those plants have entrained between 33 and 79 percent of the eggs and larvae spawned by striped bass, American shad, Atlantic tomcod and five other important species.[53] Over the time the plants have been operating, the ecology of the Hudson River has been altered, with many fish species in decline and populations becoming less stable. Of the 13 key species subject to intensive study, ten have declined in abundance, some greatly.[54] Power plants have played a considerable role in that decline.

The power plants that rely on outdated once-through cooling to generate electricity affect the full spectrum of wildlife in the aquatic ecosystem at all life stages. New York's iconic Hudson River, New York Harbor and Long Island Sound are not only home to countless wildlife species but are also vital waterways for the cities and communities around them.

CALIFORNIA COAST

SAN ONOFRE PHOTO: © 2010 DARRELL CLARKE, COURTESY SIERRA CLUB LIBRARY

THE SPECTACULAR 840-MILE Pacific Coast of California, legendary to surfers and beachcombers around the world, offers an incredible variety of shoreline habitats—exposed rocky shores, kelp forests, sandy beaches, sheltered muddy estuaries and hypersaline lagoons. The Pacific Ocean supports a rich diversity of species and habitats, including populations of seabirds and shorebirds; marine mammals like humpback whales, elephant seals and sea lions; and fish such as barracuda, mackerel, salmon, albacore, bluefin and yellowfin tuna, and sardine and rainbow trout, to name just a few. A number of threatened and endangered fish species live in California's coastal waters.

The northern portion, stretching from the Oregon border to San Francisco, is a landscape of rugged coastlines and towering majestic redwoods at or near the water's edge, with incredible vistas and opportunities for hiking, kayaking, river rafting, mountain biking, wildlife-watching, rock climbing, fishing and camping. Tidelands and marshes in this area provide important habitat for many species of waterfowl, shorebirds and marine invertebrates, as well as nursery areas for fish and crustaceans. The Point Reyes peninsula alone supports 45 percent of North American bird species and almost 15 percent of Californian plant species, including 23 threatened and endangered species.[55]

The San Francisco Bay and Delta is one of the largest estuarine systems on the West Coast and a highly dynamic and complex environment. The delta is a maze of river channels and diked islands covering over 1,000 square miles, including 78 square miles of water, formed by the confluence of the Sacramento and San Joaquin Rivers, which ultimately drain into San Francisco Bay.[56]

San Francisco Bay is made up of deepwater channels, tidelands, marshlands, freshwater streams and rivers that provide a wide variety of habitats that sustain a highly biologically diverse ecosystem. More than half of the endangered species in San Francisco Bay depend on wetlands to survive, including the California clapper rail and salt marsh harvest mouse. Local fish species on the federal endangered and threatened species list include the winter-run chinook salmon and the Sacramento splittail. Nearly all of the San Francisco Bay region beaches form part of the Golden Gate National Recreation Area, one of the most visited National Parks, with more than 13 million visitors each year.[57]

The central and southern coasts extend from the Monterey Peninsula to the Mexican border. Here one finds wildlife refuges, state parks and pristine beaches popular for surfing, hiking and camping. There are graceful, towering sand dunes that protect bays, coastal lagoons, harbors and coves popular for kayaking and fishing.

The angle of the Southern California coastline creates a huge backwater eddy in which equatorial waters flow north near the shore, and subarctic waters flow south offshore. The mixing of these waters creates a highly diverse system that supports about 500 fish and more than 5,000 invertebrate species.[58] This scenic and diverse region contains numerous wilderness areas, nature reserves, wildlife preserves and open-space areas.

California's commercial fishing operations rank higher than any other state in the nation. Tuna is the most valuable fish caught, followed by swordfish. Halibut, herring, mackerel, rockfish, sablefish, salmon and sole are also important to the fishery, as are crabs, shrimp and squid.[59]

As a mark of this waterway's importance, the California Coastal National Monument, encompassing the entire coastline, was created by presidential proclamation in 2000 to ensure the protection of all islets, reefs and rock outcroppings from the coast to a distance of 12 nautical miles.

How Power Plant Intake Structures Harm the California Coast

There are 17 coastal Californian power plants using once-through cooling systems. These plants can withdraw more than 14 billion gallons per day from the Pacific Ocean. Nearly 5 billion gallons of that flow is withdrawn by two nuclear plants: the San Onofre Nuclear Generating Station near San Clemente and the Diablo Canyon plant near San Luis Obispo. (See Appendix, Table 5, for a full list of California plants and their intake flow rates.)

These power plants kill an astounding number of fish. The annual entrainment of larval fish at the Diablo Canyon plant at average flow is estimated to be over 1.5 billion individuals.[60] At the San Onofre Nuclear Generating Station on the Southern California coast, 121 tons of midwater fish are entrained, causing a 34 to 70 percent decline in Pacific Ocean fish populations within about two miles (three kilometers).[61] Unit 3 of the San Onofre plant alone is estimated to entrain an average of over 3.1 billion individual aquatic organisms.

The Pittsburg and Contra Costa plants in the San Francisco Bay Delta impinge and entrain more than 300,000 endangered and threatened fish per year, including the Sacramento splittail, Chinook salmon and steelhead trout. The Contra Costa and Pittsburg power plants entrain and impinge threatened Delta smelt and endangered Longfin smelt.[62]

In addition to the entrainment of young life stages, Californian coastal plants impinge and kill huge numbers of older fish on their filter screens. At average flow rates, San Onofre's Units 2 and 3 combined were estimated to impinge 1.3 million fish with a total weight of over 14 tons.[63] This is the worst example on the California coast, but other plants also impinge significantly large numbers of fish. Units 6 and 7 at the Moss Landing plant were estimated to annually impinge a quarter of a million fish weighing 4,060 pounds, even though the plant's average intake flow is a relatively modest 387 million gallons per day.[64]

In May 2010, California adopted a strong state policy requiring most coastal power plants to upgrade over the next decade to achieve protections equivalent to those offered by closed-cycle cooling. However, the dirty energy industry continues to fight these requirements.

When contemplating the beauty of the Golden State, admirers invariably point to the breathtaking shoreline that has shaped California both culturally and historically. Power plants must help protect the beauty and economic vitality of the California Coast by using modern cooing system technologies.

CLOCKWISE FROM LEFT: On the California coast, there 17 antiquated power plants that suck in over 15 billion gallons of water every day. While smaller aquatic life is killed by outdated power plants, the affects move up the food chain to larger animals like whales that pass the California coast. California's shores are known not only for its amazing wildlife, but also its outdoor activities like scuba diving and surfing. Healthy tuna shoals, like the one shown here, are vital to economy of California.

CHESAPEAKE BAY

STRETCHING 200 MILES across Maryland and Virginia—and with a watershed also encompassing Pennsylvania, Delaware, West Virginia, New York and the District of Columbia—Chesapeake Bay is the largest estuary in the United States and the third-largest in the world. The Chesapeake was formed about 12,000 years ago, as glaciers melted and flooded the Susquehanna River valley. The Chesapeake Bay watershed is 64,000 square miles and includes more than 10,000 miles of tidal shoreline, including tidal wetlands and islands.

The Chesapeake Bay is fed by five major rivers: the Susquehanna, Potomac, Rappahannock, York and James. The Chesapeake holds more than 15 trillion gallons of water and, although its length and width are dramatically expansive, its average depth is only about 21 feet, making it sensitive to temperature changes and discharges.[65] Approximately 17 million people live in the watershed, 10 million of them along its shores or near them.[66]

Together with the rivers, creeks and streams that feed it, the Chesapeake Bay provides a vital habitat for many aquatic species. Within the sheltered waters of the Chesapeake, underwater seagrass beds support the base of the food chain. These beds offer food and protection for a large number of small animals and a nursery for young fish. More than 300 species of fish, 170 species of shellfish and 2,700 species of plants are found in the Chesapeake.[67]

The Chesapeake's fish species include striped bass, trout, flounder, bluefish, Spanish mackerel, channel bass, yellow and white perch, herring and American shad. The Chesapeake is a key component in the Atlantic flyway: More than a million ducks, geese and swans spend winters here each year and it provides stopover habitat to thousands of other migrating birds.[68] This delicate, complex ecosystem is home to a number of plant and animal species that are currently designated as threatened or endangered, including the peregrine falcon, loggerhead and Atlantic Ridley turtles and the shortnose sturgeon. The once-endangered bald eagle lives in the region, too, appropriately in close proximity to our nation's capital.

Along with being a vital ecosystem with a rich diversity of species, the Chesapeake offers wonderfully scenic places to visit. The shallow, protected waters of the Chesapeake Bay and its tributaries are ideal for canoeing and kayaking. The region offers opportunities for water recreation sports, including fishing, boating and swimming, as well as excellent trails along the water for bird-watching, hiking and mountain biking.

One of the Chesapeake's most significant contributions to the region's economy is its seafood industry. The Chesapeake is especially renowned for its blue crabs, clams, oysters and striped bass. More than 500 million pounds of seafood are harvested from the Chesapeake every year.[69] A 2008 U.S. National Oceanic and Atmospheric Administration report indicated that the commercial seafood industry in Maryland and Virginia contributed $3 billion and more than 41,000 jobs to the local economy.[70]

How Power Plant Intake Structures Harm Chesapeake Bay

At least seven power plants in Maryland and six in Virginia use once-through cooling systems on the shoreline of the Chesapeake Bay or on saline or brackish waters in immediate proximity to the bay. Of these 13 plants, two are nuclear (Calvert Cliffs in Maryland and Surry in Virginia), four are coal-fired (the Chesapeake, Chesterfield and Potomac River plants in Virginia and the Morgantown plant in Maryland), and seven burn natural gas or oil. The Calvert Cliffs nuclear plant is the largest cooling water user in the Chesapeake, with a design intake flow rate of more than 2.2 billion gallons per day. It is followed by Virginia's Surry and Yorktown plants and Maryland's Morgantown and Herbert A. Wagner plants, each of which can withdraw between 1 and 1.5 billion gallons of water per day. Together, these 13 power plants can withdraw more than 8 billion gallons of water per day. (See Appendix, Table 6, for a full list of Chesapeake plants and their intake flow rates.)

The removal of large volumes of water from a habitat as rich in wildlife as the Chesapeake Bay inevitably leads to environmental degradation. For example, Calvert Cliffs plant in Maryland was estimated to impinge an average of 1.3 million fish a year between 1975 and 1995 with a total weight of about 10 tons.[71] The plant also impinges an average of 627,000 blue crab per year.[72] In certain environmental conditions, Calvert Cliffs has caused fish impingement incidents of staggering proportion: On August 28, 1984, the plant impinged 146,000 spot fish in just one hour, and on August 2, 1984, 12,650 blue crab were collected from its Unit 1 screens in one hour.[73] Such massive fish kills have also caused operational problems like blockages and damage to the screens.[74]

Entrainment losses of Chesapeake populations are also considerable. The Chalk Point power plant on the Patuxent River estuary in Prince George's County, Maryland, has two units that use once-through cooling, which together extract 500,000 gallons per minute from the estuary.[75] The Power Plant Research Program of the Maryland Department of Natural Resources estimated that Chalk Point's entrainment of bay anchovies could be as high as 76 percent of the local stock.[76]

The Chesapeake Bay and its tributaries are broadly recognized as a national treasure and vital resource. The Chesapeake creates opportunities for recreational and commercial fishing; is a beautiful place to swim, hike and boat; and is a world-class ecosystem for an untold number of species. The power plants along the Bay must upgrade their outdated systems to protect this iconic waterbody.

Famous for its blue crabs, the fishing communities around the Chesapeake Bay are dependent on healthy populations for their livelihoods. The Chesapeake creates opportunities for recreational and commercial fishing; is a beautiful place to swim, hike and boat. Once endangered bald eagles living in the Bay, like the ones shown here, are reliant on strong healthy fish populations. The 13 antiquated power plants on the Bay can withdraw more than 8 billion gallons of water per day.

PHOTO: PISCES CONSERVATION, LTD

CONCLUSION

The six examples in this report illustrate the real and immediate impacts of cooling water intake structures. The massacre caused by this antiquated technology is clear: The full spectrum of aquatic species and wildlife that rely on complex food chains in our lakes and rivers and on our shores—from phytoplankton to fish, birds, and marine mammals, and including species that are already threatened or endangered—is impacted by once-through cooling. Some areas face devastating economic impacts as fisheries are threatened and recreational uses are diminished.

The Environmental Protection Agency is charged with implementing Section 316(b) of the Clean Water Act, which requires the use of the best available technologies to minimize the environmental impact of power plants' cooling water withdrawals.

The modern closed-cycle cooling technology reduces the impacts of cooling water systems, is cost-effective, and is in use at many power plants across the country. It reduces water intakes by approximately 95 percent, drastically reducing the amount of water needed for power plant operations, thus resulting in a corresponding reduction in their impact on fish and other species.

Unfortunately, the EPA, under intense pressure from powerful industry interests, has ducked its responsibilities by not requiring existing power plants to upgrade to closed-cycle cooling or similar systems. Instead, in March 2011, the EPA proposed a rule that largely maintains the status quo, mandating little to no improvement in the technologies necessary to protect our waterways and our wildlife. The EPA's proposed rule sets a goal for impingement reductions that is already being achieved by 75 percent of U.S. power plants, thus requiring only marginal improvement in fish impingement across the country, and fails to set a performance standard for entrainment of wildlife.

Worse yet, the EPA left decisions about modernizing existing power plants to already overstrained state permitting agencies. These are the same state permitting agencies that have been authorized to order improvements for more than 30 years but have instead done almost nothing to reduce the impact power plants have on aquatic ecosystems. Today, almost half of the water permits for existing coal-fired power plants are expired because state agencies have either abandoned their obligation to faithfully uphold and enforce our clean water protections or are too overburdened to comply.

Almost 40 years after Congress identified cooling water intake as a threat to our waterways, the EPA has failed to force the owners of existing power plants—the nation's largest water users—to reduce their destructive impact. With its recent proposed rule, the EPA perpetuates this missed opportunity by leaving decisions about technology improvements to overburdened states that have proven incapable or unwilling to require power plants to phase out once-through cooling.

A clear, consistent national policy that restores and protects our waterways by phasing out once-through cooling is long overdue. The simple and cost-effective step of phasing out this outdated and destructive technology would represent a huge step forward in the nation's unfinished business of ensuring clean, safe and abundant waterways for all Americans.

APPENDIX

POWER PLANTS USING ONCE-THROUGH COOLING

TABLE 1: GREAT LAKES FACILITIES

PLANT NAME	STATE	FUEL TYPE	DAILY INTAKE CAPACITY (millions of gallons)
LAKE ERIE			
Ashtabula	Ohio	Coal	1,017
Avon Lake	Ohio	Coal	1,608
Bay Shore	Ohio	Coal	742
Conners Creek	Michigan	Coal	323
Dunkirk	New York	Coal	579
Eastlake	Ohio	Coal	1,158
J. R. Whiting	Michigan	Coal	308
Lake Shore	Ohio	Coal	623
Mistersky	Michigan	Oil/Gas	198
Monroe	Michigan	Coal	2,013
River Rouge	Michigan	Coal	648
Total Lake Erie facilities (12)			**9,217**
LAKE MICHIGAN			
B. C. Cobb	Michigan	Coal	558
Bailly	Indiana	Coal	443
Crawford	Illinois	Coal	552
Dean H. Mitchell	Indiana	Coal	746
Donald C. Cook	Michigan	Nuclear	2,143
Edgewater	Wisconsin	Coal	407
Fisk	Illinois	Coal	302
J. H. Campbell	Michigan	Coal	886
Kewaunee Nuclear	Wisconsin	Nuclear	460
Michigan City	Indiana	Coal	230
Point Beach Nuclear	Wisconsin	Nuclear	1,025
Port Washington	Wisconsin	Gas	594
Pulliam	Wisconsin	Coal	565
South Oak Creek	Wisconsin	Coal	1,137
State Line	Indiana	Coal	606
Trenton Channel	Michigan	Coal	516
Valley	Wisconsin	Coal	162
Waukegan	Illinois	Coal	852
Will County	Illinois	Coal	1,292
Total Lake Michigan facilities (18)			**13,476**

LAKE HURON			
Belle River	Michigan	Coal	950
Dan E. Karn	Michigan	Coal	465
Harbor Beach	Michigan	Coal	129
J. C. Weadock	Michigan	Coal	345
Marysville	Michigan	Coal	609
St. Clair	Michigan	Coal	1,344
Total Lake Huron facilities (6)			**3,842**
LAKE ONTARIO			
Ginna	New York	Nuclear	490
Huntley	New York	Coal	846
James A. Fitzpatrick	New York	Nuclear	596
Nine Mile Point	New York	Nuclear	490
Oswego Harbor Power	New York	Oil/Gas	1,399
Total Lake Ontario facilities (5)			**3,821**
LAKE SUPERIOR			
Presque Isle	Michigan	Coal	415
Total Great Lakes facilities (42)			**30,771**

Sources: U.S. Energy Information Administration, Form EIA-860, Annual Electric Generator Report, 2009; New York State Department of Environmental Conservation, Best Technology Available (BTA) for Cooling Water Intake Structures, draft policy, March 4, 2010, App. A, Table 1; Environmental Directory of U.S. Power Plants, Edison Electric Institute, 1991.
Note: Includes plants located on the shore of a Great Lake or on a tributary in close proximity.

TABLE 2: GULF OF MEXICO FACILITIES

PLANT NAME	STATE	FUEL TYPE	DAILY INTAKE CAPACITY (millions of gallons)
A. B. Paterson	Louisiana	Oil/Gas	216
Anclote	Florida	Oil/Gas	2,864
Barney M. Davis	Texas	Oil/Gas	337
Big Bend	Florida	Coal	1,395
Crystal River, Units 1, 2 & 3	Florida	Coal/Nuclear	2,168
Deepwater	Texas	Oil/Gas	125
Jack Watson	Mississippi	Coal	125
Fort Myers	Florida	Oil/Gas	563
Lansing Smith	Florida	Coal	274
Michoud	Louisiana	Oil/Gas	748
Nueces Bay	Texas	Oil/Gas	528
P. H. Robinson	Texas	Oil/Gas	1,715
P. L. Bartow	Florida	Oil/Gas	561
S. O. Purdom	Florida	Oil/Gas	62
Sabine	Texas	Oil/Gas	443
Sam Bertron	Texas	Oil/Gas	736
Webster	Texas	Oil/Gas	115
Total Gulf of Mexico facilities (17)			**12,975**

Source: U.S. Energy Information Administration, Form EIA-860, Annual Electric Generator Report, 2009.
Note: Includes plants located on the Gulf of Mexico or in coastal bays or other marine waters in immediate proximity.

TABLE 3: MISSISSIPPI RIVER FACILITIES

PLANT NAME	STATE	FUEL TYPE	DAILY INTAKE CAPACITY (millions of gallons)
Allen Steam Plant	Tennessee	Coal	497
Alma	Wisconsin	Coal	182
Baxter Wilson	Mississippi	Oil/Gas	592
Big Cajun 2	Louisiana	Coal	362
Burlington	Iowa	Oil/Gas	116
Genoa	Wisconsin	Coal	244
High Bridge	Minnesota	Gas	202
John P. Madgett	Wisconsin	Coal	322
Lansing	Iowa	Coal	331
LaO Energy Systems	Louisiana	Gas	131
Little Gypsy	Louisiana	Oil/Gas	934
Meramec	Missouri	Coal	675
Milton L. Kapp	Iowa	Coal	175
Monticello	Minnesota	Nuclear	367
Muscatine, Unit 1	Iowa	Coal	301
Nelson Dewey	Wisconsin	Coal	144
New Madrid	Missouri	Coal	956
Nine Mile Point	Louisiana	Coal	1,497
Prairie Island	Minnesota	Nuclear	911
Quad Cities	Illinois	Nuclear	1,353
Riverside	Iowa	Coal	247
Riverside	Minnesota	Coal	277
Robert E. Ritchie	Arkansas	Oil	443
Rush Island	Missouri	Coal	863
Sioux	Missouri	Coal	705
Waterford, Units 1,2 & 3	Louisiana	Oil/Gas/Nuclear	2,021
Willow Glen	Louisiana	Gas	1,292
Wood River	Illinois	Coal	589
Total Mississippi River facilities (28)			**16,428**

Sources: U.S. Energy Information Administration, Form EIA-860, Annual Electric Generator Report, 2009; Environmental Directory of U.S. Power Plants, Edison Electric Institute, 1991.
Note: Includes plants located on the main stem of the Mississippi. Where there is more than one cooling system at a plant site, the table gives the intake capacity for the units using once-through cooling. The Monticello nuclear plant uses mechanical draft cooling towers from May through September.

TABLE 4: HUDSON RIVER, LONG ISLAND SOUND, AND NEW YORK HARBOR FACILITIES

PLANT NAME	STATE	FUEL TYPE	DAILY INTAKE CAPACITY (millions of gallons)
HUDSON RIVER			
Bowline	New York	Oil/Gas	912
Danskammer	New York	Coal	457
Indian Point	New York	Nuclear	2,500
Roseton	New York	Oil	926
Total Hudson River facilities (4)			**4,795**
LONG ISLAND SOUND			
Bridgeport Harbor	Connecticut	Coal/Oil	541
Devon	Connecticut	Oil	262
Glenwood	New York	Oil/Gas	179
Millstone	Connecticut	Nuclear	2,190
New Haven Harbor	Connecticut	Oil/Gas	404
Northport	New York	Oil/Gas	939
Norwalk Harbor	Connecticut	Oil	298
Port Jefferson	New York	Oil/Gas	399
Total Long Island Sound facilities (8)			**5,212**
NEW YORK HARBOR			
Arthur Kill	New York	Oil	713
Astoria Generating	New York	Oil/Gas	1,254
Brooklyn Navy Yard	New York	Gas	55
East River Generating	New York	Oil/Gas	369
Ravenswood	New York	Oil/Gas	1,391
Total New York Harbor facilities (5)			**3,782**
Total River, Sound & Harbor facilities (19)			**13,789**

Sources: New York State Department of Environmental Conservation, Best Technology Available (BTA) for Cooling Water Intake Structures, draft policy, March 4, 2010, App. A, Table 1; U.S. Energy Information Administration, Form EIA-860, Annual Electric Generator Report, 2009; Environmental Directory of U.S. Power Plants, Edison Electric Institute, 1991; Dominion Nuclear Connecticut Millstone Power Station, NPDES permit, Revised Fact Sheet, December 10, 2007. http://www.ct.gov/dep/lib/dep/public_notice_attachments/draft_permits/071210_millstone_revised_fact_sheet.pdf (last visited May 11, 2011)
Note: Includes plants on the tidal estuary portion of the Hudson River, the shoreline of the Long Island Sound or on saline or brackish waters in immediate proximity to the Sound, and on the East River and Arthur Kill.

TABLE 5: CALIFORNIA COAST FACILITIES

PLANT NAME	FUEL TYPE	DAILY INTAKE CAPACITY (millions of gallons)
Alamitos	Oil/Gas	1,273
Contra Costa Units 6 & 7	Oil/Gas	440
Diablo Canyon	Nuclear	2,528
El Segundo	Oil/Gas	399
Encina	Oil/Gas	857
Harbor	Gas	108
Haynes	Oil/Gas	968
Huntington Beach	Oil/Gas	514
Mandalay	Oil/Gas	253
Morro Bay	Oil/Gas	668
Moss Landing Units 1, 2, 6 & 7	Oil/Gas	1,226
Ormond Beach	Oil/Gas	685
Pittsburg Units 5, 6 &7	Oil/Gas	462
Redondo Beach Units 5, 6, 7 & 8	Oil/Gas	892
San Onofre Units 2 & 3	Nuclear	2,438
Scattergood	Oil/Gas	495
South Bay	Oil/Gas	601
Total California facilities (17)		**15,038**

Source: Water Quality Control Policy on the Use of Coastal and Estuarine Waters for Power Plant Cooling, Final Substitute Environmental Document, State Water Resources Control Board, California Environmental Protection Agency, May 4, 2010, pp. 36–38, Section 2.4, Table 4. http://www.swrcb.ca.gov/water_issues/programs/ocean/cwa316/docs/cwa316may2010/sed_final.pdf
Note: The following plants were not included because they are retiring or repowering with dry cooling: Hunters Point plant (retiring); South Bay plant (retiring); Humboldt Bay (repowering).

TABLE 6: CHESAPEAKE BAY FACILITIES

PLANT NAME	STATE	FUEL TYPE	DAILY INTAKE CAPACITY (millions of gallons)
Calvert Cliffs	Maryland	Nuclear	2,233
Chalk Point	Maryland	Oil/Gas	731
Chesapeake	Virginia	Coal	514
Chesterfield	Virginia	Coal	846
Gould Street	Maryland	Oil/Gas	99
Herbert A. Wagner	Maryland	Oil/Gas	1,098
Morgantown	Maryland	Coal	1,442
Possum Point	Virginia	Oil/Gas	224
Potomac River	Virginia	Coal	450
Riverside	Maryland	Oil/Gas	54
Sparrows Point	Maryland	Gas	297
Surry	Virginia	Nuclear	1,550
Yorktown	Virginia	Oil/Gas	1,445
Total Chesapeake Bay facilities (13)			**10,983**

Sources: U.S. Energy Information Administration, Form EIA-860, Annual Electric Generator Report, 2009; Environmental Directory of U.S. Power Plants, Edison Electric Institute, 1991.
Note: Includes plants located on Chesapeake Bay or on other saline or brackish waters in immediate proximity to the bay.

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70 http://www.chesapeakebay.net/cbfeconomicreport10.aspx?menuitem=54929 (last visited May 2011).

71 "Investigations of Impingement of Aquatic Organisms at the Calvert Cliffs Nuclear Power Plant," 1975-1995 (EPA DCN 10-5444).

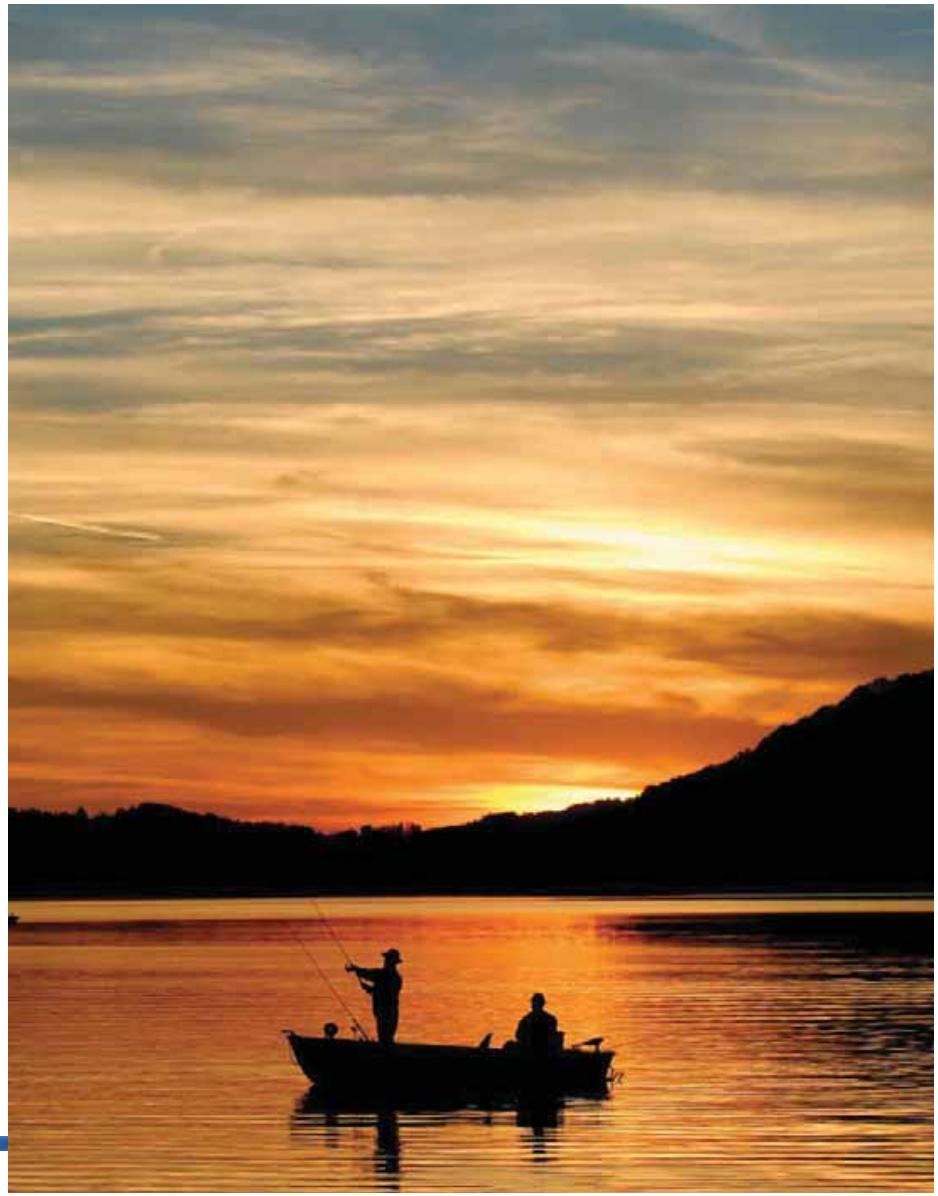
72 Ibid.

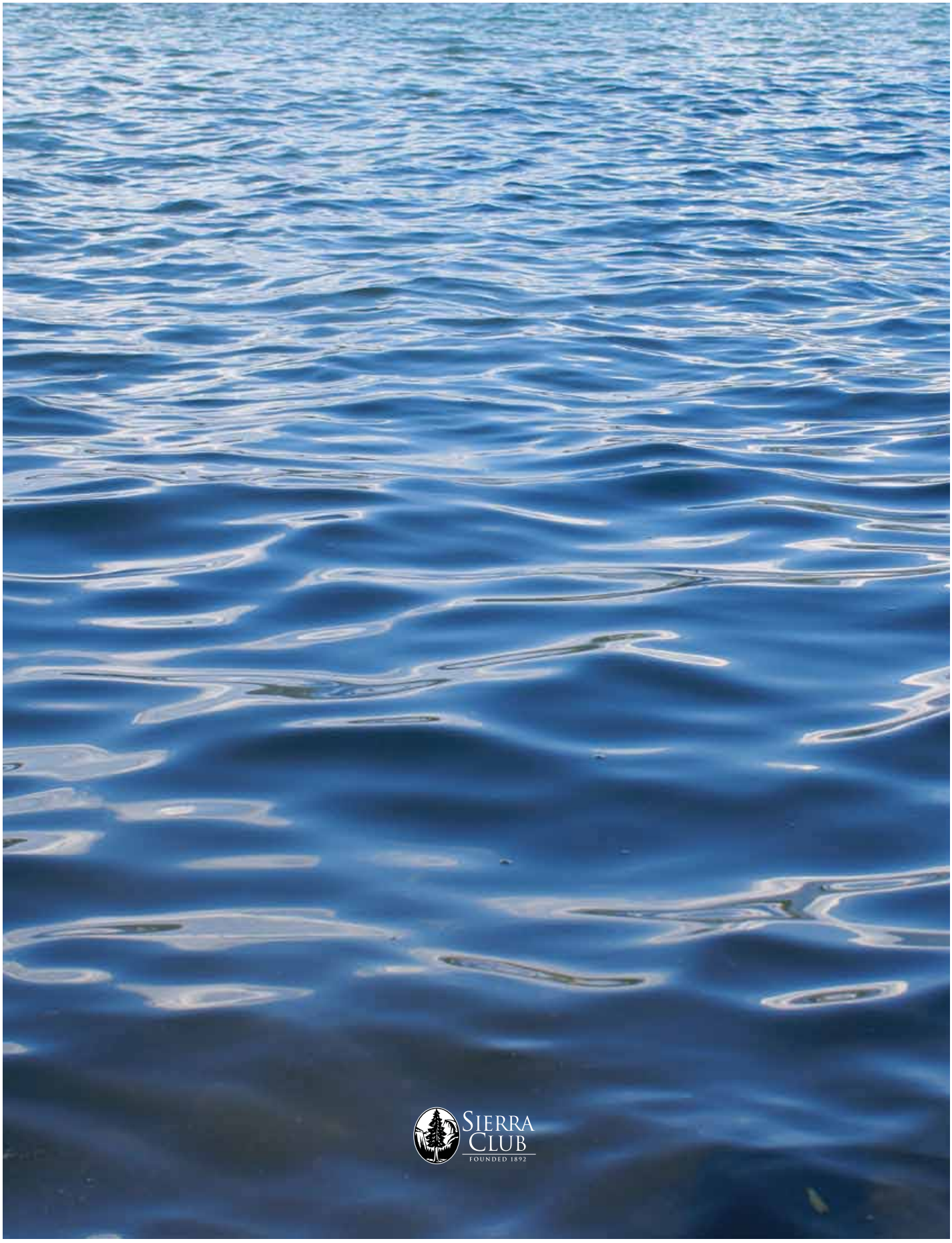
73 Ibid.

74 Ibid.

75 "Effectiveness, Operation and Maintenance, and Costs of a Barrier Net System for Impingement Reduction at the Chalk Point Generating Station" (DCN 10-5497).

76 "State of Maryland Perspectives on Cooling Water Intake Technologies to Protect Aquatic Organisms," presentation given by Richard McLean, Senior Administrator, Power Plant Research Program, Maryland Department Natural Resources, May 6–7, 2003, http://water.epa.gov/lawsregs/lawsguidance/cwa/316b/upload/2008_06_10_316b_meetings_symposium_mclean.pdf (last visited May 2011).




SIERRA
CLUB
FOUNDED 1892

AFFIDAVIT OF GILBERT HAWKINS IN SUPPORT OF VERIFIED PETITION, SWORN MARCH 21, 2014 [269- 273]

SUPREME COURT OF THE STATE OF NEW YORK
COUNTY OF QUEENS

In the Matter of the Application of SIERRA CLUB and the HUDSON RIVER FISHERMEN'S ASSOCIATION NEW JERSEY CHAPTER, INC., Petitioners, For a Judgment Pursuant to Article 78 of the Civil Practice Laws and Rules -against- JOSEPH MARTENS, COMMISSIONER, NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION, Respondent, T.C. RAVENSWOOD L.L.C., Necessary Party.	**AFFIDAVIT IN SUPPORT OF PETITIONERS' MEMORANDUM OF LAW** Index No. 2949-14

State of New Jersey)
Bergen County) ss.:

GILBERT HAWKINS, being duly sworn, deposes and says:

1. I am a resident of Leonia, a borough of Bergen County, New Jersey. My home at 123 Knapp Terrace is about 1.5 miles from the western shore of the Hudson River and about 0.5 miles from Overpeck Creek, a tributary of the Hudson.

2. I am the 2014 President of the Hudson River Fishermen's Association, New Jersey Chapter, Inc. (hereinafter "HRFA" or the "Association"), a Petitioner in the above-captioned proceeding.

3. HRFA has its mailing address at P. O. Box 421, Cresskill, New Jersey, holds Executive Board meetings at River Edge Knights of Columbus at Kinderkamack Road,

River Edge, New Jersey, and holds general membership meetings at Elk's Club Lodge #1506 in Ridgefield Park, New Jersey, and occasionally at the Palisades Center Mall in West Nyack, New York.

4. HRFA has been incorporated as a non-profit organization since 1988 and represents approximately 325 recreational fishermen who make active use of the New York Bight and the surrounding water system and are concerned with the present and future state of these fisheries. HRFA is the largest fishing group on the Hudson River and represents fishermen along the total length of the river. Most members of HRFA live in New York and New Jersey.

5. HRFA was founded in 1966 when a group of fishermen in Garrison, New York decided they had had enough of the industrial abuse of the Hudson River. The pollutants of the industrial revolution had brought the majestic Hudson River to her knees. The Association used the laws of the land to bring the Hudson River back to life, bringing lawsuits and regulatory proceedings to challenge the harms being done to the River and its watershed. The New York chapter of the Association changed its name to Riverkeeper in 1986.

6. HRFA's mission is to encourage the responsible use of aquatic resources and protection of habitat. The Association assists where possible in efforts to abate pollution and promote sport fishing and the management of that recreation.

7. I have been a member of HRFA since 1994. I have served as Environmental Director and as a member of the Board of Directors of HRFA from 1996 to the present.

8. I am a member of the Community Advisory Group for the Hudson River PCBs Superfund Site which encompasses a nearly 200-mile stretch of the Hudson River in eastern New York State from Hudson Falls, New York to the Battery in New York City, and I am a member of the Stakeholders' Advisory Working Groups for the Tappan Zee Bridge/I-287 Corridor Project.

9. I am a member of the Sierra Club. I have been a member of the Club since 2005. I am active in the Club's Hudson-Meadowlands New Jersey Group, and have served as member of the Executive Committee of the Group since 2005.

10. The East River is a significant component of the Hudson River watershed and the watershed of the New York Bight. It is one of the main fish migration routes between the Atlantic Ocean and both the Hudson River and Long Island Sound. Some of the fish migrating through the East River include sturgeon, shad, herring, blue fish, and striped bass.

11. Because the East River is constantly filled with moving water, it is a very attractive location for fish. There are two tides a day in the East River, which means that there are strong currents in the river four time a day—the incoming and outcoming flows for each tide. Millions of fish are riding on these flows in the migratory seasons.

12. Due to my association with HRFA and active participation in the activities of the organization, I am familiar with the activities of our members. HRFA has a general membership meeting once a month in Ridgefield Park, New Jersey or West Nyack, New York. The membership meetings are attended by approximately 75-100 members. I attend every meeting. At each meeting, members give reports on the fishing conditions in New York harbor. The reports at the meetings often relate to fishing on East River. At each meeting we have a lecture or guest who gives us tips and instructions of how to fish local waterways often including the East River.

13. During the fall and spring migration seasons—generally September to November and March to May—our members are fishing in the New York harbor estuary every day. Based on my experience fishing in the harbor and on the fishing reports given each month at our meetings, I estimate that three to six members will be out in their boats on the East River each day during the migration season.

14. I go out fishing whenever I can. Lately, that has been about once a month.

15. Power plant fish kills have been a concern of HRFA for many years. Among the many accomplishments of HRFA are stopping the mass slaughter of striped bass by the first Indian Point nuclear power plant, and exposing cover-ups of the fish kills. HRFA also participated in an administrative challenge to the fish kills caused by the once-through cooling system at the Danskammer power plant on the Hudson River that was decided in 2006.

16. I am aware of the fish kills caused by the once-through cooling system at the Ravenswood Generating Station and I am concerned that these fish kills are having a negative impact on our catches and on the health of the fish populations in the river. We see declines of some types of fish in the river. I am concerned that Ravenswood's once-through cooling system may be contributing to these declines.

17. The members of HRFA are sport fishermen and are taking fish with lines and bait. We do not fish for shad, which are taken by net. Of course, sturgeon are protected and no one is fishing for sturgeon. We rarely encounter sturgeon or shad. We are concerned about the decline of these species in the Hudson River watershed and are concerned that the Ravenswood once-through cooling system on the East River, a major migration route for these fish, may be a contributing to their decline.

18. Weakfish have traditionally been one of the key species fished by our members, but in the last six years weakfish have virtually disappeared from the harbor. I have observed this myself and other members have reported this at our monthly HRFA meetings.

19. A photograph taken in 2005 of myself and my son with a catch of weakfish is attached as **Exhibit A**. We have not seen weakfish like this in the harbor for six years.

20. I recently reviewed a report dated August 2006 on Ravenswood Generating Station Impingement Survival Monitoring Studies, covering March 2005– February 2006, prepared for KeySpan Corporation by ASA Analysis & Communication, Inc., and a Final Report dated October 2007 on Ravenswood Generating Station Impingement Survival Monitoring Studies covering June 2006 – February 2007, also prepared for KeySpan Corporation by ASA Analysis & Communication, Inc. These reports are attached hereto as **Exhibits B** and **C**.

21. *In reviewing these reports, I was struck by the high weakfish egg kills* caused by Ravenwood entrainment and documented in these reports.

22. I am concerned that the destruction of weakfish eggs by impingement as a result of Ravenswood's cooling water intake system has contributed to the decline of weakfish in the harbor.

23. I have personal knowledge of all facts set out in this affidavit.

GILBERT HAWKINS
123 Knapp Terrace
Leonia, New Jersey

Sworn to before me this
21st day of March, 2014

Notary Public

DEBORAH LEE BIGELOW
ID # 2361282
NOTARY PUBLIC
STATE OF NEW JERSEY
My Commission Expires June 29, 2017

EXHIBIT A TO HAWKINS AFFIDAVIT — PHOTOGRAPH OF GIL HAWKINS AND SON IN NEW YORK HARBOR WITH A CATCH OF WEAKFISH, TAKEN IN 2005

275

EXHIBIT B TO HAWKINS AFFIDAVIT — REPORT ON RAVENSWOOD GENERATING STATION IMPINGEMENT SURVIVAL MONITORING STUDIES COVERING MARCH 2005 – FEBRUARY 2006, DATED AUGUST 2006 [275- 285]

Color

RAVENSWOOD POWER STATION
ENTRAINMENT AND IMPINGEMENT MONITORING

MARCH 2005 –FEBRUARY 2006

Prepared for:

KeySpan Corporation
Environmental Engineering Department
175 East Old Country Road
Hicksville, NY 11801

Prepared by:

ASA Analysis & Communication, Inc.
90 East Main Street
Washingtonville, New York 10992

August 2006

REPORT SUMMARY

An entrainment and impingement monitoring program was conducted at the Ravenswood Power Station ("Ravenswood" or "Station") from 2 March 2005 through 21 February 2006 to fulfill a State Pollution Discharge Elimination Pennit (SPDES) requirement to conduct a one-year study to estimate the numbers of fish and selected invertebrates entrained and impinged at Ravenswood.

Ravenswood Power Station is a steam-electric generating facility that is owned and operated by KeySpan-Ravenswood, Inc. ("KeySpan"). The Station is located in Long Island City, Queens County, New York and is situated along the east bank of the lower East River. Ravenswood consists of three oil-fired, steam-electric generating units which utilize a non-contact, once-through cooling water system. The operating units, Units 10, 20, and 30, have a combined nominal rated capacity of 1,742 MWe and a design flow of 964,000 gpm (5,255,000 m^3/day). Cooling water is withdrawn from the East River into a protected embayment and to the intake structures. The intake structures are screened by wooden debris skimmers and conventional vertical traveling screens incorporating screen panels of 3/8-inch square opening vertical mesh.

Entrainment monitoring for the early life stages of fish and shellfish was conducted at Ravenswood weekly from 8 March through 30 September 2005, and then once every two weeks through 21 February 2006. One entrainment collection each for fish and shellfish was made during each 6-hour interval over the 24-hour sampling period resulting in 4 entrainment collections for fish and 4 entrainment collections for shellfish on each sampling date. Cooling water was pumped from the combined discharge canal at Ravenswood using a gasoline-powered pump with a pipe extending to mid-depth in the canal. Each entrainment collection for fish consisted of at least 100 m^3 of water and sampling typically lasted 2 hours. Entrainment samples for shellfish using a were collected concurrently with samples for fish and generally consisted of 7-8 m^3 of water.

Special entrainment studies were also conducted to examine the depth distribution and diel variation of the early life stages of fish entrained at Ravenswood. These entrainment samples were collected from surface, mid-, and bottom depths immediately in front of the center of the Unit 20 intake on a total of ten survey days, scheduled during peak seasonal periods of entrainment. One entrainment collection was made during each 3-hour interval over the 24-hour sampling period resulting in 8 entrainment collections from each of the three depths for a total of 24 samples per day on each sampling date.

For all entrainment sampling, water was pumped from the sampling location to a circular tank equipped with a 75-cm diameter plankton net with 335-µm mesh netting for the fish entrainment collections. For the shellfish entrainment collections, a fraction of the exit water from the circular tank was subsequently filtered through a 60-µm mesh net suspended in a similar barrel sampler. At the completion of each collection, the tanks were drained and the nets were carefully washed to concentrate all materials collected into the collection cups. Samples were placed in glass jars, preserved, stained, labeled, and transported to the laboratory for processing.

Impingement monitoring was conducted weekly at Ravenswood throughout the study period from 2 March 2005 through 21 February 2006. Samples consisted of all materials washed off

the intake traveling screens and collected in a 5/16-inch mesh collection basket at the screen wash water debris sump for Units 10, 20, and 30. All impinged fish and selected invertebrates were removed and identified to taxon (typically species) and age group. The total count and weight of each taxon and age group were recorded. A random sub-sample of up to 50 individuals collected from each taxon and age group were measured to the nearest millimeter and their condition recorded. A separate study of collection efficiency utilizing releases of test fish was also conducted.

Twenty-seven distinct taxonomic groups of fish were collected in entrainment sampling at Ravenswood, and 21 of these were identified to species. Post yolk-sac larvae were the most commonly entrained life stage (56 percent), followed by eggs (31 percent). Five taxa (grubby, Gobiidae, bay anchovy, fourbeard rockling, and unidentified Clupeiformes) comprised about two-thirds of the total entrainment catch. No overall patterns were discernable in the entrainment depth distribution and diel variation studies for commonly entrained species and all species combined.

Fifty-two distinct species of fish were collected in impingement sampling. Yearling and older fish made up the majority (56 percent) of impinged fish, and contributed 83 percent by weight. The top three species (blueback herring, alewife, and bay anchovy) accounted for about 45 percent of the total number impinged. Blue crab dominated targeted macroinvertebrate counts, with 98 percent of the total. Initial impingement survival varied widely by species (0 to 100 percent), and averaged 5.1 percent for all young of year fish and 21 percent for yearling and older fish. Diel variation studies showed that collections of yearling and older fish were greatest in the late evening hours. Most of the young of year fish were collected in the early morning hours. Impingement collection was consistently lowest during the mid-day.

Direct losses from entrainment and impingement at the Ravenswood intake were estimated for all species based on their sample densities and actual plant flows during the study period. Total entrainment was estimated to be 149,722,760 individuals for the year, and total impingement was 25,842 individuals. Estimates of annual losses for each species were also made utilizing full design flow at the Station.

3 MATERIALS AND METHODS

Entrainment and impingement monitoring at the Ravenswood Power Station began 2 March 2005 and ran through 21 February 2006. In general, sampling was conducted over one 24-hour period each week. Sampling protocols adhered to carefully defined Standard Operating Procedures (SOPs) (ASA 2005). The following provides a brief overview of each monitoring program.

3.1 ENTRAINMENT MONITORING

Entrainment monitoring for the early life stages of fish and shellfish was conducted at Ravenswood weekly from 8 March through 25 October 2005, and then once every two weeks through 21 February 2006. One entrainment collection each for fish and shellfish was made during each 6-hour interval over the 24-hour sampling period resulting in 4 entrainment collections for fish and 4 entrainment collections for shellfish on each sampling date. A total of 160 entrainment samples for fish and 149 entrainment samples for shellfish from Ravenswood were successfully collected (Table 3-1). Shellfish samples were not collected in early March because the sampling equipment was on backorder. Entrainment monitoring and shellfish samples were not collected for four weeks in early April and early to mid-May due to a malfunction in the discharge sampling pipe.

Sampling was conducted using a pumped entrainment sampler. Cooling water was pumped from the combined discharge canal at Ravenswood using a gasoline-powered pump with a pipe extending to mid-depth in the canal. Each entrainment collection for fish consisted of at least 100 m^3 of water and sampling typically lasted 2 hours. Entrainment samples for shellfish were collected concurrently with samples for fish and generally consisted of 7-8 m^3 of water.

Special studies were also conducted to examine the depth distribution and diel variation of the early life stages of fish entrained at Ravenswood. These entrainment samples were collected from surface, mid-, and bottom depths immediately in front of the center of the Unit 20 intake on a total of ten survey days, scheduled during peak seasonal periods of entrainment. One entrainment collection was made during each 3-hour interval over the 24-hour sampling period resulting in 8 entrainment collections from each of the three depths for a total of 24 samples per day on each sampling date. For this special study, a total of 241 entrainment samples for depth distribution and diel variation from Ravenswood were successfully collected (Table 3-1).

For all entrainment sampling, water was pumped from the sampling location to a circular tank equipped with a 75-cm diameter plankton net with 335-µm mesh netting for the fish entrainment collections. For the shellfish entrainment collections, a fraction of the exit water from the circular tank was subsequently filtered through a 60-µm mesh net suspended in a similar barrel sampler. At the completion of each collection, the tanks were drained and the nets were carefully washed to concentrate all materials collected into the collection cups. After a thorough wash-down, the collected materials (plankton and detritus) were removed from the cups, placed in glass jars, and preserved with 10 percent Formalin containing Rose Bengal dye. Each jar was then carefully labeled and transported to the laboratory for subsequent processing.

In the laboratory, the shellfish samples were archived and will not be processed unless or until appropriate and meaningful analytical protocols are developed. From the fish samples, all fish eggs, larvae and juveniles were carefully sorted from sample detritus and invertebrates. When numbers of ichthyoplankters was high, samples were randomly split using a Motota plankton-splitter and a sufficient number of splits were analyzed such that a minimum of 200 fish eggs and/or 200 fish larvae/juveniles had been sorted. For ichthyoplankters except winter flounder larvae, all specimens removed from each sample were identified to the lowest practical taxon and separated into the following life stages:

Egg – The embryonic developmental stages from spawning to hatching.

Yolk-sac larvae – The transition stage from hatching through the development of a complete, functional digestive system (regardless of the degree of yolk and/or oil globule retention).

Post yolk-sac larvae – The transition stage from development of a complete, functional digestive system to transformation to juvenile form (regardless of the degree of yolk and/or oil globule retention), including the leptocephalus stage of eels.

Juvenile – The stage following completion of a full complement of fin rays up to 12 months of age.

Winter flounder larvae were further classified into the following four stages for comparability to other winter flounder monitoring being conducted in Long Island Sound:

Stage 1 – from hatching until the yolk-sac is fully absorbed

Stage 2 – from the end of Stage 1 until the fin rays begin to develop and flexion of the notochord begins

Stage 3 – from the end of Stage 2 until the left eye migrates past the midline of the head during transformation, and

Stage 4 – from the end of Stage 3 to metamorphosis to a juvenile.

In addition, a random sample of up to 50 winter flounder larvae was measured to the nearest 0.1 mm (TL). For the other entrained larval species, length measurements to the nearest 0.1 mm (TL) were taken from up to 30 individuals per species per life stage.

The results of this laboratory processing including counts and lengths were recorded on project-specific data sheets. All laboratory processing was subject to a statistically-based quality control process based on a continuous sampling plan (derived from military-standard MIL-STD 1235B) that guarantees an Average Outgoing Quality Level (AOQL) of 90 percent or more. That is, samples selected based on the continuous sampling plan are re-inspected to assure that more than 90 percent of organisms have been removed during sorting and that an accuracy of at least 90 percent is achieved in identifying, assigning a life stage, or counting any species. Samples not achieving these acceptance limits are rejected and reprocessed.

3.2 IMPINGEMENT MONITORING

Impingement monitoring was conducted weekly from 2 March 2005 through 21 February 2006 at Ravenswood. During most weeks through October, one impingement collection was made during each 6-hour interval over the 24-hour sampling period, resulting in 4 impingement collections on each sampling date. Once per month for the other weeks, the sampling interval was shortened to 2 hours for a total of 12 impingement collections on the sampling date. From November through February, 12 samples were collected per sampling date. Samples consisted of all materials washed off the intake traveling screens and collected in a collection basket at the screen wash water debris sump for Units 10, 20, and 30 at Ravenswood. Over the study period, a total of 392 impingement samples from Ravenswood were successfully collected (Table 3-1).

A collection basket consisting of 5/16-inch mesh was placed in the debris sumps at the intakes of each unit at the start of each sampling event to intercept all screen wash water from the continuously washed screens. At the completion of each 6-hour or 2-hour impingement collection, the impinged materials were then extracted from each collection basket. All fish and selected invertebrates (blue crab, rock crab, American lobster, mantis shrimp, long-finned squid, and Japanese shore crab) were removed and identified to taxon (typically species) and age group (young of year or yearling and older). The total count and weight of each taxon and age group were recorded on project-specific data sheets. In addition, a random sample of up to 50 individuals collected from each sample, each fish taxon as well as blue crab and American lobster, and each age/length group were measured to the nearest millimeter and their condition (live, stunned, dead) was recorded.

In addition to the regularly scheduled impingement monitoring, a study to evaluate the collection efficiency of impingement was conducted on 22 March, 19 April, 19 July, and 15 November 2005 at Ravenswood using frozen white perch and goldfish. Test fish were release into the intake forebay between the trash racks and traveling screens of in-service units. The results of this direct-release study are included in Appendix A.

Table 3-1 Number of Samples Collected in Entrainment and Impingement Monitoring at Ravenswood Power Station, March 2005 – February, 2006

Date	Entrainment Monitoring Samples	Entrainment Shellfish Samples	Entrainment Depth/Diel Samples	Impingement Monitoring Samples
3/2/2005	0[1]	0[2]	NS[3]	4
3/8/2005	4	0	NS	4
3/15/2005	4	0	NS	4
3/22/2005	4	4	NS	4
3/29/2005	4	4	NS	4
4/5/2005	0[4]	0[4]	NS	4
4/12/2005	4	3	NS	4
4/18/2005	4	4	NS	4
4/26/2005	4	4	NS	4
5/3/2005	0[4]	0[4]	4	4
5/10/2005	0[4]	0[4]	21	4
5/17/2005	0[4]	0[4]	24	4
5/24/2005	4	4	24	4
5/31/2005	4	4	NS	12
6/7/2005	4	4	24	4
6/14/2005	4	4	NS	4
6/21/2005	4	4	24	4
6/28/2005	4	4	NS	12
7/5/2005	4	4	24	4
7/12/2005	4	4	NS	4
7/19/2005	4	4	24	4
7/26/2005	4	4	NS	12
8/2/2005	4	3	24	4
8/9/2005	4	4	NS	12
8/16/2005	4	4	24	4
8/23/2005	4	4	NS	4
8/30/2005	4	4	24	4
9/6/2005	4	4	NS	12
9/13/2005	4	4	NS	4
9/20/2005	4	4	NS	4
9/27/2005	4	4	NS	4
10/4/2005	4	3	NS	4
10/11/2005	4	4	NS	12
10/18/2005	4	4	NS	4
10/25/2005	4	4	NS	4
11/1/2005	4	4	NS	12
11/8/2005	NS	NS	NS	12
11/15/2005	4	4	NS	12
11/22/2005	NS	NS	NS	12
11/29/2005	4	4	NS	12
12/6/2005	NS	NS	NS	12

Table 3-1 Continued

Date	Entrainment Monitoring Samples	Entrainment Shellfish Samples	Entrainment Depth/Diel Samples	Impingement Monitoring Samples
12/13/2005	4	4	NS	12
12/20/2005	NS	NS	NS	12
12/26/2005	4	4	NS	NS
12/27/2005	NS	NS	NS	12
1/3/2006	NS	NS	NS	12
1/10/2006	4	4	NS	12
1/17/2006	NS	NS	NS	12
1/24/2006	4	4	NS	12
1/31/2006	NS	NS	NS	12
2/7/2006	4	4	NS	12
2/14/2006	NS	NS	NS	12
2/21/2006	4	4	NS	12
Total	160	149	241	392

[1] No entrainment samples were collected due to delay in initial start-up.
[2] No entrainment shellfish samples were collected due to equipment backorder.
[3] NS = no samples scheduled.
[4] Samples missed due to malfunction of discharge sampling pipe.

Table 5-1 Estimated Annual Direct Losses from Entrainment and Impingement at Ravenswood Power Station Using Actual Flow (3/2/2005 – 2/21/2006)

Taxon	Direct Losses							
	Eggs	Yolk-sac Larvae	Post Yolk-sac Larvae	Juvenile (Ent.)	All Entrained Life Stages	Juvenile (Imp.)	Yearling & Older	All Impinged Life Stages
Alewife	-	-	-	-	0	2,277	651	2,928
American eel	0	0	0	329,559	329,559	9	15	24
American shad	-	-	-	-	0	19	22	41
Atlantic croaker	0	0	2,281,339	159,888	2,441,227	95	1,589	1,684
Atlantic cutlassfish	-	-	-	-	0	0	10	10
Atlantic herring	0	0	43,003	0	43,003	88	7	95
Atlantic menhaden	22,476,098	290,458	4,894,584	0	27,661,140	899	234	1,133
Atlantic moonfish	-	-	-	-	0	32	0	32
Atlantic seasnail	-	-	-	-	0	0	9	9
Atlantic silverside	-	-	-	-	0	270	486	756
Atlantic tomcod	0	0	1,471,836	280,333	1,752,169	110	0	110
Bay anchovy	11,431,363	10,717	22,497,943	222,211	34,162,234	129	3,370	3,499
Black sea bass	-	-	-	-	0	14	34	48
Blueback herring	-	-	-	-	0	4,168	1,467	5,635
Bluefish	-	-	-	-	0	5	0	5
Bluegill	-	-	-	-	0	7	0	7
Butterfish	-	-	-	-	0	220	141	361
Clupeiformes	0	0	9,407,902	0	9,407,902	-	-	0
Cod family	2,652,092	0	0	0	2,652,092	-	-	0
Conger eel	-	-	-	-	0	0	93	93
Cunner	0	0	254,059	46,951	301,010	23	697	720
Feather blenny	0	12,628	20,095	0	32,723	-	-	0
Fourbeard rockling	8,743,187	0	0	0	8,743,187	-	-	0
Fourspot flounder	12,221	10,621	2,576	0	25,418	0	15	15
Gizzard shad	0	0	0	12,285	12,285	0	39	39
Goby family	10,712	0	18,392,887	273,909	18,677,508	-	-	0
Goldfish	-	-	-	-	0	0	6	6
Grubby	0	266,853	8,812,825	0	9,079,678	7	292	299
Gulf Stream flounder	-	-	-	-	0	21	1,432	1,453

Table 5-1 Continued

Taxon	Direct Losses							
	Eggs	Yolk-sac Larvae	Post Yolk-sac Larvae	Juvenile (Ent.)	All Entrained Life Stages	Juvenile (Imp.)	Yearling & Older	All Impinged Life Stages
Herring family	0	0	1,625,791	0	1,625,791	-	-	0
Hogchoker	0	0	9,642	0	9,642	-	-	0
Lined seahorse	-	-	-	-	0	0	40	40
Little skate	-	-	-	-	0	0	5	5
Lookdown	-	-	-	-	0	7	17	24
Northern pipefish	0	0	1,006,402	193,198	1,199,600	14	365	379
Northern puffer	-	-	-	-	0	53	9	62
Northern searobin	-	-	-	-	0	7	33	40
Northern stargazer	-	-	-	-	0	5	29	34
Oyster toadfish	0	0	0	234,710	234,710	471	426	897
Prionotus species	3,136,731	0	0	0	3,136,731	-	-	0
Red hake	-	-	-	-	0	0	200	200
Rock gunnel	0	0	549,765	0	549,765	0	81	81
Scrawled cowfish	-	-	-	-	0	0	5	5
Scup	-	-	-	-	0	283	152	435
Seaboard goby	-	-	-	-	0	0	7	7
Silver hake	-	-	-	-	0	243	289	532
Smallmouth flounder	0	0	87,766	0	87,766	0	11	11
Spiny dogfish	-	-	-	-	0	0	27	27
Spotted hake	-	-	-	-	0	0	244	244
Striped bass	0	0	89,992	0	89,992	196	698	894
Striped burrfish	-	-	-	-	0	0	12	12
Striped cusk-eel	-	-	-	-	0	0	33	33
Striped searobin	-	-	-	-	0	154	65	219
Summer flounder	0	0	159,888	0	159,888	0	22	22
Tautog	40,950	0	595,183	209,167	845,300	0	64	64
Threespine stickleback	-	-	-	-	0	0	689	689
Weakfish	9,861,948	0	741,037	0	10,602,985	502	16	518
White perch	-	-	-	-	0	0	137	137
Windowpane	3,903,396	10,396	164,564	0	4,078,356	14	101	115

Table 5-1 Continued

Taxon	Direct Losses							
	Eggs	Yolk-sac Larvae	Post Yolk-sac Larvae	Juvenile (Ent.)	All Entrained Life Stages	Juvenile (Imp.)	Yearling & Older	All Impinged Life Stages
Winter flounder	268,475	0	3,597,907	10,338	3,876,720	379	735	1,114
Wrasse family	7,904,379	0	0	0	7,904,379	-	-	0
All Taxa	70,441,552	601,673	76,706,986	1,972,549	149,722,760	10,721	15,121	25,842

286

EXHIBIT C TO HAWKINS AFFIDAVIT — FINAL REPORT ON RAVENSWOOD GENERATING STATION IMPINGEMENT SURVIVAL MONITORING STUDIES COVERING JUNE 2006 – FEBRUARY 2007, DATED OCTOBER 2007 [286- 299]

Ravenswood Generating Station

Impingement Survival Monitoring Studies

June 2006 – February 2007

Final Report

Prepared for:

KeySpan Corporation
Environmental Engineering Department
175 East Old Country Road
Hicksville, NY 11801

Prepared by:

ASA Analysis & Communication, Inc.
5 Fairlawn Drive, Suite 205
Washingtonville, New York 10992

October 2007

Introduction

The operation of cooling water intake structures is regulated under Section 316(b) of the Clean Water Act. This section requires "that the location, design, construction, and capacity of cooling water intake structures reflect the best technology available (BTA) for minimizing adverse environmental impact" (AEI). Operation of these cooling water intake structures is permitted under the National Pollutant Discharge Elimination System (NPDES) administered by the US Environmental Protection Agency (USEPA). In New York, the responsibility for the day-to-day operation of NPDES has been delegated to the New York State Department of Environmental Conservation (NYSDEC), and the requirement for BTA is administered pursuant to regulations set forth at 6 NYCRR 704.5.

As part of meeting NPDES permit requirements, KeySpan Energy conducted a detailed evaluation of BTA compliance alternatives for Ravenswood to meet NYSDEC mandated entrainment and impingement reduction requirements (ASA 2005). The compliance evaluations were conducted for Ravenswood using impingement survival rate information available from the literature together with best professional judgment on the application of those data to Ravenswood. Based on the results of this evaluation, a combination of variable-speed cooling water pumping and continuous operation of the traveling screens were selected as BTA for Ravenswood.

This report provides estimates of the survival rate of selected species of fish impinged at the Ravenswood Generating Station based on a site-specific study conducted in 2006 and 2007. The purpose of this study was to provide more reliable estimates of impingement mortality at Ravenswood.

Methods

Ravenswood Power Station is a steam-electric generating facility that is owned and operated by KeySpan. The Station is located in Long Island City, Queens County, New York and is situated along the east bank of the lower East River, directly across from Roosevelt Island. The East River is actually a 16-mile long tidal strait that separates Long Island from Manhattan Island and connects Long Island Sound to the northeast with upper New York Harbor to the south.

Ravenswood consists of three oil- and gas-fired, steam-electric generating units which utilize a non-contact, once-through cooling water system. The operating units, Units 10, 20, and 30, have a combined nominal rated capacity of 1,742 MWe and a design flow of 964,000 gpm (5,255,000 m^3/day). Cooling water is withdrawn from the East River into a protected embayment and to the intake structures, which are recessed 60 ft inside the bulkhead line. The intake structures are screened by wooden debris skimmers and conventional vertical traveling screens incorporating screen panels of 3/8-inch square opening vertical mesh.

For this study, impingement collection baskets at Ravenswood were modified to insure the all fish impinged were retained in adequate water to minimize holding stress and a holding facility was constructed to evaluate potential post-impingement mortality. The collection system consisted of an aluminum frame attached over the end of the fish return

lines. A soft net with ¼ inch mesh that was 8 feet deep with a 5 gallon pail with no drain holes attached to the cod-end was hung from the bottom of this frame. Prior to each collection, the device was lowered into place with a davit and tied into place with tag lines. The cod end was always below the surface of the water. At the end of each collection period, the tag lines were released and the device was hoisted to the deck level. The davit was then rotated over the deck and the net lowered down over the pail. The pail was decanted into plastic pans and the fish were transferred to the holding facility.

Sampling was generally conducted weekly unless plant operations or lack of fish precluded collections. On each sampling date, intake traveling screens were continuously operated. All fish were collected from the unit being sampled over an hourly or shorter interval during an eight hour period from about 6:00 pm to 2:00 am. This period was selected as it was expected to be the diel period of highest impingement rates. All fish were removed from the modified collection baskets and classified into one of three initial mortality categories: live, stunned, or dead. All live and stunned fish were then placed in holding containers which were then placed in one of two 350-gal water troughs supplied with a continuous flow of water from the East River near the Ravenswood intake.

All specimens retained were maintained in separate holding containers by collection interval and multiple containers were used to minimize the potential for predation. All retained fish were checked at the completion of 24 and 48 hours after collection to determine condition (live, stunned[1], and dead) and all dead fish were removed at each check. All dead fish and all fish remaining at the end of the test period were identified to species, counted, and measured. In addition, water quality parameters (water temperature, salinity, dissolved oxygen, and ammonia) were monitored at each check to ensure adequate holding conditions.

Results and Discussion

The original study design called for weekly impingement survival sampling during March, April, November and December 2006 and during January and February 2007. In addition, sampling was to be conducted every other week during May – October 2006. As a result of unit outages, both planned and unplanned, survival sampling could not be initiated until June 2006. As a result, impingement survival sampling was conducted on 25 dates from 12 June 2006 through 27 February 2007 (Table 1). Over this period, water temperatures ranged from near freezing (0.3 C) to more than 25 C. At the same time, dissolved oxygen ranged from 5.3 mg/l in September to more than 11 mg/l during late January and February. On all dates, dissolved oxygen concentrations were sufficiently high so as to not adversely affect impingement survival. Conductivity was generally lower in later winter and spring as a result of higher freshwater flows from the Hudson River.

A total of 545 fish spanning 35 species were collected during the course of this study (Table 2). One individual was not identifiable to species. Most of those collected were relatively small (<150 mmTL) and likely less than one year old. Survival results for all

[1] For the purposes of calculating impingement survival at each time interval, any fish classified as stunned at that time were included with those dead. However, is some cases, these stunned fish recovered resulting in higher estimates of survival in subsequent time periods.

species are presented in Table A-1. Twenty-eight of the species collected consisted of a total of less than 20 individuals. Data for these species is considered insufficient for reliable estimates of impingement survival.

Three species, black seabass, oyster toadfish, and winter flounder, were collected in relatively large numbers (>60), sufficient to permit detailed analysis of their rates of impingement survival. Together, these three species accounted for slightly more than 53 percent of the total catch in this study. Black seabass collected ranged in length from 48 to 214 mm (TL) however all but two were less than 150 mm and likely less than 1 year old (Figure 1). All were collected during the colder period of the year, beginning in early November and extending through early February. Overall initial survival was 79.0 (71.9 – 84.6)[2] percent and 78.3 (71.2 – 84.1)[2] percent after both 24 and 48 hours (Table 3). These results indicate little delayed mortality as a result of impingement stresses for this species. Estimates of impingement survival were lower for individuals collected in November (48-hr rate = 50 percent) when water temperatures averaged 12 – 14 C than for those collected when water temperatures were colder (48-hr rate = 89.4 percent).

Oyster toadfish collected ranged in length from 36 to 253 mm (TL). However, most (84 percent) were less than 150 mm and likely less than 1 year old (Figure 1). This species was collected through the study period although they were most abundant in early November and early December. Overall initial survival was 85.3 (75.0 – 91.8)[2] percent, 89.7 (80.2 – 94.9)[2] percent after 24 and 88.2 (78.4 – 93.9)[2] percent after 48 hours (Table 3). As with black seabass, these results indicate little to no delayed mortality as a result of impingement stresses for oyster toadfish. Estimated 48-hr impingement survival was 100 percent for summer (Jun – Aug), 76.7 percent for fall (Sep – Nov) and 96.3 percent for winter (Dec – Jan).

Winter flounder collected ranged in length from 40 to 290 mm (TL). However, most (72 percent) were less than 150 mm and likely less than 1 year old (Figure 1). The rest were likely a mixture and one- and two-year old individuals. This species was collected in summer (Jun – Aug) and in winter (Dec – Feb). Overall initial survival was 90.8 (81.3 – 95.6)[2] percent and 89.2 (79.4 – 94.6)[2] percent after both 24 and 48 hours (Table 3). As with the other two abundant species, these results indicate little delayed mortality as a result of impingement stresses for winter flounder. Estimated 48-hr impingement survival was 71.4 percent for summer (Jun – Aug) and 97.7 percent for winter (Dec – Feb).

In addition to the three more numerous species discuss above, sufficient numbers (20 – 26) of four other species (Atlantic silverside, blueback herring, bay anchovy, and butterfish) were collected to justify calculation of annual estimates of impingement survival, albeit with greater uncertainty than for the more abundant species. Overall annual estimates of impingement survival are presented on Table 3. Length frequency distributions for these four species are displayed on Figure 2.

Estimated impingement survival for Atlantic silverside exhibit some decline from 69.2 (49.8 – 83.5)[2] percent based on initial observation to 57.7 (38.8 – 74.5)[2] percent after 48

[2] 95 percent exact confidence interval using Bayesian methods (http://www.causascientia.org/math_stat/ProportionCI.html)

hours. However, given the width of the confidence bounds such a decline might not be statistically significant. Only for blueback herring was there strong evidence for delayed mortality resulting from impingement. For this species, impingement survival declined from 53.8(35.3 – 71.3)[2] percent based on initial observation to 34.6 (19.4 – 54.0)[2] percent after 48 hours. Since this species would be expected to be sensitive to the stresses of handling and holding as well as impingement, mortality following initial collection is likely the result of the combination of impingement and testing stresses. To the extent that handling and holding cause mortality, the 48-hr survival observed is a conservative (i.e., underestimate) of the impingement survival potential for this species at Ravenswood. Bay anchovy and butterfish exhibited very high sensitivity to impingement, with a 95% confidence interval for extended survival of 0.1 - 16.1 percent.

Based on the results of this study, the following estimates of percent impingement survival were selected as most appropriate for Ravenswood based on results from 48-hour post impingement observations:

Species	Ravenswood Impingement Survival	95 Percent Confidence Bounds[2]	Original Estimate for the FAP Alternative Evaluation[3]
Black seabass	78.3	71.2 – 84.1	50.0
Oyster toadfish	88.2	78.4 – 93.9	82.1
Winter flounder	89.2	79.4 – 94.6	41.3
Atlantic silverside	57.7	38.8 – 74.5	50.5
Blueback herring	34.6	19.4 – 54.0	14.8
Bay anchovy	0.0	0.1-16.1	0.4
Butterfish	0.0	0.1-16.1	17.6

Of these seven species, estimates of impingement survival for three of the species, oyster toadfish, Atlantic silverside, and bay anchovy, were comparable to those used in the original intake alternatives assessment at Ravenswood. For three other species, black seabass, winter flounder, and blueback herring, the site-specific estimates of impingement survival from the current study were substantially higher than those used in the original assessment. Only for one species, butterfish, was the current site-specific estimate lower than that used in the original alternatives assessment.

[3] For continuously-operated conventional traveling screens (ASA 2005).

The seven species for which sufficient numbers of individuals were collected in this study to allow estimation of impingement survival accounted for 46.4 percent of all fish collected in the most recent impingement monitoring studies conducted at Ravenswood in 2005 and 2006 (ASA 2006). This percentage, coupled with the fact that impingement survival estimates from the current study were equal to or higher than those used in the original intake alternatives assessment, suggest that the actual reductions in impingement mortality at Ravenswood may be higher than those estimated earlier.

Literature Cited

ASA 2005. Evaluation of the Fish Protection Benefits of Cooling Water Intake System Alternatives at the Ravenswood Generating Station Phase 2 Report (Revised February 2005 to Include Additional Information Requested by the NYSDEC in Letter Dated 17 November 2004). Prepared for KeySpan Energy.

ASA 2006. Ravenswood Power Station. Entrainment and Impingement Monitoring March 2005 –February 2006. Prepared for KeySpan Energy.

Table 1 - Dates of impingement survival collections and coincident water quality measurements at the Ravenswood Generating Station, 2006 - 2007.

Sample Date	Mean Water Temperature (C)	Mean Dissolved Oxygen (mg/l)	Mean Conductivity (µS/cm)
6/12/2006	17.7	7.9	30,210
6/19/2006	18.1	7.7	29,900
6/26/2006	19.3	7.8	30,520
7/3/2006	21.4	7.7	27,380
7/17/2006	23.4	7.2	35,410
7/31/2006	25.5	6.8	32,910
8/21/2006	23.2	6.2	37,300
8/28/2006	21.6	6.1	36,600
9/12/2006	20.7	5.3	35,710
10/16/2006	17.7	5.9	34,040
11/6/2006	12.4	8.1	31,767
11/13/2006	14.2	8.3	31,450
11/27/2006	12.2	9.8	31,500
12/4/2006	10.4	9.4	33,615
12/11/2006	8.8	8.7	32,730
12/26/2006	8.0	9.5	33,860
1/1/2007	8.7	9.3	34,075
1/8/2007	----------Meter out of service----------		
1/15/2007	9.4	9.9	35,085
1/22/2007	5.1	10.0	34,260
1/29/2007	5.0	11.1	35,080
2/5/2007	0.6	11.1	33,850
2/12/2007	2.2	10.1	34,795
2/20/2007	0.3	11.2	20,520
2/27/2007	2.0	11.3	30,135

Table 2 – Numbers and length ranges of fish collected in impingement survival monitoring at the Ravenswood Generating Station, 2006 - 2007.

Common name	Number Collected	Length Range (TL mm)
Black sea bass	157	48 – 214
Oyster toadfish	68	36 - 253
Winter flounder	65	40 - 290
Atlantic silverside	26	89 - 119
Blueback herring	26	65 - 119
Bay anchovy	20	59 - 101
Butterfish	20	28 - 51
Atlantic menhaden	16	35 - 112
Grubby	16	50 - 122
Gulf Stream flounder	14	49 - 83
Scup	14	33 - 69
Cunner	10	63 - 170
Red hake	10	54 - 223
Alewife	9	66 - 100
Feather blenny	8	54 - 83
Silver hake	8	66 - 98
Smallmouth flounder	8	45 - 65
Northern searobin	6	49 - 125
Spotted hake	6	77 - 101
Threespine stickleback	6	56 - 66
Northern pipefish	5	134 - 197
Spotfin butterflyfish	4	40 - 50
Striped searobin	4	31 - 89
Lined seahorse	3	75 - 98
Conger eel	2	272 - 291
Naked goby	2	46 - 58
Rock gunnel	2	119 - 128
Striped bass	2	87 - 88
American sand lance	1	113 - 113
Atlantic moonfish	1	75 - 75
Bluefish	1	55 - 55
Gizzard shad	1	131 - 131
Seaboard goby	1	50 - 50
Unidentifiable	1	447 - 447
White perch	1	139 - 139
Windowpane	1	44 - 44
Total	545	

Table 3 – Estimates of initial and extended impingement survival for the seven most abundant species collected in impingement survival monitoring at the Ravenswood Generating Station, 2006 - 2007.

Common Name	Time Period	N	Initial Observation		After 24 Hours		After 48 Hours	
			S	95% CI	S	95% CI	S	95% CI
Black seabass	Nov.	44	52.3	37.9-66.3	50.0	35.8-64.2	50.0	35.8-64.2
	Dec – Feb	113	89.4	82.3-93.8	89.4	82.3-93.8	89.4	82.3-93.8
	Overall	157	79.0	71.9-84.6	78.3	71.2-84.1	78.3	71.2-84.1
Oyster toadfish	Jun – Aug	11	100.0	73.5-99.8	100.0	73.5-99.8	100.0	73.5-99.8
	Sep – Nov	30	70.0	52.0-83.3	80.0	62.5-90.4	76.7	58.9-88.1
	Dec – Jan	27	96.3	81.7-99.1	96.3	81.7-99.1	96.3	81.7-99.1
	Overall	68	85.3	75.0-91.8	89.7	80.2-94.9	88.2	78.4-93.9
Winter flounder	Jun – Aug	21	76.2	54.6-89.3	71.4	49.8-86.1	71.4	49.8-86.1
	Dec – Feb	44	97.7	88.3-99.5	97.7	88.3-99.5	97.7	88.3-99.5
	Overall	65	90.8	81.3-95.6	89.2	79.4-94.6	89.2	79.4-94.6
Atlantic silverside	Overall	26	69.2	49.8-83.5	61.5	42.4-77.6	57.7	38.8-74.5
Blueback herring	Overall	26	53.8	35.3-71.3	38.5	22.4-57.6	34.6	19.4-54.0
Bay anchovy	Overall	20	5.0	1.1-23.8	0.00	0.1-16.1	0.00	0.1-16.1
Butterfish	Overall	20	0.00	0.1-16.1	0.00	0.1-16.1	0.00	0.1-16.1

Figure 1 Length frequency distribution for the three most abundant species collected in impingement survival sampling at Ravenswood, Jun 2006 - Feb 2007.

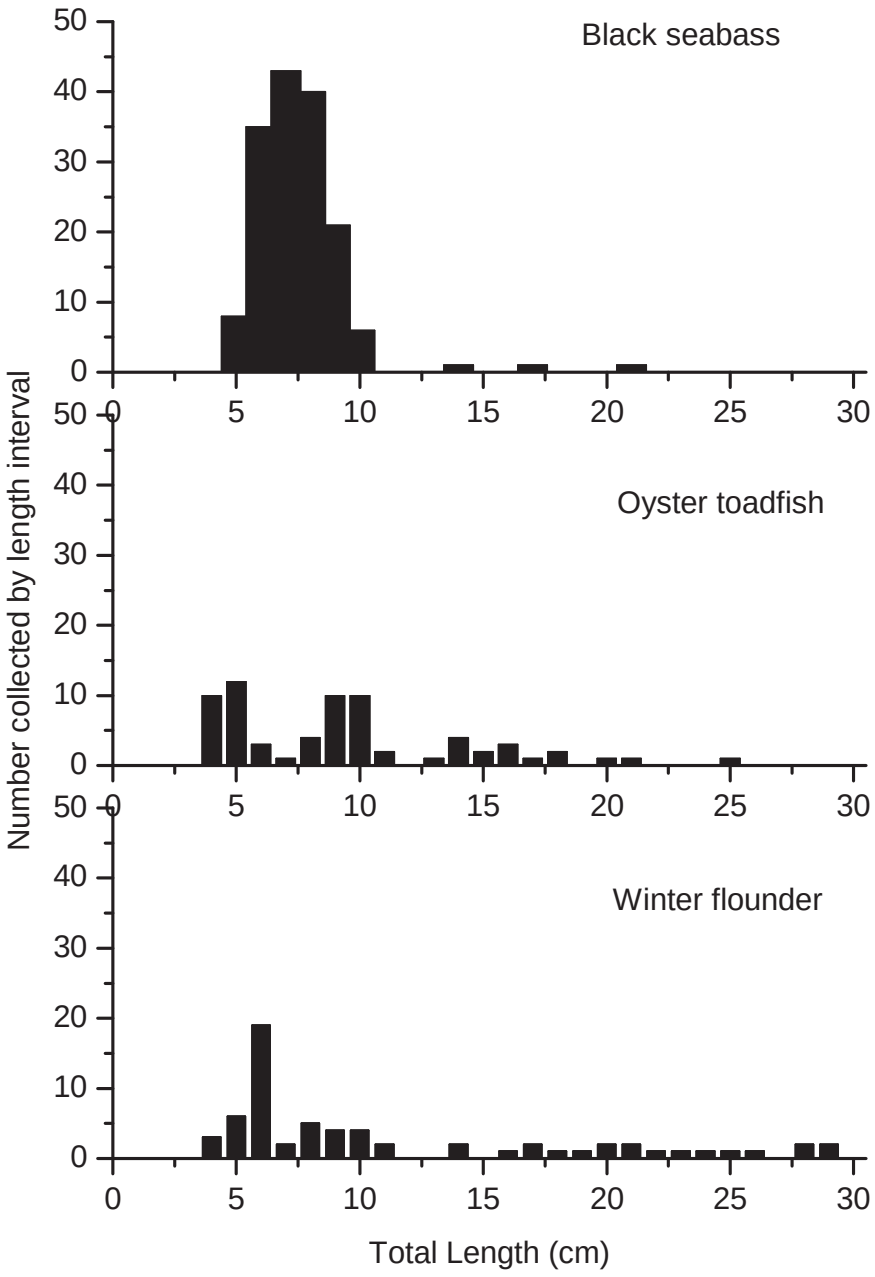
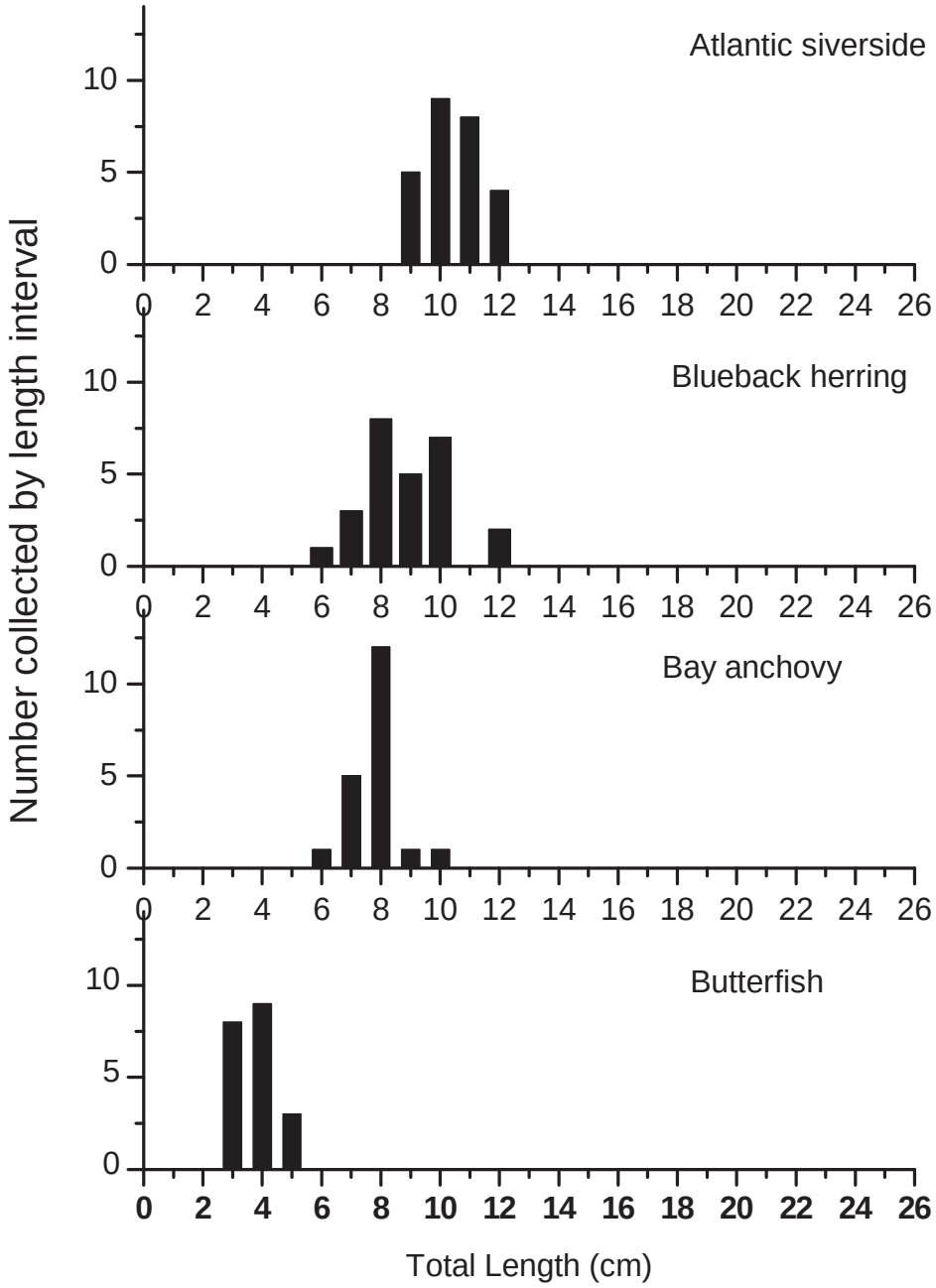


Figure 2 Length frequency distribution for the next four most abundant species collected in impingement survival sampling at Ravenswood, Jun 2006 - Feb 2007.



Appendix A

Table A-1 – Results of impingement survival monitoring at the Ravenswood Generating Station, 2006 - 2007.

Common name	Number Collected	Initial Observation			After 24 Hours			After 48 Hours		
		Live	Stun	Dead	Live	Stun	Dead	Live	Stun	Dead
Black sea bass	157	124	0	33	123	0	34	123	0	34
Oyster toadfish	68	58	3	7	61	0	7	60	0	8
Winter flounder	65	59	1	5	58	0	7	58	0	7
Atlantic silverside	26	18	0	8	16	0	9	15	0	10
Blueback herring	26	14	0	12	10	0	16	9	0	17
Bay anchovy	20	1	0	19	0	0	20	0	0	20
Butterfish	20	0	1	19	0	0	20	0	0	20
Atlantic menhaden	16	5	0	11	1	0	15	1	0	15
Grubby	16	12	0	4	12	0	4	12	0	4
Gulf Stream flounder	14	6	0	8	4	0	10	2	0	12
Scup	14	0	0	14	0	0	14	0	0	14
Cunner	10	10	0	0	10	0	0	10	0	0
Red hake	10	5	0	5	5	0	5	5	0	5
Alewife	9	7	0	2	7	0	2	5	0	4
Feather blenny	8	5	0	3	5	0	3	3	0	5
Silver hake	8	5	0	3	5	0	3	5	0	3
Smallmouth flounder	8	0	0	8	0	0	8	0	0	8
Northern searobin	6	4	0	2	4	0	2	4	0	2
Spotted hake	6	3	0	3	3	0	3	3	0	3
Threespine stickleback	6	6	0	0	6	0	0	6	0	0
Northern pipefish	5	1	0	4	1	0	4	1	0	4
Spotfin butterflyfish	4	3	0	1	3	0	1	3	0	1
Striped searobin	4	2	0	2	2	0	2	2	0	2
Lined seahorse	3	3	0	0	3	0	0	3	0	0
Conger eel	2	2	0	0	2	0	0	2	0	0
Naked goby	2	0	0	2	0	0	2	0	0	2
Rock gunnel	2	2	0	0	2	0	0	2	0	0
Striped bass	2	2	0	0	0	0	2	0	0	2
American sand lance	1	0	0	1	0	0	1	0	0	1
Atlantic moonfish	1	0	0	1	0	0	1	0	0	1
Bluefish	1	0	0	1	0	0	1	0	0	1
Gizzard shad	1	0	0	1	0	0	1	0	0	1
Seaboard goby	1	0	0	1	0	0	1	0	0	1
Unidentifiable	1	1	0	0	1	0	0	1	0	0
White perch	1	0	0	1	0	0	1	0	0	1
Windowpane	1	1	0	0	1	0	0	1	0	0

AFFIRMATION OF RACHEL TREICHLER, ESQ. IN SUPPORT OF VERIFIED PETITION, DATED MARCH 21, 2014 [300- 301]

SUPREME COURT OF THE STATE OF NEW YORK
COUNTY OF QUEENS

In the Matter of the Application of SIERRA CLUB and the HUDSON RIVER FISHERMEN'S ASSOCIATION NEW JERSEY CHAPTER, INC., Petitioners, For a Judgment Pursuant to Article 78 of the Civil Practice Laws and Rules -against- JOSEPH MARTENS, COMMISSIONER, NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION, Respondent, T.C. RAVENSWOOD L.L.C., Necessary Party.	**AFFIRMATION IN SUPPORT OF PETITIONERS' MEMORANDUM OF LAW** Index No. 2949-14

I, Rachel Treichler, an attorney admitted to the practice of law before the courts of the State of New York, affirm the following to be true under the penalties of perjury pursuant to CPLR 2106:

1. I am an attorney for the Petitioners in the above-captioned matter.

2. On August 13, 2013, I made a FOIL request to the DEC that included a request for "environmental reviews conducted of SPDES permits and renewals" for the Ravenswood Generating Station. A copy of my FOIL request is attached as **Exhibit A**.

3. On August 27, 2013, I received a response to my FOIL request from the DEC. A copy the response to my FOIL request is attached as **Exhibit B**. The response to my request for environmental reviews relating to Ravenswood's SEQRA permits was as follows:

Item 5. All environmental reviews conducted in connection with the issuance of any Ravenswood SPDES permit: Environmental reviews are a process not a record. The results of that process are primarily documented by the permit application and issued permit have been provided.

4. On March 21, 2013, I made a FOIL request to the DEC for a table summarizing the contents of the water withdrawal reporting forms received by the DEC in 2012 and 2013. A copy of my FOIL request is attached as **Exhibit C**.

5. The Excel file and accompanying letters I received from the DEC in response on March 27, 2013, are attached as **Exhibit D**.

6. On March 20, 2014, I downloaded the Bill Jacket for 2012 Assembly Bill 5318-A from the website http://iarchives.nysed.gov/PubImageWeb/viewImageData.jsp?id=185892. A copy of the downloaded bill jacket is attached as **Exhibit E.**

Dated: March 21, 2014

Rachel Treichler
7988 Van Amburg Road
Hammondsport, NY 14840
(607) 569-2114

Attorney for the Petitioners

EXHIBIT A TO TREICHLER AFFIRMATION — FOIL REQUEST FOR RAVENSWOOD SPDES PERMITS, DATED AUGUST 13, 2013

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

APPLICATION FOR ACCESS TO RECORDS

(See Instructions on Reverse Side)

APPLICANT

- **TO THE DEPARTMENT OF ENVIRONMENTAL CONSERVATION:**
  I hereby apply to inspect the following records under the provisions of the Freedom of Information Law:

Address of Facility or Site (if applicable)
Ravenswood Generating Station
38-54 Vernon Blvd
Queens, NY 11101

Spill No. (if applicable)_____ Facility ID No. (if applicable) _____

PBS No. (if applicable)_____

Other: 1. water withdrawal permit application, 2. DEC draft permit, 3. Determination that permit issuance a Type II action, 4. SPDES permit, 5. SPDES applications, 6. Environmental reviews conducted of SPDES permits and renewals, 7. NYC Coastal Management Map, 8. Determination that not located in Coastal Man. area

After inspection, should I desire copies of all or part of the records inspected, I will identify the records to be copied and hereby offer to promptly pay the established fees. (Cost of reproduction or 25¢ per page as applicable). Contact me if cost will exceed $ 25.00 .

Name (Print or type) Rachel Treichler Telephone No. (607) 569-2114 Fax No._____

Company (if applicable) _____ E-Mail Address treichlerlaw@frontiernet.net

Mailing Address 7988 Van Amburg Road, Hammondsport, NY 14840

Signature Rachel Treichler Date Aug. 13, 2013

RECORDS CUSTODIAN

TO APPLICANT:

RECORDS PROVIDED

____ The reproduction costs for the records provided $_____

____ Records have been (partially, fully) provided

(If not provided, date when records are expected to be fully provided:_____)

RECORDS NOT AVAILABLE

____ Records cannot be located after a diligent search ____ The Department is not the custodian for records indicated

RECORDS DENIED

I hereby advise that access to the records, or part of the records, has been denied for the reason(s) checked below:

____ Specifically exempt by another statute

____ Would impair present or imminent contract awards or collective bargaining negotiations

____ Compiled for law enforcement purposes

____ Inter-agency or intra-agency materials that are not:

- statistical or factual tabulations or data
- instructions to staff that affect the public
- final agency policy or determinations; or
- external audits, including but not limited to audits performed by the comptroller and the Federal government

____ Unwarranted invasion of privacy

____ Trade secrets

____ Could endanger life or safety of any other person

____ Other exemptions (as applicable)

Records Custodian signature_____ Date:_____

EXHIBIT B TO TREICHLER AFFIRMATION — DEC RESPONSE TO FOIL REQUEST, DATED AUGUST 27, 2013 [303-304]

New York State Department of Environmental Conservation
Division of Environmental Permits, 4th Floor
625 Broadway, Albany, NY 12233-1750
Phone: (518) 402-9167 • **Fax:** (518) 402-9168
Website: www.dec.ny.gov

Joe Martens
Commissioner

August 27, 2013

Ms. Rachel Treichler
7988 Van Amburg Rd
Hammondsport, NY 14840

Re: Ravenswood FOIL Request
FOIL # 13- 2533

Dear Ms. Treichler;
I am writing in response to your August 13, 2013 FOIL Request for information on the Ravenswood Generation Station. After reviewing Department records I can provide the following response to your requests:

Item 1 Water Withdrawal Permit Application filed on behalf of the Ravenswood Generating Station: Enclosed.

Item 2 Draft Water Supply Permit prepared for Ravenswood Generating Station:
A Draft Permit has not been prepared. Under the Uniform Procedures Act draft permits are only required for federally delegated permits under the Clean Air Act or The Clean Water Act.

Item 3 Current SPDES permit for the Ravenswood Generating Station:
Enclosed.

Item 4 The most recent SPDES application filed on behalf of the Ravenswood Generating Station: The Bureau of Water Permit within the Division of Water has provided SPDES permit applications and permits

Item 5 All environmental reviews conducted in connection with the issuance of any Ravenswood SPDES permit: Environmental reviews are a process not a record. The results of that process are primarily documented by the permit application and issued permit have been provided.

Item 6 The Determination that the Water Withdrawal Permit is a Type II action under SEQRA:
The Department does not generate a separate document when it determines that the action is type II under SEQRA. However, The Department has determined that the issuance of "initial permits" under ECL section 15-501.9 as implemented by 6 NYCRR 601.7 is a ministerial action and therefore subject to the Type II exemption set out in 6 NYCRR 617.5(c)(19).

Item 7 The Determination that the Ravenswood Generating Station is not located in a Coastal Management Area:
Upon further review the Department has determined that the facility is within the Coastal Management Area and a Coastal Consistency Certification has been prepared.

Item 8 The Coastal Erosion Hazard Areas (CEHA) maps in New York City and Long Island Sound:
Provided on the attached CD

Sincerely,

Kent P. Sanders
Deputy Chief Permit Administrator
Division of Environmental Permits
NYSDEC - Albany

Cc: Records Access

EXHIBIT C TO TREICHLER AFFIRMATION — FOIL REQUEST FOR WATER WITHDRAWAL REPORTING INFORMATION, DATED MARCH 21, 2013

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

APPLICATION FOR ACCESS TO RECORDS

(See Instructions on Reverse Side)

APPLICANT

- **TO THE DEPARTMENT OF ENVIRONMENTAL CONSERVATION:**

I hereby apply to inspect the following records under the provisions of the Freedom of Information Law:

Address of Facility or Site (if applicable)

Spill No. (if applicable)_____ Facility ID No. (if applicable) _____

PBS No. (if applicable)_____

Other: Copies of all Water Withdrawal Reporting Forms filed with the Department in 2012 and 2013 and any memos, tables, or charts describing or summarizing the information contained in those forms.

After inspection, should I desire copies of all or part of the records inspected, I will identify the records to be copied and hereby offer to promptly pay the established fees. (Cost of reproduction or 25¢ per page as applicable). Contact me if cost will exceed $ 15.00.

Name (Print or type) Rachel Treichler Telephone No. (607) 569-2114 Fax No._____

Company (if applicable) Law Office of Rachel Treichler E-Mail Address treichlerlaw@frontiernet.net

Mailing Address 7988 Van Amburg Road, Hammondsport, NY 14840

Signature Rachel Treichler Date March 21, 2013

RECORDS CUSTODIAN

TO APPLICANT:

RECORDS PROVIDED

___ The reproduction costs for the records provided $_____

___ Records have been (partially, fully) provided

(If not provided, date when records are expected to be fully provided:_____)

RECORDS NOT AVAILABLE

___ Records cannot be located after a diligent search ___ The Department is not the custodian for records indicated

RECORDS DENIED

I hereby advise that access to the records, or part of the records, has been denied for the reason(s) checked below:

___ Specifically exempt by another statute

___ Would impair present or imminent contract awards or collective bargaining negotiations

___ Compiled for law enforcement purposes

___ Inter-agency or intra-agency materials that are not:

- statistical or factual tabulations or data
- instructions to staff that affect the public
- final agency policy or determinations; or
- external audits, including but not limited to audits performed by the comptroller and the Federal government

___ Other exemptions (as applicable)

___ Unwarranted invasion of privacy

___ Trade secrets

___ Could endanger life or safety of any other person

Records Custodian signature_____ Date:_____

306

EXHIBIT D TO TREICHLER AFFIRMATION — DEC RESPONSE TO FOIL REQUEST, DATED MARCH 27, 2013 [306- 329]

Foil No. 13-1022

Subject: Foil No. 13-1022
From: "Richard Kruzansky" <rhkruzan@gw.dec.state.ny.us>
Date: 3/27/2013 8:29 AM
To: <treichlerlaw@frontiernet.net>
CC: "Records Access" <foil@gw.dec.state.ny.us>, "Maureen Martinez" <mumartin@gw.dec.state.ny.us>, "Suzanne Anson" <smanson@gw.dec.state.ny.us>

Please find information attached.

Attachments:

Foil No. 13-1022Treichler.doc	31.5 KB
FOIL 13-1022 .xlsx	104 KB

New York State Department of Environmental Conservation
Division of Water
Bureau of Water Resource Management, 4th Floor
625 Broadway, Albany, New York 12233-3508
Toll Free: (877) 472-2619 • **Phone:** (518) 402-9185 • **Fax:** (518) 402-9018
Website: www.dec.ny.gov
Email: AWQRS@gw.dec.state.ny.us

Joseph Martens
Commissioner

March 27, 2013

Ms. Rachel Treichler
Law Office of Rachel Treichler
7988 Van Amburg Road
Hammondsport, NY 14840

Re: Foil No. 13-1022
Water Withdrawal Reporting Information

Dear Ms. Treichler:

The Bureau of Water Resource Management, within the Division of Water (DOW), has received your Freedom of Information Requests dated March 21, 2013.

Attached is an Excel spreadsheet of the information to be responsive to your request.

Questions relative to this request may be sent to:

NYSDEC
Division of Water
Bureau of Water Resource Management,
625 Broadway, 4th Floor
Albany, NY 12233-3508
Telephone # 518 402-8182

Sincerely,

Richard Kruzansky
Engineering Geologist

cc: Ruth Earl
Anson, Suzanne
Maureen Martinez

FACILITY NAME	FACILITY TOWN/CITY	FACILITY COUNTY	ve_Day_Withdraw	Units_Ave_Day	ax_Day_Withdrav	Units_Max_Day
102nd Street Landfill	Niagara Falls (C)	Niagara	0.001	MGD	0.0034	MGD
59th Street Steam Station	New York (T)	New York	1.6	MGD	4.3	MGD
A Zimmerman & Son	Lloyd (T)	Ulster				
AA Dairy	Candor (T)	Tioga	38500	GPD	41800	GPD
Abe Datthyn Farms	Sodus (T)	Wayne	4390	GPD	120000	GPD
Adams, Vg	Adams (T)	Jefferson	0.695	MGD	0.909	MGD
Adirondack Beverages	Glenville (T)	Schenectady	286254	GPD	539444	GPD
Adirondack Correctional Facility	North Elba (T)	Essex	326590	GPD	386910	GPD
Adirondack Farm LLC	Ausable (T)	Clinton	104938	GPD	121545	GPD
Adirondack Hatchery	Santa Clara (T)	Franklin	2.61	MGD	3.17	MGD
AES Cayuga (Cayuga Operating Company)	Lansing (T)	Tompkins	214.12	MGD	243.36	MGD
AES Greenridge LLC	Torrey (T)	Yates	64634881	GPD	64634881	GPD
AES Somerset (Somerset Operating Company)	Somerset (T)	Niagara	239	MGD	274	MGD
AES Westover LLC	Union (T)	Broome	50.7	MGD	57.6	MGD
Afton, Vg	Afton (T)	Chenango	203288	GPD	520000	GPD
AG Energy (Ogdensburg Energy)	Ogdensburg (C)	St. Lawrence				
Agri-Mark, Inc - Chateaugay Plant	Chateaugay (T)	Franklin	628939	GPD		
Agro-Farma - New Berlin	Columbus (T)	Chenango	0.579	MGD	0.971	MGD
Agro-Farma Campus	Norwich (T)	Chenango	10298	GPD	25560	GPD
Airway Meadows Golf Course	Northumberland (T)	Saratoga	20834	GPD	300000	GPD
Akron, Vg	Bennington (T)	Wyoming	411465	GPD	646000	GPD
Albany Country Club	Guilderland (T)	Albany	33415	GPD	482143	GPD
Albany International	Homer (T)	Cortland	147052	GPD	318380	GPD
Albany Water Filtration	Coeymans (T)	Albany	19.6	MGD	23.6	MGD
Albertson Water District	North Hempstead (T)	Nassau	2	MGD	4.6	MGD
Albion, Vg	Carlton (T)	Orleans	1.48	MGD	2.27	MGD
Alcoa East Plant Intake (Reynolds Metals)	Massena (T)	St. Lawrence	0.48	MGD	0.7	MGD
Alden, Vg	Alden (T)	Erie	215341	GPD	321300	GPD
Alfred, Vg	Alfred (T)	Allegany	363500	GPD	600000	GPD
Allegany State Park - Barton Weller	Cold Spring (T)	Cattaraugus	15.6	GPM	230	GPM
Allegany State Park - Long Point	Ellery (T)	Chautauqua	4000	GPD	8000	GPD
Allegany State Park - Route 1 (Red House)	Red House (T)	Cattaraugus		GPD		GPD
Allegany Station	Hume (T)	Allegany	86500	GPD	499000	GPD
Allegany, Vg	Allegany (T)	Cattaraugus	462199	GPD	548200	GPD
Allenwaite Farms, Inc	Easton (T)	Washington	102687	GPD	117480	GPD
Altamont Orchards	Guilderland (T)	Albany	1000	GPD	120000	GPD
Altamont, Vg	Guilderland (T)	Albany	158000	GPD	279000	GPD
Altona Correctional Facility	Altona (T)	Clinton	79361	GPD	118600	GPD
Amawalk - Shenorock Water District	Somers (T)	Westchester		GPD	74100	GPD
Amdur Park, Woodbury Water District #6	Woodbury (T)	Orange	0.014	MGD	0.036	MGD
Amenia Water District #1	Amenia (T)	Dutchess	95091	GPD	186300	GPD
American Sugar Refining Inc.	Yonkers (C)	Westchester	7.5	MGD	12.3	MGD
Amos Zittel & Sons	Eden (T)	Erie	34000	GPD	100000	GPD
AMRI Rensselaer	Rensselaer (C)	Rensselaer	0.835	MGD	1.613	MGD
Amsterdam, City	Providence (T)	Saratoga	5.6	MGD	7.1	MGD
Anderson Farms	Riverhead (T)	Suffolk	325000	GPD	900000	GPD
Andes Water District #1	Andes (T)	Delaware	22272	GPD	51390	GPD
Andover, Vg	Andover (T)	Allegany	194660	GPD	392000	GPD
Angelica, Vg	West Almond (T)	Allegany	121334	GPD	228000	GPD
Anglebrook Golf Club	Somers (T)	Westchester	145958	GPD	450000	GPD
Antwerp, Vg	Antwerp (T)	Jefferson	60889	GPD	93000	GPD
Apawamis Club	Rye (C)	Westchester	21000	GPD	250000	GPD
APC Paper Company of New York	Norfolk (T)	St. Lawrence	0.194	MGD	0.38	MGD
Aqua Arbor	Chateaugay (T)	Franklin				
Aqua Arbor	Chateaugay (T)	Franklin				
Arcade, Vg	Arcade (T)	Wyoming	0.54	MGD	0.6	MGD
Arcade, Vg, Sandusky Water	Freedom (T)	Cattaraugus	11688	GPD	18677	GPD
Arcady Bay Association	Hague (T)	Warren	9300	GPD	33600	GPD
ArcelorMittal Lackawanna	Hamburg (T)	Erie	25	MGD	25	MGD
Arkport, Vg	Hornellsville (T)	Steuben	95340	GPD	100000	GPD
Arlington High School	La Grange (T)	Dutchess	10225	GPD	45900	GPD
Arrowhead Golf Club	Cicero (T)	Onondaga	92076	GPD	243000	GPD
Arthur Kill Generating Station	Richmond (T)	Richmond	480	MGD	712.8	MGD
Astoria Generating Station	Queens (T)	Queens	455.6	MGD	723.7	MGD
Attica Water Plant	Attica (T)	Wyoming	933000	GPD	1168000	GPD
Au Sable Forks Water District	Jay (T)	Essex	193238	GPD	300000	GPD
Auburn, City	Owasco (T)	Cayuga	4.829	MGD	6.21	MGD
Aurora Ridge Dairy LLC	Ledyard (T)	Cayuga	100274	GPD	123333	GPD
Ausable Club	Keene (T)	Essex	33000	GPD	109000	GPD
Avoca, Vg	Avoca (T)	Steuben	61669	GPD	115000	GPD
Avon, Vg	Livonia (T)	Livingston	0.839	MGD	1.39	MGD
Ayers & Gillette LLC	Pike (T)	Wyoming	0.135	MGD		
B J Farms	Easton (T)	Washington	123556	GPD	139355	GPD
Back O'Beyond	Southeast (T)	Putnam	41318	GPD	275000	GPD

FACILITY NAME	FACILITY TOWN/CITY	FACILITY COUNTY	ve_Day_Withdraw	Units_Ave_Day	ax_Day_Withdrav	Units_Max_Day
Bainbridge, Vg	Bainbridge (T)	Chenango	0.213	MGD	0.296	MGD
Baldwinsville, Vg	Lysander (T)	Onondaga	0.951	MGD	1.743	MGD
Ballston Spa Country Club	Milton (T)	Saratoga	100000	GPD	360000	GPD
Ballston Spa, Vg	Saratoga Springs (C)	Saratoga	0.87	MGD	1.804	MGD
Balmat Mines	Fowler (T)	St. Lawrence	0.37	MGD	0.53	MGD
Barber Brothers	Northumberland (T)	Saratoga	29673	GPD	34070	GPD
Barber Family Farm	Fulton (T)	Schoharie	2071	GPD	126000	GPD
Bard College	Red Hook (T)	Dutchess	74780	GPD	157000	GPD
Barneveld, Vg	Trenton (T)	Oneida	35087	GPD	57000	GPD
Barre Stone Products	Barre (T)	Orleans	3.9	MGD	6.6	MGD
Barrett - Litchfield Quarry	Litchfield (T)	Herkimer	0.35	MGD	0.74	MGD
Barrett - Norwood Quarry	Norfolk (T)	St. Lawrence	2.23	MGD	6.82	MGD
Barrett - Watertown Quarry	Pamelia (T)	Jefferson	1.2	MGD	2.64	MGD
Barrow's View Club	Spafford (T)	Onondaga	0	GPD	0	GPD
Batavia, City	Batavia (C)	Genesee	2.78	MGD	4.49	MGD
Bath Fish Hatchery	Urbana (T)	Steuben	2.13	MGD	2.56	MGD
Bath Veterans Adminstration	Bath (T)	Steuben	153903	GPD	203000	GPD
Bath, Vg	Bath (T)	Steuben	0.946	MGD	2.05	MGD
Battle Island Golf	Granby (T)	Oswego	101342	GPD	338350	GPD
Beacon, City	Fishkill (T)	Dutchess	2.35	MGD	3.2	MGD
Beak & Skiff Apple Farms	Onondaga (T)	Onondaga	126000	GPD	126000	GPD
Bear Mountain Water Supply	Highlands (T)	Orange	0.156	MGD	0.242	MGD
Bedford Consolidated Improvement District #1	Bedford (T)	Westchester	0.65	MGD	1.33	MGD
Bedford Creek Golf Course	Hounsfield (T)	Jefferson	16000	GPD	360000	GPD
Bedford Golf and Tennis Club	Bedford (T)	Westchester	33410	GPD	0.5	MGD
Bedford Hills Correctional Facility	Bedford (T)	Westchester	0.3	MGD	0.334	MGD
Beekman Country Club	East Fishkill (T)	Dutchess	76004	GPD	900945	GPD
Beekman Country Club - Water Company	East Fishkill (T)	Dutchess	94774	GPD	403300	GPD
Belfast Water District	Belfast (T)	Allegany	57000	GPD	180000	GPD
Belle Terre Farm	Sodus (T)	Wayne	15780	GPD	216000	GPD
Belmont, Vg	Amity (T)	Allegany	228000	GPD	318000	GPD
Bergen Farms	Hector (T)	Schuyler	80000	GPD	130000	GPD
Berkshire Farm Center	Canaan (T)	Columbia	42349	GPD	100128	GPD
Bethlehem Energy Center	Bethlehem (T)	Albany	2.52	MGD	5.25	MGD
Bethlehem Water District #1	New Scotland (T)	Albany	5.367	MGD	9.057	MGD
Bieler Enterprises	Williamstown (T)	Oswego	698512.5	GPD	1259000	GPD
Big Flats, Tn	Big Flats (T)	Chemung	0.524	MGD	1.045	MGD
Big O Farms Inc	Elba (T)	Genesee	3168000	GPD	4752000	GPD
Bilow Farm	Bellmont (T)	Franklin	90878	GPD	98890	GPD
Binghamton, City	Binghamton (C)	Broome	6.5	MGD		
Black River Generation, LLC (ReEnergy)	Le Ray (T)	Jefferson	0	GPD	0	GPD
Black River, Vg	Le Ray (T)	Jefferson	179488	GPD	290000	GPD
Blackberry Hill Water District	Southeast (T)	Putnam	41101	GPD	64430	GPD
Blackhead Mountain Lodge & Country Club	Cairo (T)	Greene	50000	GPD	120000	GPD
Blind Brook Club	Rye (T)	Westchester	26027	GPD	320000	GPD
Bloomfield, Vg	East Bloomfield (T)	Ontario	155510	GPD		
Blooming Grove Water District #1	Blooming Grove (T)	Orange	0.25	MGD	0.299	MGD
Blooming Grove Water District #2, Oxford	Blooming Grove (T)	Orange	0.01	MGD	0.02	MGD
Blooming Grove Water District #3, Tomahawk	Blooming Grove (T)	Orange	0.011	MGD	0.034	MGD
Blooming Grove Water District #4, Tappan	Blooming Grove (T)	Orange	0.031	MGD	0.057	MGD
Blooming Grove Water District #5, Mountain View	Blooming Grove (T)	Orange	0.021	MGD	0.04	MGD
Blue Heron Hills Country Club	Walworth (T)	Wayne	57884	GPD	200000	GPD
Blue Mountain Lake Water District #1	Indian Lake (T)	Hamilton	0.04	MGD	0.132	MGD
Bolivar, Vg	Bolivar (T)	Allegany	170553	GPD	337000	GPD
Bolton Landing, City	Bolton (T)	Warren	198127	GPD	550834	GPD
Bonded Concrete - Cammarota Pit	Schaghticoke (T)	Rensselaer	207000	GPD	360000	GPD
Bonded Concrete - Gravesville Plant	Russia (T)	Herkimer	207000	GPD	360000	GPD
Bonded Concrete - Nassau Quarry	Nassau (T)	Rensselaer	207000	GPD	360000	GPD
Bonded Concrete - Schultz Construction Mine/Prov B	Ballston (T)	Saratoga	207000	GPD	360000	GPD
Bonded Concrete - Weir Sand & Gravel Mine	Schaghticoke (T)	Rensselaer	207000	GPD	360000	GPD
Bonded Concrete - West Sand Lake Pit	Sand Lake (T)	Rensselaer	450000	GPD	780000	GPD
Bonduelle USA - Bergen Facility	Bergen (T)	Genesee	94342	GPD	479900	GPD
Bonduelle USA - Oakfield Facility	Oakfield (T)	Genesee	189029	GPD	1055582	GPD
Boonville Quarry	Leyden (T)	Lewis	1.32	MGD	3.44	MGD
Boonville, Vg	Boonville (T)	Oneida	248000	GPD	785700	GPD
Boralex NY (ReEnergy New York)	Chateaugay (T)	Franklin	157000	GPD	338000	GPD

FACILITY NAME	FACILITY TOWN/CITY	FACILITY COUNTY	ve_Day_Withdraw	Units_Ave_Day	ax_Day_Withdrav	Units_Max_Day
Borella's Farm	Smithtown (T)	Suffolk	90000	GPD	180000	GPD
Bowman Farms	North Collins (T)	Erie	228000	GPD	501600	GPD
Brae Burn Country Club	Harrison (T)	Westchester	55479	GPD	450000	GPD
Brantling Ski Slopes	Arcadia (T)	Wayne	75269	GPD	727272	GPD
Brewster Heights	Southeast (T)	Putnam	41101	GPD	64430	GPD
Brewster Heights - Middle Branch	Southeast (T)	Putnam	92600	GPD		
Brewster, Vg	Southeast (T)	Putnam	202000	GPD	213510	GPD
Briermere Farms	Riverhead (T)	Suffolk	373714	GPD	450000	GPD
Brierwood Country Club	Hamburg (T)	Erie	55746	GPD	350000	GPD
Brinkerhoff Water District	Fishkill (T)	Dutchess	0.281	MGD	0.483	MGD
Bristol Mountain	South Bristol (T)	Ontario	0.45	MGD	10.08	MGD
Bri-ton Farms	Huron (T)	Wayne	1120	GPD	5000	GPD
Broadalbin, Vg	Broadalbin (T)	Fulton	108000	GPD	130000	GPD
Brocton, Vg	Portland (T)	Chautauqua	0.3	MGD	0.539	MGD
Brookfield Country Club	Clarence (T)	Erie	35279	GPD	450000	GPD
Brook-Lea Country Club	Gates (T)	Monroe	37676	GPD	288000	GPD
Brooklyn Navy Yard	Kings (T)	Kings	52729233	GPD	73490591	GPD
Brookside Farm	Argyle (T)	Washington	800	GPD	1000	GPD
Brookwoods Country Club	Ontario (T)	Wayne	27000	GPD	150000	GPD
Broughton Farm	Gainesville (T)	Wyoming	93340	GPD		
Brownville, Vg	Brownville (T)	Jefferson	143000	GPD	331000	GPD
Bruce Matis	Palatine (T)	Montgomery	17500	GPD	17500	GPD
Bruno Farms	Brookhaven (T)	Suffolk	300000	GPD	400000	GPD
Brynwood Golf & Country Club	North Castle (T)	Westchester	50500	GPD	206000	GPD
Buffalo River Improvement Corporation	Buffalo (C)	Erie	5.23	MGD	9	MGD
Buffalo Water Authority	Buffalo (C)	Erie	68.1	MGD	86.21	MGD
Burke, Vg	Burke (T)	Franklin	15800	GPD	70000	GPD
Burrows Paper Corporation	Little Falls (C)	Herkimer	0.795	MGD	1.6	MGD
Burrows Paper Corporation - East Mill St	Little Falls (C)	Herkimer	1.45	MGD	2.36	MGD
Burrows Paper Corporation - Lyonsdale	Lyonsdale (T)	Lewis	1.65	MGD	2.13	MGD
Butterville Farms	Henderson (T)	Jefferson	108345	GPD	119866	GPD
Cahoon Farms Inc	Huron (T)	Wayne	142723	GPD	210083	GPD
Cairo Water District	Cairo (T)	Greene	0.096	MGD	0.189	MGD
Cale Farms Water Works	Somers	Westchester	9300	GPD	21700	GPD
Caledonia Fish Hatchery	Caledonia (T)	Livingston	5250	GPM	6232	GPM
Callanan - Amenia Facility	Amenia (T)	Dutchess	385009	GPD	2013018	GPD
Callanan - Bethlehem Site	Coeymans (T)	Albany	341223	GPD	3197643	GPD
Callanan - Bridgeville Site	Thompson (T)	Sullivan	589953	GPD	3170376	GPD
Callanan - Clockville Site	Lincoln (T)	Madison	3061856	GPD	3603050	GPD
Callanan - Cochecton Site	Cochecton (T)	Sullivan	102438	GPD	1602000	GPD
Callanan - Cropseyville Site	Brunswick (T)	Rensselaer	899724	GPD	2209018	GPD
Callanan - East Kingston Site	Ulster (T)	Ulster	1144159	GPD	3401391	GPD
Callanan - Pattersonville Site	Amsterdam (C)	Montgomery	105796	GPD	2360754	GPD
Callanan - Port Ewen Quarry	Esopus (T)	Ulster	249773	GPD	3515400	GPD
Callicoon Water Company	Delaware (T)	Sullivan	137764	GPD	298000	GPD
Calverton Links	Riverhead (T)	Suffolk	90500	GPD	156666	GPD
Camden, Vg	Camden (T)	Oneida	0.36	MGD	0.618	MGD
Camp Ohr Shalom	Fallsburg (T)	Sullivan	12000	GPD	12000	GPD
Camp Smith, NY Army National Guard	Cortlandt (T)	Westchester	0.0201391	MGD	0.0929	MGD
Campbell, Tn	Campbell (T)	Steuben	17758.68	GPD	66134	GPD
Canajoharie Water Works	Johnstown (T)	Fulton	0.95	MGD	1.43	MGD
Canandaigua Country Club	Canandaigua (T)	Ontario	70000	GPD	90000	GPD
Canaseraga, Vg	Burns (T)	Allegany	0.074	MGD	0.096	MGD
Candor, Vg	Candor (T)	Tioga	107022	GPD	161000	GPD
Canisteo, Vg	Canisteo (T)	Steuben	0.37	MGD	0.983	MGD
Canton, Vg	Pierrepont (T)	St. Lawrence	0.55	MGD	0.74	MGD
Cape Vincent, Vg	Cape Vincent (T)	Jefferson	478598	GPD	786560	GPD
Capital Hills at Albany Golf Course	Bethlehem (T)	Albany	14429	GPD	250000	GPD
Carey Farm	Groton (T)	Tompkins	7500	GPD	10000	GPD
Cargill Salt	Dix (T)	Schuyler	8.6	MGD	10.4	MGD
Cargill Salt - Cayuga Mine	Lansing (T)	Tompkins	0.203	MGD	0.397	MGD
Carmel Water District #2	Carmel (T)	Putnam	0.85	MGD	1.5	MGD
Carmel Water District #3	Carmel (T)	Putnam	98420	GPD	129345	GPD
Carmel Water District #8	Carmel (T)	Putnam	207	GPM	257	GPM
Carmel Water District #9	Carmel (T)	Putnam	31.6	GPM	38.7	GPM
Carsada Dairy	Malone (T)	Franklin	40595	GPD	49837	GPD
Carthage Energy LLC	Wilna (T)	Jefferson	0.198	MGD	11.017	MGD
Carthage/West Carthage, Vgs	Croghan (T)	Lewis	0.66	MGD	0.75	MGD
Carvel Country Club	Pine Plains (T)	Dutchess	14385	GPD	270000	GPD
Cashins Farm	Root (T)	Montgomery	20000	GPD	120000	GPD
Casperkill Golf Club	Poughkeepsie (T)	Dutchess	250000	GPD	465000	GPD
Cassadaga, Vg	Stockton (T)	Chautauqua	101907	GPD	177000	GPD
Castleton Power	Schodack (T)	Rensselaer	81630	GPD	0.286	MGD
Castleton, Vg	Schodack (T)	Rensselaer	0.153	MGD	0.238	MGD
Catlin,Tn (Beaver Valley Water District)	Catlin (T)	Chemung	23293	GPD	87900	GPD
Cato, Vg	Cato (T)	Cayuga	25000	GPD	25000	GPD
Catskill State Fish Hatchery	Rockland (T)	Sullivan	2640	GPM	3000	GPM

FACILITY NAME	FACILITY TOWN/CITY	FACILITY COUNTY	ve_Day_Withdraw	Units_Ave_Day	ax_Day_Withdrav	Units_Max_Day
Catskill, Vg	Coxsackie (T)	Greene	831490	GPD	1192645	GPD
Cattaraugus County Department of Public Works	Little Valley (T)	Cattaraugus	0.25682	MGD	0.25682	MGD
Cavallaro Farms	Goshen (T)	Orange	0	GPD	0	GPD
Cavalry Veterans of Syracuse Golf Club	Manlius (T)	Onondaga	42390	GPD		
Cayuga, Vg	Aurelius (T)	Cayuga	59000	GPD	150000	GPD
Cazenovia, Vg	Cazenovia (T)	Madison	261000	GPD	1	MGD
Cedar Springs Fish Hatchery	Caledonia (T)	Livingston	600	GPM	600	GPM
Cedar Valley	Pawling (T)	Dutchess	16000	GPD	28000	GPD
Cedar View Golf Course	Lansing (T)	Tompkins	368	GPD	24000	GPD
Cellu Tissue - Natural Dam	Gouverneur (T)	St. Lawrence	1.556	MGD	2.537	MGD
Centennial Golf Club	Carmel (T)	Putnam	36784	GPD	385000	GPD
Centerpointe Golf Course	Canandaigua (T)	Ontario	20143	GPD	210000	GPD
Central Bridge W.D.	Schoharie (T)	Schoharie	56000	GPD	109000	GPD
Central Water District (Perrysburg)	Perrysburg (T)	Cattaraugus	35000	GPD	125000	GPD
Century Country Club	Harrison (T)	Westchester	48806	GPD	70280	GPD
CET - Tonawanda Engine Site	Tonawanda (T)	Erie	257621	GPD	373787	GPD
Cha-liz Farm	Chazy (T)	Clinton	105674	GPD	113000	GPD
Champion Hills Country Club	Victor (T)	Ontario	80	GPM	100	GPM
Champlain, Vg	Champlain (T)	Clinton	120000	GPD	300000	GPD
Chase Farm	Perinton (T)	Monroe	2652	GPD		
Chateaugay Correctional Facility	Chateaugay (T)	Franklin	25599	GPD	65500	GPD
Chateaugay Hatchery	Chateaugay (T)	Franklin	1.6	MGD	1.6	MGD
Chateaugay, Vg	Chateaugay (T)	Franklin	0.735	MGD	1.008	MGD
Chatham, Vg	Ghent (T)	Columbia	260846	GPD	523781	GPD
Chautauqua Golf Club	Chautauqua (T)	Chautauqua	82117	GPD	360700	GPD
Chautauqua Hatchery	Chautauqua (T)	Chautauqua	0.21	MGD	1.71	MGD
Chautauqua Utility District	Chautauqua (T)	Chautauqua	157787	GPD	622937	GPD
Chenango, Tn - Applewood	Chenango (T)	Broome	0.0988	MGD	0.165	MGD
Chenango, Tn - Northgate	Chenango (T)	Broome	0.511	MGD	1.026	MGD
Cherry Creek, Vg	Cherry Creek (T)	Chautauqua	82384	GPD	114000	GPD
Cherry Valley, Vg	Cherry Valley (T)	Otsego	45359	GPD	102000	GPD
Chester, Vg	Chester (T)	Orange	445000	GPD	0.772	MGD
Chestertown Water District	Chester (T)	Warren	80000	GPD	305000	GPD
Chestnut Hill Country Club, Inc.	Darien (T)	Genesee	49428	GPD	60000	GPD
Chiavetta's	Evans (T)	Erie				
Childstock Farms	Malone (T)	Franklin	125500	GPD	1167000	GPD
Chili Country Club	Chili (T)	Monroe	63333	GPD	64800	GPD
Churchville Park Golf Course	Riga (T)	Monroe	157377	GPD	300000	GPD
Cincinnatus, Tn	Cincinnatus (T)	Cortland	40035	GPD	113000	GPD
Clark Farm	Clayton (T)	Jefferson	8877	GPD	10000	GPD
Clarksville Water District	New Scotland (T)	Albany	28415	GPD	81260	GPD
Clayton, Vg	Clayton (T)	Jefferson	0.154	MGD	0.299	MGD
Clayville, Vg	Paris (T)	Oneida	68398	GPD		
Cleveland, Vg	Vienna (T)	Oneida	126000	GPD	253000	GPD
Clifton Park Water Authority	Clifton Park (T)	Saratoga	3.19	MGD	5.66	MGD
Clifton Springs Country Club	Hopewell	Ontario	95000	GPD	325000	GPD
Climax Paperboard, Inc.	Champion (T)	Jefferson	0.275	MGD	0.785	MGD
Clinton Correctional Facility	Saranac (T)	Clinton	0.816	MGD	1.49	MGD
Clinton Erie Associates, Inc.	Tyre (T)	Seneca	15	MGD	15	MGD
Clinton, Vg	Kirkland (T)	Oneida	423249	GPD	494420	GPD
Clinton's Ditch Cooperative Co., Inc.	Cicero (T)	Onondaga	447900	GPD	727000	GPD
Clover-Leaf Nursery	Colonie (T)	Albany	155737	GPD	311474	GPD
Clyde, Vg	Galen (T)	Wayne	205000	GPD	324000	GPD
Clymer Water District	Clymer (T)	Chautauqua	0.077	MGD	0.078	MGD
Cobblestone Creek Country Club	Victor (T)	Ontario	67900	GPD	375000	GPD
Cobleskill Stone Products - Broe Pit	Milford (T)	Otsego	36000	GPD	36000	GPD
Cobleskill, Vg	Cobleskill (T)	Schoharie				
Cohocton,Vg	Cohocton (T)	Steuben	70877	GPD	80000	GPD
Cohoes, City	Cohoes (C)	Albany	674160	GPD	3856000	GPD
Colarusso Quarry Co.	Greenport (T)	Columbia	84834	GPD	88000	GPD
Colarusso Sand & Gravel	Greenport (T)	Columbia	864761	GPD	1090285	GPD
Colby Homestead Farms	Ogden (T)	Monroe	14200	GPD	150000	GPD
Cold Spring Water District	Thompson (T)	Sullivan	13582	GPD	40800	GPD
Coleman Ditch	Warwick (T)	Orange	394	GPD	72000	GPD
Collins Correctional Facility	Collins (T)	Erie	0.568	MGD	0.71	MGD
Collins, Tn	Collins (T)	Erie	0.11	MGD	0.318	MGD
Colonial Springs Farms	Babylon (T)	Suffolk	4000	GPD	5000	GPD
Colonie Golf and Country Club	New Scotland (T)	Albany	43906	GPD	220000	GPD
Colton Water District	Colton (T)	St. Lawrence	48000	GPD	98000	GPD
Columbia Golf & Country Club	Claverack (T)	Columbia	45536	GPD	262000	GPD
Como Plant #21	Cheektowaga (T)	Erie	1455	GPM	2825	GPM
Conklin, Tn	Conklin (T)	Broome	221000	GPD	381000	GPD
Conrow Farms	Clarkson (T)	Monroe	600000	GPD	600000	GPD
Cooperstown Dreams Park	Homer (T)	Cortland	58613	GPD	164000	GPD
Cooperstown, Vg	Otsego (T)	Otsego	553900	GPD	991000	GPD
Copake Country Club	Copake (T)	Columbia	0.024	MGD	0.22	MGD

FACILITY NAME	FACILITY TOWN/CITY	FACILITY COUNTY	ve_Day_Withdraw	Units_Ave_Day	ax_Day_Withdrav	Units_Max_Day
Copenhagen, Vg	Denmark (T)	Lewis	61638	GPD	108500	GPD
Coram Materials Corp	Brookhaven (T)	Suffolk	2.16	MGD	2.16	MGD
Corbett Hill Gravel Products	Randolph (T)	Cattaraugus	2.86	MGD	3.71	MGD
Corbin Hills Water Supply	Highlands (T)	Orange	9412	GPD	12500	GPD
Corfu, Vg	Pembroke (T)	Genesee	101605	GPD	145870	GPD
Cornell Hartford T & R Center	Harford (T)	Cortland	52894	GPD	79989	GPD
Cornell Research Ponds	Dryden (T)	Tompkins	1	MGD	1	MGD
Cornell University - Ag. Research Facilities (CALS)	Ithaca (C)	Tompkins	30821	GPD	146319	GPD
Cornell University - Chilled Water Plant 1	Ithaca (C)	Tompkins	0		0	
Cornell University - Heat Exchange Facility	Ithaca (T)	Tompkins	19	MGD	45	MGD
Cornell University - Water Filtration Plant	Ithaca (T)	Tompkins	1.514	MGD	2.692	MGD
Cornerest Farm	Hebron (T)	Washington	643	GPD	731	GPD
Corning - Erwin Facility	Copake (T)	Columbia	76986	GPD	128814	GPD
Corning Country Club	Corning (T)	Steuben	31402	GPD	492000	GPD
Corning Inc	Corning (C)	Steuben	1.35	MGD	2.36	MGD
Corning Inc - Big Flats	Big Flats (T)	Chemung	29500	GPD	29500	GPD
Corning Inc - Canton Plant	Dekalb (T)	St. Lawrence	19152	GPD	42027	GPD
Corning Inc - Sullivan Park	Erwin (T)	Steuben	242523	GPD	689000	GPD
Corning, City	Corning (C)	Steuben	1312660	GPD	1437000	GPD
Corning, Tn - Gibson Water District	Corning (T)	Steuben	0.032	MGD	0.262	MGD
Cortland Asphalt Products	Cortlandville (T)	Cortland	15820	GPD	45765	GPD
Cortland Country Club	Cortlandville (T)	Cortland	80000	GPD	400000	GPD
Cortland Water Department	Cortland (C)	Cortland	2547487	GPD	3297686	GPD
Cortlandville, Tn	Cortlandville (T)	Cortland	627000	GPD	805000	GPD
Corwith Farms	Southampton (T)	Suffolk	0	GPD	0	GPD
Country Club of Buffalo	Amherst (T)	Erie			99000	GPD
Country Club of Rochester	Pittsford (T)	Monroe	51000	GPD	300000	GPD
Country Crossing	Woodbury (T)	Orange	16663	GPD	83000	GPD
Country Gardens Nursery	Southampton (T)	Suffolk	28246	GPD	254400	GPD
County Line Stone Co, Inc	Newstead (T)	Erie	11	MGD	14	MGD
Coxsackie Correctional Facility	Coxsackie (T)	Greene	21246	GPD	406530	GPD
Coxsackie, Vg	Coxsackie (T)	Greene	1.051	MGD	1.34	MGD
Coyne Farms	Avon (T)	Livingston	35786	GPD	35786	GPD
Crag Burn Golf Club	Elma (T)	Erie	25457	GPD	386919	GPD
Cranesville - Blue Stores Mine	Rhinebeck (T)	Dutchess	120000	GPD	120000	GPD
Cranesville - Eastern Quarry	Kingston (T)	Ulster	504000	GPD	504000	GPD
Cranesville - Hudson Valley Sand & Stone	Wilton (T)	Saratoga	420000	GPD	420000	GPD
Cranesville - Maple Ave	Johnstown (T)	Fulton	456000	GPD	456000	GPD
Cranesville - Scotia Sand & Stone	Glenville (T)	Schenectady	456000	GPD	456000	GPD
Cranesville - Tully Pit	Tully (T)	Onondaga	456000	GPD	456000	GPD
Cranesville - Watertown	Watertown (T)	Jefferson	432000	GPD	432000	GPD
Creek Country Club	Oyster Bay (T)	Nassau	35027	GPD	580000	GPD
Crist Bros Orchards	Montgomery (T)	Orange	0.049	MGD	0.31	MGD
Croghan, Vg	Croghan (T)	Lewis	0.168	MGD	0.516	MGD
Cromwell Hill Commons	Monroe (T)	Orange	9	MGD	13	GPM
Crystal Water Supply Co	Thompson (T)	Sullivan	86310	GPD	199300	GPD
CTS Dairy	Ellisburg (T)	Jefferson	68987	GPD	78690	GPD
Cuba, Vg	Cuba (T)	Allegany	221512	GPD	399000	GPD
CY Farms LLC	Elba (T)	Genesee	70100	GPD	1.75	MGD
D & J Brawdy Farms, Inc	Eden (T)	Erie	188852	GPD	504000	GPD
Dagele Bros Produce	Warwick (T)	Orange	0.05	MGD	0.12	MGD
Dale Brine Field	Middlebury (T)	Wyoming	0.776	MGD	1.674	MGD
Dalton Farms - DCWWA	Beekman (T)	Dutchess	104651	GPD	147600	GPD
Damin Farm, LLC	Prattsburg (T)	Steuben	40242	GPD	46060	GPD
Dankowski Farms	East Hampton (T)	Suffolk	1260	GPM	1260	GPM
Danskammer Generating	Newburgh (T)	Orange	278.8	MGD	455.04	MGD
Dansville, Vg	North Dansville (T)	Livingston	0.673	MGD	1.15	MGD
Darin Hickling	Edmeston (T)	Otsego	30300	GPD	40320	GPD
Davandjer Farms	Warwick (T)	Orange	0.05	MGD	0.12	MGD
Davenport Farms	Marbletown (T)	Ulster	24000	GPD	132000	GPD
Davis Peach Farm North Orchard LLC	Riverhead (T)	Suffolk	300000	GPD	450000	GPD
Davos / Riverside Water System	Fallsburg (T)	Sullivan	65329	GPD	244000	GPD
Deansboro Water District	Marshall (T)	Oneida	27940	GPD	61700	GPD
DeBuck's Sod Farm	Warwick (T)	Orange	390000	GPD	1000000	GPD
Deer Run Dairy	Henderson (T)	Jefferson	43573	GPD	90400	GPD
Deer Run Farms	Brookhaven (T)	Suffolk	30000	GPD	110000	GPD
Deerfield Country Club	Clarkson (T)	Monroe	40800	GPD	243000	GPD
Deerwood Golf Course	North Tonawanda (C)	Niagara	122396	GPD	383274	GPD
Del Mar Farms Inc	Batavia (T)	Genesee	1225000	GPD	4550000	GPD
Delaney Crushed Stone	Northampton (T)	Fulton	9000	GPD	120000	GPD
DeLea Sod Farm - Scorells	Huntington (T)	Suffolk	720000	GPD	960000	GPD
DeLea Sod Farms - Aquabogue	Huntington (T)	Suffolk	3708000	GPD	4940000	GPD
DeLea Sod Farms - Cal	Huntington (T)	Suffolk	3888000	GPD	5100000	GPD
DeLea Sod Farms - MP	Huntington (T)	Suffolk	4680000	GPD	7	MGD

FACILITY NAME	FACILITY TOWN/CITY	FACILITY COUNTY	ve_Day_Withdraw	Units_Ave_Day	ax_Day_Withdrav	Units_Max_Day
Delevan, Vg	Yorkshire (T)	Cattaraugus	141920	GPD	223000	GPD
Delhi College Golf Course	Delhi (T)	Delaware	14177	GPD	187695	GPD
Delhi, Vg	Delhi (T)	Delaware	0.33	MGD	0.644	MGD
Demko Farms Inc	Lowville (T)	Lewis	97000	GPD	108000	GPD
Deposit, Vg	Sanford (T)	Broome	217700	GPD	563300	GPD
DeRuyter, Vg	De Ruyter (T)	Madison	44000	GPD	167000	GPD
Dexter, Vg	Brownville (T)	Jefferson	67500	GPD	117000	GPD
Diamond Point Water District	Lake George (T)	Warren	37440	GPD	66050	GPD
Dolgeville, Vg	Salisbury (T)	Herkimer	655380	GPD	879120	GPD
Dolomite Products - Avon Sand & Gravel	Avon (T)	Livingston	0.129	MGD		
Dolomite Products - Blades Bath	Bath (T)	Steuben	8000	GPD	25480	GPD
Dolomite Products - Blades Howard	Howard (T)	Steuben	873000	GPD	3600000	GPD
Dolomite Products - Brockport Quarry	Penfield (T)	Monroe	1.45	MGD		
Dolomite Products - Circular Hill	Le Roy (T)	Genesee	720000	GPD	2160000	GPD
Dolomite Products - Cleason Palmer	Palmyra (T)	Wayne	768000	GPD	2304000	GPD
Dolomite Products - Gates Quarry	Gates (T)	Monroe	1.74	MGD		
Dolomite Products - Greystone Golf Club	Walworth (T)	Wayne	0.087	MGD		
Dolomite Products - Leroy Quarry	Le Roy (T)	Genesee	0.875	MGD		
Dolomite Products - Manchester Quarry	Manchester (T)	Ontario	1.99	MGD		
Dolomite Products - Mendon Sand & Gravel	West Bloomfield (T)	Ontario	0.139	MGD		
Dolomite Products - Ogden Quarry	Ogden (T)	Monroe	1.2	MGD		
Dolomite Products - Penfield Quarry	Penfield (T)	Monroe	0.726	MGD		
Dolomite Products - Shadow Lake Golf Club	Penfield (T)	Monroe	0.047	MGD		
Dolomite Products - Shadow Pine Golf Club	Penfield (T)	Monroe	0.042	MGD		
Dolomite Products - Walworth Quarry	Walworth (T)	Wayne	0.493	MGD		
Doral Arrowwood	Rye (T)	Westchester	34560	GPD	321718	GPD
Double H Ranch	Lake Luzerne (T)	Warren	31500	GPD	40000	GPD
Dover Plains Water	Dover (T)	Dutchess	139000	GPD	146000	GPD
Dressel Farms, LLC	New Paltz (T)	Ulster	1933	GPD	50400	GPD
Dry Hill Ski Area	Watertown (T)	Jefferson	474000	GPD	720000	GPD
Dryden, Vg	Dryden (T)	Tompkins	213000	GPD	410000	GPD
Dudley Water Supply	Cato (T)	Cayuga	50000	GPD	150000	GPD
Dundee, Vg	Starkey (T)	Yates	191000	GPD	407000	GPD
Dunkirk Generating Station	Dunkirk (C)	Chautauqua	304	MGD		
Dunkirk, City of	Dunkirk (C)	Chautauqua	3.449	MGD	4.597	MGD
DuPont Co - Yerkes Plant	Tonawanda (T)	Erie	3.25	MGD	4.93	MGD
DuPont Niagara	Niagara Falls (C)	Niagara	31	MGD	50	MGD
Durand-Eastman Golf Club	Rochester (C)	Monroe	118033	GPD	225000	GPD
Durez North Tonawanda	North Tonawanda (C)	Niagara	0.112	MGD	0.269	MGD
Dutch Hollow Country Club	Owasco (T)	Cayuga	4000	GPD	120000	GPD
Dutchess Golf & Country Club	Poughkeepsie (T)	Dutchess	230000	GPD	250000	GPD
Dutchess Quarry & Supply Co - Goshen	Goshen (T)	Orange	102439	GPD	1.08	MGD
Dutchess Quarry & Supply Co - Pleasant Valley	Pleasant Valley (T)	Dutchess	0.4243	MGD	1.38	MGD
Dyker Beach Golf Course	Kings (T)	Kings	43953	GPD	475000	GPD
Eagle Crest Golf Club	Clifton Park (T)	Saratoga	36000	GPD	89000	GPD
Earlville, Vg	Hamilton (T)	Madison	60600	GPD	181000	GPD
East Aurora Country Club	Elma (T)	Erie	38641	GPD	38641	GPD
East Coast Nurseries	Riverhead (T)	Suffolk	290012	GPD	4270000	GPD
East Randolph	Cold Spring (T)	Cattaraugus	152075	GPD	161000	GPD
East River Generating Station	New York (T)	New York	264.1	MGD	371.8	MGD
Eastern Alloys	Montgomery (T)	Orange	226	GPD	1763	GPD
Eastern Correctional Facility	Wawarsing (T)	Ulster	380	GPM	571	GPM
Eastman Kodak Water Treatment Plant	Greece (T)	Monroe	13189442	GPD	16493439	GPD
Eaton Corporation	Horseheads (T)	Chemung	125000	GPD	900000	GPD
ECWA - Sturgeon Point	Evans (T)	Erie	49	MGD	74	MGD
ECWA - Van De Water	Tonawanda (T)	Erie	18.48	MGD	41.43	MGD
Ed Ruland & Son	Southold (T)	Suffolk	152308	GPD	180000	GPD
Ed Zilnicki Farm	Riverhead (T)	Suffolk	1.4	MGD	1.9	MGD
Edelweiss Farms	Freedom (T)	Cattaraugus	90950	GPD	95088	GPD
Edgewood Farms	Groveland (T)	Livingston	24818	GPD	26875	GPD
Edison Club Golf Course	Clifton Park (T)	Saratoga	29939	GPD	760000	GPD
Edmund Densieski	Southampton (T)	Suffolk	0.3	MGD	1.5	MGD
Elak Farm	Southold (T)	Suffolk	180000	GPD	250000	GPD
Elam Materials	Cohocton (T)	Steuben	930596	GPD	1440134	GPD
Elam Sand & Gravel - Oaks Corners	Phelps (T)	Ontario	324072	GPD	620496	GPD

FACILITY NAME	FACILITY TOWN/CITY	FACILITY COUNTY	ve_Day_Withdraw	Units_Ave_Day	ax_Day_Withdrav	Units_Max_Day
Elam Sand & Gravel - West Bloomfield	West Bloomfield (T)	Ontario	292213	GPD	546840	GPD
Elba, Vg	Elba (T)	Genesee	0.084	MGD	0.278	MGD
Elizabethtown Water District	Elizabethtown (T)	Essex	140000	GPD	150000	GPD
Elkdale Country Club	Little Valley (T)	Cattaraugus	31968	GPD	250000	GPD
Ellenville, Vg	Wawarsing (T)	Ulster	0.82	MGD	0.91	MGD
Ellicottville, Tn Water District #1	Ellicottville (T)	Cattaraugus				
Ellicottville, Vg	Ellicottville (T)	Cattaraugus	415000	GPD		
Ellisburg, Tn, Water District #1	Ellisburg (T)	Jefferson	82885	GPD	177000	GPD
Elm Tree Golf Course	Virgil (T)	Cortland			9000	GPD
Elmira College - Murray Center	Veteran (T)	Chemung	172	GPM	342	GPM
Elmira Water Board	Elmira (C)	Chemung	5.53	MGD	8.45	MGD
Elmwood Country Club	Greenburgh (T)	Westchester	147787	GPD	270000	GPD
El-Vi Farms	Phelps (T)	Ontario	105674	GPD	113000	GPD
Emerald Green Louise Marie Water Co	Thompson (T)	Sullivan	434613	GPD	951399	GPD
Emma's Garden Growers	Southold (T)	Suffolk	15708	GPD	80000	GPD
Emmi & Sons Inc	Lysander (T)	Onondaga	139751.33	GPD	418415	GPD
Empire Cheese	Cuba (T)	Allegany	152126	GPD	248446	GPD
Empire State Plaza	Albany (C)	Albany	25.117	MGD	67.39	MGD
Endicott Water District	Union (T)	Broome	4.82	MGD	8.2	MGD
Erwin, Tn	Campbell (T)	Steuben	0.865	MGD	1.411	MGD
Evans Chemetics LP	Waterloo (T)	Seneca	4.5	MGD	6.3	MGD
Evans Mills, Vg	Le Ray (T)	Jefferson	78000	GPD	186000	GPD
Evergreen Farm	Petersburg (T)	Rensselaer	13526	GPD	15256	GPD
F & W Schmitts Farm	Huntington (T)	Suffolk	19726	GPD	240000	GPD
F & W Schmitts Farm - Yaphank	Brookhaven (T)	Suffolk	19726	GPD	240000	GPD
Fairview Golf Course	Avon (T)	Livingston	75000	GPD	0.144	MGD
Fairways of Halfmoon	Halfmoon (T)	Saratoga	155700	GPD	305000	GPD
Falke Quarry	Lexington (T)	Greene	64000	GPD	64000	GPD
Fallsburg-WHO-LS-SF	Fallsburg (T)	Sullivan	1.404	MGD	3.335	MGD
Fedun Farms	Riverhead (T)	Suffolk	20000	GPD	684000	GPD
Fenway Golf Club	Scarsdale (T)	Westchester	39203	GPD	290000	GPD
Ferro Electronic Materials	Torrey (T)	Yates	71963	GPD	121528	GPD
FH Stickles Mine	Livingston (T)	Columbia	18116000	GPD	28899000	GPD
FiberMark - Brownville	Hounsfield (T)	Jefferson	203361	GPD	387723	GPD
Finch Paper LLC	Glens Falls (C)	Warren	19604	GPM	27810	GPM
Fino Farms	Marlborough (T)	Ulster	132876	GPD	1586000	GPD
Fishkill Farms	East Fishkill (T)	Dutchess	7397	GPD	90000	GPD
Fishkill, Vg	Fishkill (T)	Dutchess	1.92	MGD	2.8	MGD
Fix Bros	Livingston (T)	Columbia	41621	GPD	508800	GPD
Fleischmann"s Vinegar Co	Rose (T)	Wayne	35613	GPD	60000	GPD
Fleischmanns, Vg	Middletown (T)	Delaware	165000	GPD	305800	GPD
Fleurchem Inc	Middletown (C)	Orange	39195	GPD	78390	GPD
Florida, Vg	Chester (T)	Orange	0.468	MGD	0.743	MGD
FMC Corporation	Tonawanda (T)	Erie	9.822	MGD	14.699	MGD
Fonda Water Plant	Mohawk (T)	Montgomery	535000	GPD	699000	GPD
Ford Gum	Newstead (T)	Erie	970500	GPD	970500	GPD
Forestport,Tn	Forestport (T)	Oneida	0.023	MGD	65900	GPD
Forever Wild Water Co.	Jay (T)	Essex	52141	GPD		
Former Carborundum Complex	Wheatfield (T)	Niagara	0.124	MGD	0.138	MGD
Former GM Powertrain Facility	Massena (T)	St. Lawrence	0.057	MGD	0.64	MGD
Former IBM - Endicott	Union (T)	Broome	0.842	MGD	1.01	MGD
Former IBM - Owego	Owego (T)	Tioga	0.421	MGD	0.653	MGD
Former TRW Site	Jamestown (C)	Chautauqua	0.03	MGD	0.09	MGD
Former Westinghouse Facility	Horseheads (T)	Chemung	1.37	MGD	1.58	MGD
Fort Ann, Vg	Fort Ann (T)	Washington	93604	GPD	487000	GPD
Fort Drum Public Works	Le Ray (T)	Jefferson	0.576	MGD	0.763	MGD
Fort Edward, Vg	Moreau (T)	Saratoga	379545	GPD	607000	GPD
Fort Plain, Vg	Palatine (T)	Montgomery	0.35	MGD	0.5	MGD
Fosters Farm	Southampton (T)	Suffolk				
Four Corners	East Fishkill (T)	Dutchess	81278	GPD	0.746544	MGD
Four Seasons Ski Center	Manlius (T)	Onondaga	90000	GPD	110000	GPD
Fox Hill Estates	Southeast (T)	Putnam	2748	GPD	9640	GPD
Fox Valley Club	Lancaster (T)	Erie	27894	GPD	339375	GPD
Frank McBride & Sons	Southold (T)	Suffolk	960000	GPD	1440000	GPD
Frank Tantillo & Son	Gardiner (T)	Ulster	30000	GPD	50000	GPD
Frankfort, Vg	Frankfort (T)	Herkimer	700000	GPD	1	MGD
Franklin, Vg	Franklin (T)	Delaware	29100	GPD	110000	GPD
Franklinville, Vg	Franklinville (T)	Cattaraugus	0.521	MGD	0.588	MGD
Freatman Farm	Cambria (T)	Niagara	75000	GPD	75000	GPD
Fred Terry Farms	Southold (T)	Suffolk	8575	GPD	480000	GPD
Frederick Malik Farm	Brookhaven (T)	Suffolk	40500	GPD	81000	GPD
Fredonia Water Plant	Pomfret (T)	Chautauqua	1.58	MGD	2.22	MGD
Free Bird Farm	Palatine (T)	Montgomery	1000	GPD	2000	GPD
Frewsburg Water	Carroll (T)	Chautauqua	216935	GPD	250000	GPD
Frey Concrete, Inc	Lancaster (T)	Erie	9546	GPD	17730	GPD
Frey Sand and Gravel	Alexander (T)	Genesee	1050000	GPD	1050000	GPD
Friendship Dairies LLC	Friendship (T)	Allegany	0.37	MGD	0.55	MGD
Friendship, Tn	Friendship (T)	Allegany	0.31	MGD	0.864	MGD

FACILITY NAME	FACILITY TOWN/CITY	FACILITY COUNTY	ve_Day_Withdraw	Units_Ave_Day	ax_Day_Withdrav	Units_Max_Day
Friesland Campina Domo	Delhi (T)	Delaware	430183	GPD	852537	GPD
Frontenac Crystal Springs	Clayton (T)	Jefferson	10744	GPD	15356	GPD
Fullerton Farm	Argyle (T)	Washington	3880	GPD	4100	GPD
Fulton City Water Works	Volney (T)	Oswego	1.29	MGD	2.97	MGD
Fultonville, Vg	Glen (T)	Montgomery	100000	GPD	180000	GPD
Gajeski Produce	Riverhead (T)	Suffolk	35000	GPD	360000	GPD
Galway Golf Club	Galway (T)	Saratoga	2314	GPD		GPD
Gardeau Creast Farms	Castile (T)	Wyoming	47139	GPD		GPD
Gardenworks Farm	Salem (T)	Washington				
Garrison Golf Club	Philipstown (T)	Putnam	123120	GPD	246240	GPD
GE - Global Research Center	Niskayuna (T)	Schenectady	0	GPM	0	GPM
GE - Hudson Falls	Kingsbury (T)	Washington	121830	GPD	182465	GPD
GE - Schenectady	Rotterdam (T)	Schenectady	11	MGD	50	MGD
Genegantslet Golf Club	Greene (T)	Chenango	6868	GPD	178349	GPD
Genesee Valley Park Golf Course	Rochester (C)	Monroe	251803	GPD	480000	GPD
Geneseo, Vg	Geneseo (T)	Livingston	1.3	MGD	2.1	MGD
Geneva, City	Geneva (T)	Ontario	1.87	MGD	3.171	MGD
Genoa-King Ferry Water District	Genoa (T)	Cayuga	69758	GPD	160900	GPD
Genon Bowline	Haverstraw (T)	Rockland	74.94	MGD	989.29	MGD
George Saulpaugh & Son	Clermont (T)	Columbia	300000	GPD	388000	GPD
Georgia-Pacific Consumer Operations LLC	Plattsburgh (C)	Clinton	1.07	MGD	2.02	MGD
Gernatt - Chaffee	Sardinia (T)	Erie	2850	GPD	3150	GPD
Gernatt - Collins	Collins (T)	Erie	1900	GPD	2300	GPD
Gernatt - Freedom	Freedom (T)	Cattaraugus	2800	GPD	3600	GPD
Gernatt - Gowanda	Persia (T)	Cattaraugus	1650	GPD	1800	GPD
Gernatt - Great Valley	Great Valley (T)	Cattaraugus	3200	GPD	3630	GPD
Gernatt - Hanover	Hanover (T)	Chautauqua	0	GPM	0	GPM
Gernatt - South Dayton	Dayton (T)	Cattaraugus	2500	GPD	2880	GPD
Gernatt - Springville	Concord (T)	Erie	1500	GPD	1650	GPD
Gilbertsville,Vg	Butternuts (T)	Otsego			97000	GPD
Gill Corn Farms	Hurley (T)	Ulster	0		0	
Giroux Poultry Farm	Chazy (T)	Clinton	81163	GPD	81163	GPD
Glen Arbor Golf Club	Bedford (T)	Westchester	243646	GPD	466290	GPD
Glen Cove, City	Glen Cove (C)	Nassau			7.8	MGD
Glen Oak Golf Course	Amherst (T)	Erie	288000	GPD	288000	GPD
Glenfield Water District	Martinsburg (T)	Lewis	31045	GPD	82200	GPD
Glens Falls Country Club	Queensbury (T)	Warren	45353	GPD	310000	GPD
Glens Falls, City	Queensbury (T)	Warren	2.7	MGD	3.4	MGD
Glenview Dairy	Montour (T)	Schuyler	20000	GPD	30000	GPD
Glenville, Tn	Glenville (T)	Schenectady	1717189	GPD	3074000	GPD
Gloversville Board of Water Commissioners	Johnstown (T)	Fulton	1.94	MGD	2.68	MGD
Golden Earthworm Organic Farm	Riverhead (T)	Suffolk	108000	GPD	144000	GPD
Golden Harvest Farms, Inc.	Kinderhook (T)	Columbia	9493	GPD	52500	GPD
Golf Club on Wellesley Island	Alexandria (T)	Jefferson	33355	GPD	175000	GPD
Gonyo Brothers LLC	Mooers (T)	Clinton	7882	GPD	9092	GPD
Goodyear Dunlop Tires, NA Ltd.	Tonawanda (T)	Erie	4.2	MGD	5.3	MGD
Gore Mountain - PWS	Johnsburg (T)	Warren	2.35	MGD	19.79	GPM
Gore Mountain - Snow	Johnsburg (T)	Warren	4.54	MGD	5000	GPM
Gorham, Tn	Gorham (T)	Ontario	0.414	MGD	0.842	MGD
Goshen, Vg	Goshen (T)	Orange	0.828	MGD	1.173	MGD
Gouverneur, Vg	Gouverneur (T)	St. Lawrence	0.6451	MGD	1.0824	MGD
Gowanda Country Club	Collins (T)	Erie	24411	GPD	120000	GPD
Gowanda, Vg	Persia (T)	Cattaraugus				
Grand Island, Tn	Grand Island (T)	Erie	1.646	MGD	2.561	MGD
Grand Venture Dairy LLC	Lorraine (T)	Jefferson	73150	GPD	110300	GPD
Grandview Water Works	Kinderhook (T)	Columbia				
Granville, Vg	Granville (T)	Washington	0.56	MGD	0.889	MGD
Graymont Materials - Clinton Quarry	Clinton (T)	Clinton	0	GPD	0	GPD
Graymont Materials - Lewis Quarry	Lewis (T)	Essex	700000	GPD	828000	GPD
Graymont Materials - Malone Quarry	Malone (T)	Franklin	720000	GPD	2970000	GPD
Graymont Materials - Mooers Quarry	Mooers (T)	Clinton	264000	GPD	792000	GPD
Graymont Materials - Parishville Plant	Potsdam (T)	St. Lawrence	0	GPD	0	GPD
Graymont Materials - Plattsburgh Quarry	Plattsburgh (T)	Clinton	1750000	GPD	2750000	GPD
Graymont Materials - Saranac Lake Quarry	Harrietstown (T)	Franklin	530000	GPD	870000	GPD
Great Lake Kraut	Manchester (T)	Ontario	19750	GPD	48420	GPD
Great Meadow Correctional Facility	Whitehall (T)	Washington	0.431	MGD	0.69	MGD
Greek Peak Mountain Resort	Virgil (T)	Cortland	307397	GPD	1.4	MGD
Green Haven Correctional Facility	Beekman (T)	Dutchess	662891	GPD	936135	GPD
Green Hill Dairy	Scipio (T)	Cayuga	45800	GPD	51000	GPD
Green Island, Vg	Green Island (T)	Albany	499949	GPD	705800	GPD
Green Meadow Park Water	La Grange (T)	Dutchess	13500	GPD	23564	GPD

FACILITY NAME	FACILITY TOWN/CITY	FACILITY COUNTY	ve_Day_Withdraw	Units_Ave_Day	ax_Day_Withdrav	Units_Max_Day
Greenbriar/Somerdel Water Works	Somers (T)	Westchester	47500	GPD	160300	GPD
Greene,Vg	Greene (T)	Chenango	195082	GPD	195082	GPD
Greenlawn Sod Farms	Riverhead (T)	Suffolk	4500	GPD	1150000	GPD
Greenpoint Remediation	Kings (T)	Kings	619	GPM	704	GPM
Greenport Water District #1	Greenport (T)	Columbia	528000	GPD	1112000	GPD
Greenport Water District #1- Mt Ida	Claverack (T)	Columbia	21800	GPD	47000	GPD
Greenville, Tn	Greenville (T)	Greene	0.054	MGD	0.079	MGD
Greenwich, Vg	Easton (T)	Washington	150000	GPD	303000	GPD
Greenwood Dairy Farm	Potsdam (T)	St. Lawrence	19679	GPD	57000	GPD
Greenwood Lake, Vg	Warwick (T)	Orange	0.32	MGD	0.519	MGD
Greenwood Lake, West Side #1	Warwick (T)	Orange	103500	GPD	125600	GPD
Greig Farm	Red Hook (T)	Dutchess				
Greiner Bros Farms Inc	Marlborough (T)	Ulster	192812	GPD	2343892	GPD
Grindstone Farm	Richland (T)	Oswego	5000	GPD	60000	GPD
Grossinger Country Club	Liberty (T)	Sullivan	17615	GPD	300000	GPD
Groton, Vg	Groton (T)	Tompkins	293000	GPD	585000	GPD
Groveland Correctional Facility	Groveland (T)	Livingston	0.342	MGD	0.48	MGD
Guilderland Parks & Recreation	Guilderland (T)	Albany	175000	GPD	337500	GPD
Guilderland, Tn	Guilderland (T)	Albany	2.757	MGD	4.9	MGD
Guilford Water District	Guilford (T)	Chenango	20000	GPD	70000	GPD
Gunthers Greenhouse	Hempstead (T)	Nassau	7000	GPD	10000	GPD
Hadley, Tn Water District #1	Hadley (T)	Saratoga	0.0353	MGD	0.125	MGD
Hadley, Tn Water District #2	Hadley (T)	Saratoga	0.0471	MGD	0.15	MGD
Hafner, LLC	Lysander (T)	Onondaga	770.96	GPD	44100	GPD
Halcyon Park Water District	Ulster (T)	Ulster	26000	GPD	62000	GPD
Half Hollow Nursery	Riverhead (T)	Suffolk	317000	GPD	675000	GPD
Hamilton, Vg	Hamilton (T)	Madison	0.392282	MGD	0.835	MGD
Hamlet Willow Creek Country Club	Brookhaven (T)	Suffolk	105000	GPD	200000	GPD
Hammondsport Water	Urbana (T)	Steuben	109372	GPD	444800	GPD
Hampton Manor / Hillview Water District #4	East Greenbush (T)	Rensselaer	130000	GPD	250000	GPD
Hanah Mountain Resort Country Club	Middletown (T)	Delaware			100000	GPD
Hancock Quarry	Hancock (T)	Delaware	0.72	MGD	0.72	MGD
Hand Melon Farm LLC	Easton (T)	Washington	300000	GPD	500000	GPD
Hansen Farms	Seneca (T)	Ontario	8285	GPD	216000	GPD
Hanson Aggregates - Batavia Sand & Gravel	Batavia (T)	Genesee	0.475	MGD	1.47	MGD
Hanson Aggregates - Bath Sand & Gravel	Bath (T)	Steuben	1750	GPD	9306	GPD
Hanson Aggregates - Boonville	Western (T)	Oneida	0	GPD	0	GPD
Hanson Aggregates - Butler Quarry	Butler (T)	Wayne	0.4	MGD	1.28	MGD
Hanson Aggregates - Cayuta	Cayuta (T)	Schuyler	0	GPD	0	GPD
Hanson Aggregates - Clarendon Quarry	Clarendon (T)	Orleans	1.19	MGD	2.1	MGD
Hanson Aggregates - Forestport Quarry	Forestport (T)	Oneida	0	GPD	0	GPD
Hanson Aggregates - Gravesville	Russia (T)	Herkimer	0	GPD	0	GPD
Hanson Aggregates - Great Bend Quarry	Champion (T)	Jefferson	0.361	MGD	1	MGD
Hanson Aggregates - Honeoye Falls Quarry	Lima (T)	Livingston	6	MGD	8.9	MGD
Hanson Aggregates - Jamesville Quarry	Dewitt (T)	Onondaga	0.88	MGD	1.64	MGD
Hanson Aggregates - Jordanville	Warren (T)	Herkimer	0.335	MGD	0.933	MGD
Hanson Aggregates - Kanona Sand & Gravel	Bath (T)	Steuben	0	GPD	0	GPD
Hanson Aggregates - Lacona North	Sandy Creek (T)	Oswego	0	GPD	0	GPD
Hanson Aggregates - Lacona South	Sandy Creek (T)	Oswego	0	GPD	0	GPD
Hanson Aggregates - Leroy	Le Roy (T)	Genesee	0	GPD	0	GPD
Hanson Aggregates - Oaks Corners Quarry	Phelps (T)	Ontario	2.87	MGD	4.4	MGD
Hanson Aggregates - Oakwood Plant	Springport (T)	Cayuga	0	GPD	0	GPD
Hanson Aggregates - Ogdensburg Quarry	Oswegatchie (T)	St. Lawrence	0.335	MGD	0.556	MGD
Hanson Aggregates - Oriskany Falls	Augusta (T)	Oneida	184	GPM	209	GPM
Hanson Aggregates - Phelps	Phelps (T)	Ontario	0	GPD	0	GPD
Hanson Aggregates - Phelps Sand & Gravel	Phelps (T)	Ontario	0.232	MGD	0.528	MGD
Hanson Aggregates - Poland Sand & Gravel	Russia (T)	Herkimer	27	GPD	40	GPD
Hanson Aggregates - Skaneateles Quarry	Skaneateles (T)	Onondaga	0.18	MGD	0.456	MGD

FACILITY NAME	FACILITY TOWN/CITY	FACILITY COUNTY	ve_Day_Withdraw	Units_Ave_Day	ax_Day_Withdraw	Units_Max_Day
Hanson Aggregates - St. Johnsville Quarry	St Johnsville (T)	Montgomery	30910	GPD	0.118	MGD
Hanson Aggregates - Stafford Quarry	Stafford (T)	Genesee	3.1	MGD	6.8	MGD
Hanson Aggregates - Victor	Victor (T)	Ontario	0.232	MGD	0.528	MGD
Hanson Aggregates - Watertown Quarry	Pamelia (T)	Jefferson	0.989	MGD	1.8	MGD
Happenchance Farm	White Creek (T)	Washington	500	GPD	6000	GPD
Harbes Farm	Southold (T)	Suffolk	407934	GPD	1632000	GPD
Hardeman Orchards	Red Hook (T)	Dutchess				
Harden Furniture	Annsville (T)	Oneida	153000	GPD	153000	GPD
Hardie Farms	Lansing (T)	Tompkins	50066	GPD	61000	GPD
Hardinge Inc	Horseheads (T)	Chemung	0.38	MGD	1.08	MGD
Harlem Valley Materials	Amenia (T)	Dutchess	504000	GPD	720000	GPD
Harmony Golf Club	Chesterfield (T)	Essex	33400	GPD	88000	GPD
Harriman, Vg	Monroe (T)	Orange	0.451	MGD	0.734	MGD
Harris/Brault (Superfund)	Chazy (T)	Clinton	129	GPM	168	GPM
Harrisville, Vg	Diana (T)	Lewis	88000	GPD	259000	GPD
Hearty Roots Community Farm Ltd	Clermont (T)	Columbia	12370	GPD	175000	GPD
Hector Water District	Hector (T)	Schuyler	112000	GPD	273000	GPD
Hemdale Farms	Seneca (T)	Ontario	4841	GPD	200000	GPD
Henderson, Tn	Henderson (T)	Jefferson	35008	GPD	106600	GPD
Henry W. Agle & Sons Inc.	Eden (T)	Erie	60000	GPD	565000	GPD
Hepworth Farm	Marlborough (T)	Ulster	295833	GPD	806452	GPD
Heritage Springs Water Works	Milton (T)	Saratoga	184000	GPD	353000	GPD
Heritage Waterworks	Somers (T)	Westchester	0.348	MGD	0.56	MGD
Hermon, Vg	Russell (T)	St. Lawrence	100000	GPD	100000	GPD
Heuvelton, Vg	Oswegatchie (T)	St. Lawrence	118000	GPD	215000	GPD
Hi Hope Farm	Ellisburg (T)	Jefferson	69102	GPD	79092	GPD
Hidden Falls Spring Water	Greig (T)	Lewis	288000	GPD	288000	GPD
Highland Falls, Vg	Highlands (T)	Orange	0.435	MGD	0.6	MGD
Highland Lake Estates	Woodbury (T)	Orange	0.0385	MGD	0.088	MGD
Highland Park Golf Course	Sennett (T)	Cayuga	156840	GPD	519824	GPD
Highland Residential Center	Lloyd (T)	Ulster	34100	GPD	45500	GPD
Highland Sand & Gravel	Woodbury (T)	Orange	280000	GPD	350000	GPD
Highland Water District	Lloyd (T)	Ulster	0.547	MGD	2.66	MGD
Hildene Farms, Inc	Pavilion (T)	Genesee	60000	GPD	70000	GPD
Hill Water Works	Kinderhook (T)	Columbia	92100	GPD		
Hillcrest Farm LLC	Ellisburg (T)	Jefferson	77400	GPD	88000	GPD
Hillcrest Water District #1	Fenton (T)	Broome	0.275	MGD	0.319	MGD
Hillcrest Water District (Southeast, Tn)	Southeast (T)	Putnam	21895	GPD	48770	GPD
Hinsdale, Tn	Hinsdale (T)	Cattaraugus	63600	GPD	140000	GPD
Hodun Farm	Riverhead (T)	Suffolk	1104000	GPD	1440000	GPD
Hoeffner Farms - Hornell	Fremont (T)	Steuben	594000	GPD	1188000	
Hoeffner Farms - Montgomery	Montgomery (T)	Orange	600000	GPD	1.02	MGD
Holcim (US) Inc.	Catskill (T)	Greene	21224	GPD	750	GPM
Holimont Ski Resort	Ellicottville (T)	Cattaraugus	34000	GPD	8640000	GPD
Hollingsworth & Vose Co - Easton Facility	Easton (T)	Washington	2.91	MGD	3.59	MGD
Hollingsworth & Vose Co - Greenwich Facility	Easton (T)	Washington	0.261	MGD	0.66	MGD
Hollow Brook Golf Club	Cortlandt (T)	Westchester	35930	GPD	260000	GPD
Homogeneous Metals	Paris (T)	Oneida	559983	GPD	1332000	GPD
Hoosick Falls, Vg	Hoosick (T)	Rensselaer	441419	GPD	670616	GPD
Hopewell Hamlet Water District	East Fishkill (T)	Dutchess	46235	GPD	0.0864	MGD
Hopkinson Farms	Williamstown (T)	Oswego	360000	GPD		
Horizon Heights (Monroe Water District #1)	Monroe (T)	Orange				
Hornell, City	Fremont (T)	Steuben	2358143	GPD	3806280	GPD
Horseheads, Vg	Horseheads (T)	Chemung	2	MGD	2.7	MGD
Houghton Water District	Caneadea (T)	Allegany	167000	GPD	558000	GPD
Hourigan Dairy Farm	Elbridge (T)	Onondaga	35000	GPD		
Howes Cave Quarry	Cobleskill (T)	Schoharie	1.32	MGD	1.32	MGD
HP Hood	Hornellsville (T)	Steuben	171520	GPD	343000	GPD
HP Hood dba Crowley	Orleans (T)	Jefferson	157546	GPD	162883	GPD
Hudson National Golf Club	Cortlandt (T)	Westchester	100000	GPD	280000	GPD
Hudson Valley Resort	Rochester (T)	Ulster	60000	GPD	120000	GPD
Hudson Valley Water Co	Hurley (T)	Ulster	56168	GPD		
Huguenot Estates East	Deerpark (T)	Orange	46462	GPD	63200	GPD
Huhtamaki Inc	Fulton (C)	Oswego	220440	GPD	0.857	MGD
Hume, Tn	Hume (T)	Allegany	59963	GPD	100000	GPD
Hunt Hollow Ski Club	Naples (T)	Ontario	0.517	MGD		
Hunter Mountain	Hunter (T)	Greene	0.868	MGD	12.96	
Hunter, Vg	Hunter (T)	Greene	0.181	MGD	0.464	MGD
Huntley Generating Station	Tonawanda (T)	Erie	200	MGD	406	MGD
Huron Campus	Union (T)	Broome	0.24	MGD	2.3	MGD
Hyde Park - DCWWA	Hyde Park (T)	Dutchess	1031408	GPD	1375000	
Hyde Park Landfill	Niagara Falls (C)	Niagara	0.107	MGD	0.462	MGD
IBM Hudson Valley Research Park	East Fishkill (T)	Dutchess	2.06	MGD	3.39	MGD
IBM Poughkeepsie	Poughkeepsie (T)	Dutchess	23.6	MGD	46	MGD
IBM Somers	Somers (T)	Westchester	0.027	MGD	0.151	MGD

FACILITY NAME	FACILITY TOWN/CITY	FACILITY COUNTY	ve_Day_Withdraw	Units_Ave_Day	ax_Day_Withdrav	Units_Max_Day
Ideal Dairy Farms Inc	Kingsbury (T)	Washington	52250	GPD	66500	GPD
Ilion, Vg	German Flatts (T)	Herkimer	1.29	MGD	1.66	MGD
Indeck - Corinth Energy Center	Lake Luzerne (T)	Warren	0.658	MGD	1.091	MGD
Indeck - Silver Springs Energy Center	Gainesville (T)	Wyoming	3792	GPD	185000	GPD
Indian Island Golf Course	Riverhead (T)	Suffolk				
Indian Lake Water District #2	Indian Lake (T)	Hamilton	0.113	MGD	0.295	MGD
Indian Point 2&3 LLCs	Cortlandt (T)	Westchester	2024	MGD	2489	MGD
Inergy Midstream	Bath (T)	Steuben	107800	GPD	203900	GPD
Inlet Golf Club	Inlet (T)	Hamilton	16055	GPD	300000	GPD
Interface Solutions, Inc - Fulton	Volney (T)	Oswego	0.975	MGD	2.17	MGD
Interface Solutions, Inc - Hoosick Falls	Hoosick (T)	Rensselaer	0.3166	MGD	0.672	MGD
Interface Solutions, Inc - Lewis Plant	Croghan (T)	Lewis	0.71	MGD	1.34	MGD
Interlaken, Vg	Covert (T)	Seneca	55244	GPD	117000	GPD
International Paper - Corinth	Lake Luzerne (T)	Warren	0	MGD	0	MGD
International Paper - Ticonderoga Mill	Ticonderoga (T)	Essex	16.8	MGD	21.5	MGD
International Wire - Camden Wire	Camden (T)	Oneida	544000	GPD	685000	GPD
International Wire - Sherrill Operations	Sherrill (C)	Oneida	460000	GPD	721000	GPD
Intertek	Cortlandville (T)	Cortland	532308	GPD	658080	GPD
Irondequoit Country Club	Pittsford (T)	Monroe				
Irving Tissue, Inc	Fort Edward (T)	Washington	3.012	MGD	5.28	MGD
IsleChem, LLC	Grand Island (T)	Erie	0.377	MGD	1.16	MGD
Ithaca, City	Ithaca (T)	Tompkins	3.96	MGD	5.64	MGD
Ivy Acres Inc	Riverhead (T)	Suffolk	143940	GPD	315900	GPD
J Anzalone Orchards	Lloyd (T)	Ulster				
J Glebocki Farms	Goshen (T)	Orange	2500	GPD	3000	GPD
Jacob Rottkamp & Son	Riverhead (T)	Suffolk	1.6	MGD		
Jados Farms	Warwick (T)	Orange				
James A. Fitzpatrick Nuclear Power Plant	Scriba (T)	Oswego	543	MGD	596	MGD
James Baird State Park	La Grange (T)	Dutchess	55000	GPD	110000	GPD
James Piedimonte & Sons	Murray (T)	Orleans	39600	GPD	1.6	MGD
Jamestown BPU - Power	Jamestown (C)	Chautauqua	0.03	MGD	0.09	MGD
Jamestown City	Poland (T)	Chautauqua	4.692	MGD	7.989	MGD
Jane Kulesa	Riverhead (T)	Suffolk	0	GPD	0	GPD
Jaway Farms	Rochester (T)	Ulster				
Jay, Water Plant	Jay (T)	Essex	202304	GPD	263000	GPD
JB Martin Farms, Inc	Clarkson (T)	Monroe	2	MGD	2.05	MGD
JCI Jones Chemicals - Caledonia	Caledonia (T)	Livingston	326000	GPD	498000	GPD
JCI Jones Chemicals - Warwick	Warwick (T)	Orange	143000	GPD	187000	GPD
JD Water Company Inc	Bethel (T)	Sullivan				
Jeffersonville, Vg	Callicoon (T)	Sullivan				
John Condzella	Riverhead (T)	Suffolk	1627	GPD	150000	GPD
John Hartmann & Sons	Riverhead (T)	Suffolk	251112	GPD	1368000	GPD
John Kujawski & Sons	Riverhead (T)	Suffolk	328000	GPD	2400000	GPD
John Munch	Sheridan (T)	Chautauqua				
John Tuthill	Southold (T)	Suffolk			126000	GPD
Johnson City, Vg	Union (T)	Broome	2.7	MGD	4.4	MGD
Johnson Potato Farm	Williamson (T)	Wayne			432000	GPD
Johnstown, City	Johnstown (T)	Fulton	1.81	MGD	2.8	MGD
Jointa Galusha, LLC - Glens Falls Quarry	Glens Falls (C)	Warren	0.834	MGD	1.44	MGD
Jointa Galusha, LLC - Hartford Quarry	Hartford (T)	Washington	45000	GPD	0.864	MGD
Jointa Galusha, LLC - Pattens Mills	Fort Ann (T)	Washington	15964	GPD	227770	GPD
Jones Beach State Park	Hempstead (T)	Nassau	151000	GPD	631000	GPD
Jones Farm	Cornwall (T)	Orange	250	GPM	740	GPM
Joseph Meyer & Sons	Fremont (T)	Steuben				
Joseph Sidoti	Warwick (T)	Orange				
K & W Enterprises	Gaines (T)	Orleans	363000	GPD	363000	GPD
Kanon Valley Country Club	Lenox (T)	Madison	13157	GPD	166500	GPD
Karpinski Farms	Riverhead (T)	Suffolk	648000	GPD	1296000	GPD
Keeseville, Vg	Chesterfield (T)	Essex	195101	GPD	485020	GPD
Kerhonkson Water District	Wawarsing (T)	Ulster	59808	GPD	156000	GPD
Kerry Bio-Science	Norwich (T)	Chenango	354616	GPD	530754	GPD
Kiamesha Artesian Spring Water	Thompson (T)	Sullivan	112500	GPD	136645	GPD
Kinderhook, Vg	Kinderhook (T)	Columbia	118750	GPD	247000	GPD
Kings Estates (Warwick Water Corp)	Warwick (T)	Orange	70024	GPD	107000	GPD
Kings Ransom Farm	Northumberland (T)	Saratoga	35110	GPD	39480	GPD
Kingston City Water District	Woodstock (T)	Ulster	4.5	MGD	4.9	MGD
Kinnebrook Mobile Home Park	Thompson (T)	Sullivan	54183	GPD	82600	GPD
Kinsella - Barber Walters Pit	Pompey (T)	Onondaga	336000	GPD	500000	GPD
Kinsella - EZAcres	Homer (T)	Cortland	336000	GPD	500000	GPD
Kinsella - Fayetteville Quarry	Manlius (T)	Onondaga	142000	GPD	400000	GPD
Kirkwood, Tn	Kirkwood (T)	Broome	750000	GPD	953000	GPD

FACILITY NAME	FACILITY TOWN/CITY	FACILITY COUNTY	ve_Day_Withdraw	Units_Ave_Day	ax_Day_Withdrav	Units_Max_Day
Kiryas Joel, Vg	Monroe (T)	Orange	1.57	MGD	2.16	MGD
Kiskatum Mobil Home Park	Catskill (T)	Greene	5000	GPD	6000	GPD
Kissing Bridge Corp	Concord (T)	Erie	2.6	MGD	3.7	MGD
Klein's Kill Fruit Farms	Livingston (T)	Columbia	147400	GPD	147400	GPD
Knolls Atomic Power Lab - Kesselring Site	Milton (T)	Saratoga	0.34	MGD	1.1	MGD
Knolls Atomic Power Lab - Knolls Site	Niskayuna (T)	Schenectady	3.5	MGD	3.9	MGD
Knowlton Technologies, LLC	Watertown (C)	Jefferson	399000	GPD	545100	GPD
Kozak Farms	Riverhead (T)	Suffolk	168580	GPD	240000	GPD
Kraft Foods - Walton	Walton (T)	Delaware	0.618	MGD	1.301	MGD
Kraft Foods Global - Campbell	Campbell (T)	Steuben	0.742	MGD	1.1	MGD
Kreher's Farm Fresh Eggs, LLC	Clarence (T)	Erie	30000	GPD	50000	GPD
KS Datthyn Farms	Sodus (T)	Wayne	15000	GPD	100000	GPD
Kurt Weiss Greenhouses	Brookhaven (T)	Suffolk	171000	GPD	516666	GPD
Labrador Development Corp	Truxton (T)	Cortland	1682118	GPD	2144250	GPD
Lafarge Building Materials	Coeymans (T)	Albany	3.2	MGD	6.4	MGD
Lafarge Freedom Pit	Freedom (T)	Cattaraugus	43500	GPD	648000	GPD
Lafarge Lockport Quarry	Lockport (C)	Niagara	1930000	GPD	4320000	GPD
Lafarge Niagara Quarry	Niagara (T)	Niagara	1190000	GPD	2880000	GPD
LaGrange Town Center	La Grange (T)	Dutchess	82200	GPD	219000	GPD
Lais Farm	Marlborough (T)	Ulster	21600	GPD	43200	GPD
Lake George, Vg	Lake George (T)	Warren	0.72	MGD	1.4	MGD
Lake Hill Farms Water District	Chester (T)	Orange	79834	GPD	133000	GPD
Lake Isle Country Club (Town of Eastchester Golf Course)	Eastchester (T)	Westchester	50015	GPD	200000	GPD
Lake Luzerne Water District	Lake Luzerne (T)	Warren	341000	GPD	595000	GPD
Lake Placid, Vg	North Elba (T)	Essex	1.081082	MGD	2.076	MGD
Lake Tiorati Water Supply	Tuxedo (T)	Orange	0.017	MGD	0.115	MGD
Lake Vue Park Water District	Montgomery (T)	Orange	11000	GPD	73000	GPD
Lakeside Country Club	Milo (T)	Yates	227309	GPD		
Lamb Farms # 1	Oakfield (T)	Genesee	97796	GPD	111680	GPD
Lamb Farms # 2	Elba (T)	Genesee	48758	GPD	55680	GPD
Lancaster Country Club	Lancaster (T)	Erie	42150	GPD	227307	GPD
Lang's Nursery	West Sparta (T)	Livingston	48000	GPD	72000	GPD
Laural Links Country Club	Southold (T)	Suffolk				
Laurens, Vg	Laurens (T)	Otsego	18078	GPD	30000	GPD
L-Brooke Farms, LLC	Byron (T)	Genesee			1260000	GPD
Leatherstocking Golf Course	Otsego (T)	Otsego	314741	GPD	384500	GPD
Ledge Rock Farms LLC	Shelby (T)	Orleans	556	GPD	7000	GPM
Leewood Golf Club	Eastchester (T)	Westchester	40046	GPD	128000	GPD
Leray Water District #2	Le Ray (T)	Jefferson	247860	GPD	344860	GPD
Leverenz Farms	Hamlin (T)	Monroe			500000	GPD
Lewin Farm	Riverhead (T)	Suffolk	750000	GPD	1440000	GPD
Lewis Water District #1	Lewis (T)	Essex	28000	GPD	37000	GPD
Liberty, Vg	Liberty (T)	Sullivan	667000	GPD	789000	GPD
Lima Golf & Country Club	Lima (T)	Livingston	84000	GPD	168000	GPD
Lincoln Dairy	Fleming (T)	Cayuga	105205	GPD	113329	GPD
Links at Ivy Ridge	Newstead (T)	Erie	0.05	MGD	0.35	MGD
Links at Unionvale	Union Vale (T)	Dutchess	50476	GPD	230000	GPD
Little Falls, City	Salisbury (T)	Herkimer	2600000	GPD	3100000	GPD
Little Switzerland	East Fishkill (T)	Dutchess	69811	GPD	108500	GPD
Little Valley, Vg	Little Valley (T)	Cattaraugus	263000	GPD	364000	GPD
Livingston Manor Water	Rockland (T)	Sullivan	0.389	MGD	0.679	MGD
Lochmor Golf Course	Fallsburg (T)	Sullivan	21278	GPD	250000	GPD
Locke, Tn	Locke (T)	Cayuga	23537	GPD	83000	GPD
Lockheed Martin Corp.	Salina (T)	Onondaga	304827	GPD	469028	GPD
Lockport Town & Country Club	Lockport (C)	Niagara	26275	GPD	385000	GPD
Lockport, City	North Tonawanda (C)	Niagara	5.27	MGD	7.24	MGD
Locust Hill Country Club	Henrietta (T)	Monroe	100000	GPD	250000	GPD
Locust Valley Water District	Oyster Bay (T)	Nassau	1.725	MGD	7.053	MGD
Logan Farms	Palatine (T)	Montgomery	0		0	
Long Beach, City	Long Beach (C)	Nassau	3200000	GPD	5178000	GPD
Long Lake Water District #2	Long Lake (T)	Hamilton	328597	GPD	623000	GPD
Losurdo Foods	Oswegatchie (T)	St. Lawrence	22000	GPD	28000	GPD
Love Canal	Niagara Falls (C)	Niagara	0.015	MGD	0.0982	MGD
Lowville, Vg	New Bremen (T)	Lewis	924417	GPD	1073000	GPD
Lydall Thermal	Green Island (T)	Albany	1.74	MGD	4.902	MGD
Lyndonville, Vg	Yates (T)	Orleans	0.193	MGD	0.408	MGD
Lyons Falls, Vg	Lyonsdale (T)	Lewis	103083	GPD	103083	GPD
Lyons, Vg	Lyons (T)	Wayne			0.802	MGD
Lyonsdale Biomass, LLC	Lyonsdale (T)	Lewis	260829	GPD	563000	GPD
M G Hurd and Sons	Lloyd (T)	Ulster	59660	GPD		
M K Phelps Farm	Sardinia (T)	Erie	5000	GPD	1550000	GPD
Machias, Tn	Machias (T)	Cattaraugus				
Madison, Vg	Madison (T)	Madison	65000	GPD	150000	GPD
Madrid Water District #1	Madrid (T)	St. Lawrence	0.054	MGD	0.133	MGD
Madura Farm	Warwick (T)	Orange	300	GPD	500	GPD
Mahany, R&G	Dansville (T)	Steuben	1162170	GPD	6062400	GPD
Mahopac Golf Club	Carmel (T)	Putnam	22091	GPD	366742	GPD
Malone, Vg	Malone (T)	Franklin	2.2	MGD	3	MGD
Manchester Water District	La Grange (T)	Dutchess	338000	GPD	920000	GPD

FACILITY NAME	FACILITY TOWN/CITY	FACILITY COUNTY	ve_Day_Withdraw	Units_Ave_Day	ax_Day_Withdraw	Units_Max_Day
Manhattan Woods Golf Club	Orangetown (T)	Rockland	35773	GPD	460000	GPD
Mannsville, Vg	Ellisburg (T)	Jefferson	32190	GPD	198800	GPD
Mansion Ridge Golf Club	Monroe	Orange	185000	GPD	270000	GPD
Mapleview Dairy	Madrid (T)	St. Lawrence	105794	GPD	114166	GPD
Marathon, Vg	Marathon (T)	Cortland	0.08	MGD	0.278	MGD
Margaretville, Vg	Middletown (T)	Delaware	95000	GPD	210000	GPD
Mark Eger & Bros.	Livingston (T)	Columbia	336000	GPD	504000	GPD
Mark Twain State Park	Veteran (T)	Chemung	16905	GPD	316741	GPD
Marks Farm	Martinsburg (T)	Lewis	294705	GPD	294705	GPD
Marshall Skiff Orchards	Onondaga (T)	Onondaga	63000	GPD	70000	GPD
Marshland Links	Owego (T)	Tioga	0.18	MGD	0.21	MGD
Martha Clara Vineyards Inc	Riverhead (T)	Suffolk	517	GPD	108000	GPD
Martin Sidor Farms Inc	Southold (T)	Suffolk	6.72	MGD	6.72	MGD
Martinsburg Water District	Martinsburg (T)	Lewis	72141	GPD	141500	GPD
Maryland Water District	Maryland (T)	Otsego	39392	GPD	54000	GPD
Mason Farms	Williamson (T)	Wayne	15000	GPD	1	MGD
Massena Intake	Massena (T)	St. Lawrence	2.2	MGD	2.7	MGD
Massena, Vg	Massena (T)	St. Lawrence	1.2	MGD	1.7	MGD
Maybrook, Vg	Hamptonburgh (T)	Orange	0.195	MGD	0.5	MGD
Mayfield, Vg	Mayfield (T)	Fulton	85500	GPD	174900	GPD
May's Farm	Riverhead (T)	Suffolk	9000	GPD	110000	GPD
Mayville, Vg	Chautauqua (T)	Chautauqua	207000	GPD	353000	GPD
McCollum Farms	Royalton (T)	Niagara	2.5	MGD	3.5	MGD
McConnellsville Golf Club	Vienna (T)	Oneida	153000	GPD	153000	GPD
McCormick Farms, Inc	Wethersfield (T)	Wyoming	2387389	GPD	2387389	GPD
McGraw, Vg	Cortlandville (T)	Cortland	110970	GPD	160900	GPD
McGregor Country Club	Wilton (T)	Saratoga	62411	GPD	183000	GPD
Mead Orchards	Red Hook (T)	Dutchess	20000	GPD	290000	GPD
Meadows	Middlefield (T)	Otsego	16300	GPD	18600	GPD
Mechanicville, City	Stillwater (T)	Saratoga	0.97	MGD	1176000	GPD
Mehlenbacher Farms Inc	Wayland (T)	Steuben	19452	GPD	63333	GPD
Mendon Country Club	Mendon (T)	Monroe	19589	GPD	80000	GPD
Merrell Farms, LLC	Butler (T)	Wayne	152875	GPD	166359	GPD
Merritt Park Water	Fishkill (T)	Dutchess	0.024	MGD	0.094	MGD
Metropolis Country Club	Greenburgh (T)	Westchester	39029	GPD	0.224	MGD
Metropolitan Water Board	Oswego (T)	Oswego	19.564	MGD	40.17	MGD
Mexico, Vg	Mexico (T)	Oswego	372833	GPD	590200	GPD
Meyers Farm	Riverhead (T)	Suffolk	25890	GPD	270000	GPD
Michael McKay Farms	Riverhead (T)	Suffolk	200000	GPD	300000	GPD
Michelle Estates	Lewisboro (T)	Westchester	40791	GPD	106700	GPD
Middleburg,Vg	Middleburg (T)	Schoharie	22167	GPD	300	GPM
Middletown, City	Wallkill (T)	Orange	2620521	GPD	3178000	GPD
Middleville, Vg	Fairfield (T)	Herkimer	95233	GPD	100065	GPD
Mid-Orange Correctional Facility	Warwick (T)	Orange	162604	GPD	403200	GPD
Midvale Country Club	Perinton (T)	Monroe	283000	GPD	942000	GPD
Migliorelli Farm	Red Hook (T)	Dutchess	500000	GPD	1000000	GPD
Milford, Vg	Milford (T)	Otsego	94000	GPD	152000	GPD
Milk Street Dairy	Rutland (T)	Jefferson	72201	GPD	95114	GPD
Mill Creek Golf Club	Riga (T)	Monroe	426000	GPD	432000	GPD
Mill Road Farms	Riverhead (T)	Suffolk	250000	GPD		
Millbrook Golf & Tennis Club	Washington (T)	Dutchess	5945	GPD	80000	GPD
Millbrook, Vg	Washington (T)	Dutchess	213000	GPD	400000	GPD
Millerton, Vg	Northeast (T)	Dutchess	189800	GPD	338000	GPD
Minard & Sons	Plattekill (T)	Ulster			2200	GPD
Minard Farms	Lloyd (T)	Ulster	35000	GPD	432000	GPD
Minerva, Tn	Minerva (T)	Essex	80000	GPD	210000	GPD
Mizkan Americas, Inc	Sodus (T)	Wayne	0.124	MGD	0.179	MGD
MKZ Farms	Riverhead (T)	Suffolk	26281	GPD	432000	GPD
Modern Landfill Inc	Lewiston (T)	Niagara	0.01	MGD	0.03	MGD
Mohawk Fine Papers - Cohoes	Cohoes (C)	Albany	0.9	MGD	1.42	MGD
Mohawk Fine Papers - Waterford	Waterford (T)	Saratoga	9	MGD	9	MGD
Mohawk River Golf Course	Clifton Park (T)	Saratoga			360000	GPD
Mohawk Valley Water Authority	Russia (T)	Herkimer	20.6	MGD	24.25	MGD
Mohawk, Vg	German Flatts (T)	Herkimer	541528	GPD	832000	GPD
Mohonk Golf Course	New Paltz (T)	Ulster	21600	GPD	21600	GPD
Mombaccus Excavating - Amanda Dr	Rochester (T)	Ulster	207000	GPD	360000	GPD
Mombaccus Excavating Inc	Rochester (T)	Ulster	207000	GPD	360000	GPD
Monofrax - Jamestown	Ellicott (T)	Chautauqua	12316	GPD	21716	GPD
Monroe County Water Authority Brockport	Hamlin (T)	Monroe	0	MGD	0	MGD
Monroe County Water Authority Shoremont	Greece (T)	Monroe	55.4	MGD	109	MGD
Monroe Golf Club	Pittsford (T)	Monroe	86470	GPD	950000	GPD
Monroe Hills Water District	Monroe (T)	Orange				
Monroe,Vg	Monroe (T)	Orange	874436	GPD	1325599	GPD
Montclair Condominiums	Wappinger (T)	Dutchess	36649	GPD		
Montgomery Water District #1	Montgomery (T)	Orange	32000	GPD	302000	GPD
Montgomery, Vg	Montgomery (T)	Orange	0.263	MGD	0.377	MGD
Montour Falls, Vg	Montour (T)	Schuyler	193000	GPD	662000	GPD
Moon Brook Country Club	Ellicott (T)	Chautauqua	44156	GPD	226000	GPD
Moravia, Vg	Moravia (T)	Cayuga	465942	GPD	507200	GPD

FACILITY NAME	FACILITY TOWN/CITY	FACILITY COUNTY	ve_Day_Withdraw	Units_Ave_Day	ax_Day_Withdrav	Units_Max_Day
Morgiewicz Produce	Warwick (T)	Orange	3500	GPD	300	GPM
Moriah Water District	Moriah (T)	Essex	422923	GPD	962000	GPD
Morning Star Farm	Adams (T)	Jefferson	31427	GPD	35971	GPD
Morningstar Foods	Delhi (T)	Delaware	0.6066	MGD	0.72	MGD
Morris, Vg	Morris (T)	Otsego	59333	GPD	147000	GPD
Morrisonville Water District	Schuyler Falls (T)	Clinton				
Morrisville State College	Eaton (T)	Madison	199830	GPD	387000	GPD
Morrisville State College - Aquaculture Center	Eaton (T)	Madison	91.04	GPM	132.2	GPM
Morrisville, Vg	Eaton (T)	Madison	65000	GPD	117000	GPD
Morton Salt, Inc	Gainesville (T)	Wyoming	9.84	MGD	10.28	MGD
Moserdale Farm	Denmark (T)	Lewis	31125	GPD	31125	GPD
Moses Farm	White Creek (T)	Washington	17840	GPD	21000	GPD
Mosher Farms	Eaton (T)	Madison	30450	GPD	300900	GPD
Motor Components	Horseheads (T)	Chemung	0.18	MGD	0.576	MGD
Mount Kisco Country Club	Mount Kisco (T)	Westchester	137574	GPD	258320	GPD
Mount Kisco, Vg	Bedford (T)	Westchester	1360370	GPD	1563000	GPD
Mount McGregor Correctional Facility	Corinth (T)	Saratoga	72391	GPD	220846	GPD
Mount Morris Dairy Farms	Mount Morris (T)	Livingston	32000	GPD	36000	GPD
Mount Morris, Vg	Perry (T)	Wyoming	0.53	MGD	1	MGD
Mount Peter Ski Area	Warwick (T)	Orange	144000	GPD	576000	GPD
Mount Upton Water District	Guilford (T)	Chenango	22000	GPD	22000	GPD
Mountain Brook Water District	Southeast (T)	Putnam	2502	GPD	10700	GPD
Mountaindale Water District	Fallsburg (T)	Sullivan	51740	GPD	213000	GPD
MPM Silicones, LLC	Waterford (T)	Saratoga	11.6	MGD	18	MGD
Murcrest Farm LLC	Champion (T)	Jefferson	60400	GPD	82500	GPD
Myruski Farms Inc	Goshen (T)	Orange	70	GPM	70	GPM
My-T-Acres, Inc	Batavia (T)	Genesee	2.89	MGD		
Napanoch Water District	Wawarsing (T)	Ulster	99899	GPD	223000	GPD
Naples, Vg	Naples (T)	Ontario	250000	GPD	275000	GPD
Narde Paving - Hurley Pit	Southport (T)	Chemung	0	GPD	0	GPD
Narde Paving - Paladino Pit	Horseheads (T)	Chemung	1944000	GPD	2916000	GPD
Narrowsburg Water District	Tusten (T)	Sullivan	74681	GPD	229200	GPD
Nassau, Vg	Nassau (T)	Rensselaer	149650	GPD	249000	GPD
New Athens Generating	Athens (T)	Greene	0.153	MGD	0.77	MGD
New Berlin, Vg	New Berlin (T)	Chenango	107422	GPD	157000	GPD
New Hope View Farm	Homer (T)	Cortland	35967	GPD		
New Paltz, Vg	New Paltz (T)	Ulster	773451	GPD	1471000	GPD
New Russia Water District	Elizabethtown (T)	Essex	900	GPD	1400	GPD
New Vernon Water Co	Mount Hope (T)	Orange	15736	GPD	44600	GPD
New Woodstock Water District	Cazenovia (T)	Madison	23300	GPD	90000	GPD
New York Air Brake Co	Watertown (C)	Jefferson	12296	GPD		
New York City DEP	Neversink (T)	Sullivan	1078	MGD	1418	MGD
New York City DEP Wells	Queens (T)	Queens				
New York Country Club	Ramapo (T)	Rockland			200000	GPD
Newark Valley, Vg	Newark Valley (T)	Tioga	110924	GPD	324633	GPD
Newark, Vg	Canandaigua (T)	Ontario	3.06	MGD	4.272	MGD
Newburgh Consolidated Water District	Newburgh (T)	Orange	0.63	MGD	2.74	MGD
Newburgh, City	New Windsor (T)	Orange	4926000	GPD	6514000	GPD
Newfield, Tn	Newfield (T)	Tompkins	137099	GPD	285020	GPD
Newport, Vg	Newport (T)	Herkimer	78000	GPD	100000	GPD
Newton Falls Fine Paper Company, LLC	Clifton (T)	St. Lawrence	0		0	
Newton Water Works	Homer (T)	Cortland	402000	GPD	660000	GPD
Niagara County Water District	Niagara Falls (C)	Niagara	17	MGD	34	MGD
Niagara Falls Water Board	Niagara Falls (C)	Niagara	18.4	MGD	24.3	MGD
Niagara Frontier Country Club	Porter (T)	Niagara	81500	GPD	120000	GPD
Niagara Power Project	Lewiston (T)	Niagara	47463	MGD	62164	MGD
Nichols, Tn	Nichols (T)	Tioga	4987	GPD	0.05	MGD
Nine Mile Point Nuclear Station	Scriba (T)	Oswego	401.1	MGD	457.1	MGD
Niskayuna Consolidated Water District	Niskayuna (T)	Schenectady	1.4	MGD	1.7	MGD
Noblehurst Farms, Inc.	York (T)	Livingston	83000	GPD	102000	GPD
Norlite Corporation	Colonie (T)	Albany	60000	GPD	90000	GPD
Norman Brennan	Paris (T)	Oneida				
Normanside Country Club	Albany (C)	Albany	92720	GPD	302570	GPD
North Branch Farms	Ellisburg (T)	Jefferson	200000	GPD	200000	GPD
North Castle Water District #2	North Castle (T)	Westchester	0.137	MGD	0.35	MGD
North Castle Water District #4	North Castle (T)	Westchester	0.334	MGD	0.673	MGD
North Cohocton Water District	Cohocton (T)	Steuben	29000	GPD	76000	GPD
North Collins, Vg	Brant (T)	Erie	160000	GPD	380000	GPD
North Country Concrete	Constantia (T)	Oswego	1320000	GPD	1320000	GPD
North Country Dairy, LLC	Lawrence (T)	St. Lawrence	389550	GPD	787600	GPD
North Creek Water District	Johnsburg (T)	Warren	153032	GPD	397500	GPD
North Fork Nursery	Riverhead (T)	Suffolk	631233	GPD	1980000	GPD
North Harbor Dairy	Hounsfield (T)	Jefferson	27060	GPD	91935	GPD
North Hills Country Club	North Hempstead (T)	Nassau	70800	GPD	250000	GPD

FACILITY NAME	FACILITY TOWN/CITY	FACILITY COUNTY	ve_Day_Withdraw	Units_Ave_Day	ax_Day_Withdrav	Units_Max_Day
North Java Water District	Java (T)	Wyoming	34633	GPD	70522	GPD
North Tonawanda, City	North Tonawanda (C)	Niagara	3.93	MGD	5.4	MGD
Northeast Solite Corp	Saugerties (T)	Ulster	1.5	MGD	3.7	MGD
Northeast Water District (New Scotland, Tn)	New Scotland (T)	Albany	22068	GPD	38300	GPD
Northern Aggregates - Fulton	Volney (T)	Oswego	1620000	GPD	1620000	GPD
Northville, Vg	Northampton (T)	Fulton	95411	GPD	273600	GPD
Northwood Water Company	Malta (T)	Saratoga	94400	GPD	151000	GPD
Norwich Meadows Farm	Norwich (T)	Chenango	31120	GPD	175000	GPD
Norwich, City	Norwich (T)	Chenango	0.98	MGD	1.5	MGD
Novelis Corporation	Scriba (T)	Oswego	0.534	MGD	2	MGD
Nunda, Vg	Nunda (T)	Livingston	0.154	MGD	0.284	MGD
Nyack, Vg	Clarkstown (T)	Rockland	1.9	MGD	2.5	MGD
NYCO Minerals	Lewis (T)	Essex	750000	GPD	2060000	GPD
Oak Hill Country Club	Pittsford (T)	Monroe	0.11	MGD	0.49	MGD
Oak Orchard Dairy	Elba (T)	Genesee	47337	GPD	50000	GPD
Oak-Mitsui	Hoosick (T)	Rensselaer	553	GPD	669	GPD
Oakwood Dairy	Aurelius (T)	Cayuga	135616	GPD	150000	GPD
OATKA Milk Products Coop Inc	Batavia (T)	Genesee	1.198	MGD	2.004	MGD
Occidental Chemical Corp - Niagara Plant	Niagara Falls (C)	Niagara	12	MGD	22	MGD
Odessa, Vg	Catharine (T)	Schuyler	53090	GPD	200900	GPD
Ogdensburg, City	Ogdensburg (C)	St. Lawrence	2.04	MGD	5	MGD
Old Forge Water District	Webb (T)	Herkimer	188000	GPD	477000	GPD
Old Oaks Country Club	Harrison (T)	Westchester	19566	GPD		
Old Westbury, Vg	North Hempstead (T)	Nassau	1.989	MGD	6.969	MGD
Olde Kinderhook Golf Club	Kinderhook (T)	Columbia	0.04	MGD	0.386	MGD
Olean Advanced Products	Olean (T)	Cattaraugus	322060	GPD	520000	GPD
Olean, City	Olean (C)	Cattaraugus	2.34	MGD	4.23	MGD
Olin Chemicals	Niagara Falls (C)	Niagara	0.92	MGD	0.95	MGD
Omega Wire - Jordan	Elbridge (T)	Onondaga	179000	GPD	291000	GPD
Omega Wire - Williamstown	Williamstown (T)	Oswego	404000	GPD	612000	GPD
One New York Plaza	New York (T)	New York	10.9	MGD	32.1	MGD
Oneida Community Golf Club	Oneida (C)	Madison	10900	GPD		
Oneida Fish Hatchery	Constantia (T)	Oswego	1	MGD	2.3	MGD
Oneida, City	Annsville (T)	Oneida	3.05	MGD	4.36	MGD
Oneonta, City	Oneonta (T)	Otsego	1.69	MGD	2.09	MGD
Onondaga County Water Authority - Otisco Lake Water	Marcellus (T)	Onondaga	17.584	MGD	20.893	MGD
Onondaga Golf and Country Club	Dewitt (T)	Onondaga	6986	GPD	971000	GPD
Ontario Benefit Area #1	Ontario (T)	Wayne	1.955	MGD	3.396	MGD
Onteora Club	Hunter (T)	Greene				
Orange County Golf Club	Wallkill (T)	Orange	100000	GPD	180000	GPD
Orbaker's Fruit Farm	Williamson (T)	Wayne	5995	GPD	111907	GPD
Orchard Creek Golf Club	Guilderland (T)	Albany	24758	GPD	1152000	GPD
Orchard Park Country Club	Orchard Park (T)	Erie	48387	GPD	325167	GPD
Oriskany Falls, Vg	Madison (T)	Madison	56110	GPD	96412	GPD
Ossining, Vg	Ossining (T)	Westchester	3.2	MGD	4.2	MGD
Oswego Country Club	Oswego (C)	Oswego	10500	GPD	215000	GPD
Oswego County Energy Recovery Facility	Volney (T)	Oswego	8.25	MGD	14	MGD
Oswego Harbor Power	Oswego (C)	Oswego	167.7	MGD	364.21	MGD
Oswego, City	Oswego (C)	Oswego	7.85	MGD	14.091	MGD
Otego, Vg	Otego (T)	Otsego	78400	GPD	126000	GPD
Otisville, Vg	Mount Hope (T)	Orange	213981	GPD	407400	GPD
Otsego Manor	Otsego (T)	Otsego	17312	GPD	25364	GPD
Ouleout Golf Course	Franklin (T)	Delaware	27913	GPD	53760	GPD
Ovid, Vg	Ovid (T)	Seneca	69716	GPD	101000	GPD
Owasco Country Club	Owasco (T)	Cayuga	32533	GPD	268190	GPD
Owasco, Tn	Owasco (T)	Cayuga	419474	GPD	639249	GPD
Owego, Tn	Owego (T)	Tioga				
Owego, Tn Water District #1	Owego (T)	Tioga	0.048	MGD	0.165	MGD
Owego, Tn Water District #2	Owego (T)	Tioga	0.196	MGD	0.363	MGD
Owego, Tn Water District #3	Owego (T)	Tioga	0.104	MGD	0.424	MGD
Owego, Tn Water District #4	Owego (T)	Tioga	0.154	MGD	0.368	MGD
Owego, Tn Water District #5 (RT 38)	Owego (T)	Tioga	0.049	MGD	0.187	MGD
Owera Water District	Cazenovia (T)	Madison	0.0076	MGD	0.02	MGD
Oxford, Vg	Oxford (T)	Chenango	281733	GPD	563000	GPD
Painted Post, Vg	Erwin (T)	Steuben	0.18	MGD	0.619	MGD
Palatine Bridge, Vg	Palatine (T)	Montgomery	101000	GPD	137000	GPD
Pallette Stone - Saratoga Quarry	Saratoga Springs (C)	Saratoga	0.53976	MGD	0.7667	MGD
Pallette Stone - South Corinth	Corinth (T)	Saratoga	1.2	MGD	1.5	MGD
Palmyra, Vg	Canandaigua (T)	Ontario	370300	GPD	605900	GPD
Panek Farms, LLC	Albion (T)	Orleans	51325	GPD	2715000	GPD
Papas Dairy	Malone (T)	Franklin	92456	GPD	103964	GPD
Parishville Water District #1	Parishville (T)	St. Lawrence	0.045	MGD	0.08	MGD
Park Country Club	Amherst (T)	Erie	66000	GPD	225000	GPD

FACILITY NAME	FACILITY TOWN/CITY	FACILITY COUNTY	ve_Day_Withdraw	Units_Ave_Day	ax_Day_Withdrav	Units_Max_Day
Parkview Fairways Golf Course	East Bloomfield (T)	Ontario	17925	GPD	85500	GPD
Pasquale Sidoti	Warwick (T)	Orange				
Patsy Vigneri & Sons	Elba (T)	Genesee	0	GPD	0	GPD
Patterson Farms, Inc	Springport (T)	Cayuga	7506	GPD	10000	GPD
Pattys Berries & Bunches	Southold (T)	Suffolk				
Paul Smith's College	Brighton (T)	Franklin	67943	GPD	172800	GPD
Pauls Garden	Fenton (T)	Broome	7222	GPD	60000	GPD
Pavero Cold Storage	Lloyd (T)	Ulster	120000	GPD	350000	GPD
Pawling, Vg	Pawling (T)	Dutchess	228000	GPD	196	GPM
Peat & Son Nursery	Southampton (T)	Suffolk	92780	GPD	420000	GPD
Peckham - Putnam Materials Corp.	Patterson (T)	Putnam	0.135	MGD	0.169	MGD
Peckham - Willaim E. Dailey Inc.	Hoosick (T)	Rensselaer	0.6	MGD	0.6	MGD
Peckham - Wingdale Materials, LLC	Dover (T)	Dutchess	2.4	MGD	2.4	MGD
Peckham Materials - Catskill	Catskill (T)	Greene	0.84	MGD	0.84	MGD
Peckham Materials - Chestertown	Chester (T)	Warren	0.528	MGD	0.528	MGD
Peckham Materials - Greenfield	Greenfield (T)	Saratoga	0.42	MGD	0.42	MGD
Peckham Materials - Hudson Falls	Kingsbury (T)	Washington	1.02	MGD	1.02	MGD
Peckham Materials - Wingdale	Dover (T)	Dutchess	2.4	MGD	2.4	MGD
Pedersen Farms	Seneca (T)	Ontario	75000	GPD	270000	GPD
Peek'n Peak	French Creek (T)	Chautauqua	103217	GPD	154826	GPD
Peekskill, City	Peekskill (C)	Westchester	4.197	MGD	5.61	MGD
Pelham Country Club	Pelham (T)	Westchester	14383	GPD	350000	GPD
Pelham-Split Rock Golf	Bronx (T)	Bronx	39725	GPD	450000	GPD
Pellegrini Vineyards	Southold (T)	Suffolk	212	GPD	6575	GPD
Penfield Country Club	Penfield (T)	Monroe	16114	GPD	315214	GPD
Penn Yan, Vg	Jerusalem (T)	Yates	857941	GPD	1813000	GPD
Perennial Charm Nursery	Southampton (T)	Suffolk	141666	GPD	288000	GPD
Perinton Golf & Country Club	Perinton (T)	Monroe	230000	GPD	297000	GPD
Perry, Vg	Castile (T)	Wyoming				
Perry's Ice Cream Co. Inc.	Newstead (T)	Erie	1.153	MGD	1.59	MGD
Peru Water District	Peru (T)	Clinton	166071	GPD	600	GPM
Philadelphia, Vg	Le Ray (T)	Jefferson	0.226	MGD	0.394	MGD
Phillips Family Farm	Brant (T)	Erie	30000	GPD	32000	GPD
Philmont, Vg	Claverack (T)	Columbia	166000	GPD	320000	GPD
Phoenix, Vg	Schroeppel (T)	Oswego	251504	GPD	548310	GPD
Piercefield Water District	Piercefield (T)	St. Lawrence	14367	GPD	169920	GPD
Pike, Tn	Pike (T)	Wyoming	38340	GPD	112757	GPD
Pine Bush Water District	Crawford (T)	Orange	0.155	MGD	0.332	MGD
Pine Grove Health and Country Club	Camillus (T)	Onondaga	45600	GPD	68400	GPD
Pine Hill Water Co	Shandaken (T)	Ulster	122400	GPD	122400	GPD
Pine Hollow Country Club	Oyster Bay (T)	Nassau	104559	GPD		
Pine Island Turf Nursery. Inc.	Warwick (T)	Orange	20000	GPD	1000000	GPD
Pine Plains Water Improvement Area	Pine Plains (T)	Dutchess	70300	GPD	136800	GPD
Pinehaven Country Club	Guilderland (T)	Albany	109000	GPD	0.4	MGD
Pinelands Nursery	Bleecker (T)	Fulton	500	GPD	3000	GPD
Pinewood Country Club	Ogden (T)	Monroe				
Pioneer Fruit Farms	Marlborough (T)	Ulster	5000	GPD	8000	GPD
Pioneer Water Bottling Co	Marlborough (T)	Ulster	12000	GPD	15000	GPD
Pittsford ,Tn - Recreational	Pittsford	Monroe	0	GPD	0	GPD
PJ Rotella Memorial GC	Haverstraw (T)	Rockland	18120	GPD	155000	GPD
Plattsburgh, City	Plattsburgh (T)	Clinton	2.2	MGD	2.86	MGD
Plattsburgh, Tn	Plattsburgh (T)	Clinton	1.355	MGD	2.1	MGD
Plattsburgh, Tn - Cadyville Water District	Plattsburgh (T)	Clinton	83180	GPD	184600	GPD
Pleasant Valley Farm - Argyle	Argyle (T)	Washington	4785	GPD	87200	GPD
Pleasant Valley Farm - Salt Point	Pleasant Valley (T)	Dutchess	21600	GPD	43200	GPD
Plum Island Animal Disease Center	Southold (T)	Suffolk	58156	GPD	0.183	MGD
Poland, Vg	Russia (T)	Herkimer	55588	GPD	169200	GPD
Polaro	Poestenkill (T)	Rensselaer	207000	GPD	360000	GPD
Polevalley Players Club	Hartford (T)	Washington				
Polkville Crushed Stone	Cortlandville (T)	Cortland	332013	GPD	720040	GPD
Pomapa Bros. Inc.- Milton	Saratoga Springs (C)	Saratoga	4218	GPD	4219	GPD
Pominvilles Farm	Croghan (T)	Lewis	14000	GPD	18000	GPD
Port Ewen Water District	Esopus (T)	Ulster	310000	GPD	450000	GPD
Port Henry , Vg	Moriah (T)	Essex	0.15	MGD	0.295	MGD
Port Jervis, City	Port Jervis (C)	Orange	0.7	MGD	1.2	MGD
Port Leyden, Vg	Lyonsdale (T)	Lewis	47985	GPD	84516	GPD
Porterdale Farms	Rodman (T)	Jefferson	114978	GPD	131600	GPD
Portville, Vg	Portville (T)	Cattaraugus	134000	GPD	351000	GPD
Potsdam Specialty Paper Inc.	Potsdam (T)	St. Lawrence	1.11	MGD	1.93	MGD
Potsdam Town & Country Club	Potsdam (T)	St. Lawrence	300	GPM	900	GPM
Potsdam, Vg	Potsdam (T)	St. Lawrence	1048400	GPD	1673000	GPD
Pottersville Water District	Chester (T)	Warren	30000	GPD	132000	GPD

FACILITY NAME	FACILITY TOWN/CITY	FACILITY COUNTY	ve_Day_Withdraw	Units_Ave_Day	ax_Day_Withdrav	Units_Max_Day
Poughkeepsie, City	Poughkeepsie (T)	Dutchess	9.997	MGD	15.76	MGD
Pound Ridge Golf Club	Pound Ridge (T)	Westchester	115500	GPD	135000	GPD
Powelton Club	Newburgh (T)	Orange	62085	GPD	193065	GPD
Powers Farm	Pittsford (T)	Monroe	2200	GPD	150000	GPD
Prattsburgh Water District	Prattsburg (T)	Steuben	52438	GPD	250000	GPD
Prattsville Water District	Prattsville (T)	Greene	25417	GPD		
Praxair, Inc	Niagara Falls (C)	Niagara	39.9	MGD	48.8	MGD
Preble Hill Farm, LLC	Preble (T)	Cortland	31810	GPD	36409	GPD
Princetown, Tn	Princetown (T)	Schenectady	62711	GPD	180000	GPD
Prospect, Vg	Trenton (T)	Oneida	23430	GPD	27700	GPD
Pulaski, Vg	Richland (T)	Oswego				
Purchase Golf Club	Purchase	Westchester	100000	GPD	400000	GPD
Quaker Ridge Golf Club	Scarsdale (T)	Westchester	44107	GPD	350000	GPD
Queensbury Water District	Queensbury (T)	Warren	5.209	MGD	12.13	MGD
R&R Farms / Dykeman & Sons, Inc	Glen (T)	Montgomery	42734	GPD	48911	GPD
Randolph Hatchery	Cold Spring (T)	Cattaraugus	2.74	MGD	3.01	MGD
Randolph, Tn	Randolph (T)	Cattaraugus	255181	GPD	379000	GPD
Ravena, Vg	New Baltimore (T)	Greene	0.5	MGD	0.934	MGD
Ravenswood Generating Station	Queens (T)	Queens	512.9	MGD	1390	MGD
Ravenwood Golf Club	Victor (T)	Ontario	141441	GPD	400000	GPD
Ray Brook Water District	North Elba (T)	Essex	41000	GPD	81000	GPD
RE Ginna Nuclear Power Plant	Ontario (T)	Wayne	427	MGD	511	MGD
Red Hook Golf Club	Red Hook (T)	Dutchess	37357	GPD		
Red Hook Water District #1	Red Hook (T)	Dutchess	82000	GPD	227000	GPD
Red Hook, Vg	Red Hook (T)	Dutchess	238333	GPD	287000	GPD
Red Wing - Roe Jan Mine	Milan (T)	Dutchess	278598	GPD	2.9	MGD
Reeves Farms	Lysander (T)	Onondaga	0.075	MGD		
Reilly Vineyards, LLC	Southold (T)	Suffolk	45000	GPD	45000	GPD
Remington Arms Co	German Flatts (T)	Herkimer	0.82	MGD	0.95	MGD
Remsen, Vg	Remsen (T)	Oneida	49387	GPD	150153	GPD
Reservoir Creek Golf Course	Naples (T)	Ontario				
Revere Copper Products	Rome (C)	Oneida	5.8	MGD	5.8	MGD
Reyncrest Farms	Darien (T)	Genesee	42500	GPD	45000	GPD
Rhinebeck, Vg	Rhinebeck (T)	Dutchess	457000	GPD	1179000	GPD
Richard M. Flynn	Brookhaven (T)	Suffolk	889750	GPD	1257100	GPD
Richard Snyder	Montezuma (T)	Cayuga	21700	GPD	104550	GPD
Richfield Springs, Vg	Springfield (T)	Otsego	0.13	MGD	0.221	MGD
Richland Water District #1 & #2	Richland (T)	Oswego	169264	GPD	289227	GPD
Richmondville, Vg	Richmondville (T)	Schoharie	74380	GPD	127303	GPD
Ridgebury Lake Water District	Wawayanda (T)	Orange	17172	GPD	41100	GPD
Ridgecrest Dairy	Venice (T)	Cayuga	194630	GPD	209660	GPD
Ridgemont Country Club	Greece (T)	Monroe	150000	GPD	1000000	GPD
Ripley Water District	Ripley (T)	Chautauqua	108289	GPD	272442	GPD
River Breeze Farm	Waddington (T)	St. Lawrence	62567	GPD	108866	GPD
River Garden	Cairo (T)	Greene	65000	GPD	130000	GPD
Riverview Dale Farm	New Bremen (T)	Lewis				
RL Jeffres & Sons Inc	Covington (T)	Wyoming				
Roach Farm	Venice (T)	Cayuga	116305	GPD	125860	GPD
Roanoke Sand & Gravel	Brookhaven (T)	Suffolk	4307245	GPD	24843450	GPD
Robert Davenport & Sons	Marbletown (T)	Ulster	0	GPD	0	GPD
Robinn Meadows Water Company	Wawayanda (T)	Orange	22626	GPD	59600	GPD
Rochester, City	Canadice (T)	Ontario	36.6	MGD	40.26	MGD
Rockland Country Club	Orangetown (T)	Rockland	2056745	GPD	7192075	GPD
Rockrimmon Country Club	Pound Ridge (T)	Westchester	81550	GPD	340000	GPD
Rocky Point Homeowners Assn	Inlet (T)	Hamilton				
Rogowski Farm	Warwick (T)	Orange	250	GPD	2500	GPD
Rogues Roost Golf & Country Club	Sullivan (T)	Madison	8333	GPD	120000	GPD
Rolling Hills at Antlers	Amsterdam (T)	Montgomery				
Rolling Meadows Water Corp (Hurley Water Co)	Hurley (T)	Ulster	167214	GPD	200000	GPD
Romanski Farms	Riverhead (T)	Suffolk	65205	GPD	700000	GPD
Rome Fish Hatchery	Rome (C)	Oneida	7.1	MGD	8.4	MGD
Rome, City	Annsville (T)	Oneida	9.5	MGD	14.8	MGD
Root Bros. Farms	Barre (T)	Orleans	36819	GPD	325800	GPD
Roscoe-Rockland Water District	Rockland (T)	Sullivan	0.092	MGD	0.207	MGD
Rose Hill Farm	Red Hook (T)	Dutchess			2500	GPD
Rosendale, Tn	Rosendale (T)	Ulster	0.125	MGD	0.195	MGD
Rose-North Rose Water District	Rose (T)	Wayne	0.292	MGD	0.705	MGD
Roseton Generating Station	Newburgh (T)	Orange	340.54	MGD	794.4	MGD
Rotterdam, Tn - Main St	Rotterdam (T)	Schenectady	223560	GPD	377500	GPD
Rotterdam, Tn - Rice Road	Rotterdam (T)	Schenectady	3.85	MGD	8885000	GPD
Round Swamp Farm	East Hampton (T)	Suffolk	40000	GPD		
Rouses Point, Vg	Champlain (T)	Clinton	656516	GPD	1116000	GPD
Route 82 Sand & Gravel	Washington (T)	Dutchess	252000	GPD	306000	GPD
Rovers' Farm Inc	Chazy (T)	Clinton	30858	GPD	35607	GPD
Rowlands Hollow Water Works	Milton (T)	Saratoga	136000	GPD	304000	GPD

FACILITY NAME	FACILITY TOWN/CITY	FACILITY COUNTY	ve_Day_Withdraw	Units_Ave_Day	ax_Day_Withdrav	Units_Max_Day
Roxbury, Tn	Roxbury (T)	Delaware	193000	GPD	336000	GPD
Royal Mountain Ski Area	Caroga (T)	Fulton	67000	GPD	1.7	MGD
RT Vanderbilt Co, Inc - Gouverneur Mineral Division I	Fowler (T)	St. Lawrence	0.033	MGD	0.046	MGD
RT Vanderbilt Co, Inc - Gouverneur Mineral Division II	Diana (T)	Lewis	2.6	MGD	3.84	MGD
Rushville, Vg	Gorham (T)	Ontario	0.11	MGD	0.234	MGD
Russel Generating Station	Greece (T)	Monroe	0	MGD	0	MGD
Sacandaga Park Water District	Northampton (T)	Fulton	49000	GPD	107000	GPD
Sackets Harbor, Vg	Hounsfield (T)	Jefferson	299767	GPD	594026	GPD
Saint Johnsville, Vg	Oppenheim (T)	Fulton	53539	GPD	70872	GPD
Salamanca, City	Salamanca (C)	Cattaraugus	1.16	MGD	2.03	MGD
Salem Golf Club	North Salem (T)	Westchester	11989	GPD	120000	GPD
Salem, Vg	Salem (T)	Washington	39651	GPD	137040	
Salmon Creek Country Club	Ogden (T)	Monroe	12904	GPD	1.08	MGD
Salmon River Hatchery	Albion (T)	Oswego	7.7	MGD	7.7	MGD
Samascott Orchards	Kinderhook (T)	Columbia	29589	GPD	360000	GPD
Sandy Creek & Lacona Joint Water Works	Sandy Creek (T)	Oswego	0.17	MGD	0.28	MGD
Saranac Lake, Vg	North Elba (T)	Essex	1.03	MGD	1.319	MGD
Saratoga County Water Authority	Halfmoon (T)	Saratoga	2861130	GPD	7111450	GPD
Saratoga Golf and Polo Club	Saratoga Springs (C)	Saratoga	31000	GPD	110000	GPD
Saratoga National Golf Club	Saratoga Springs (C)	Saratoga	50000	GPD	400000	GPD
Saratoga Sod Farm, Inc.	Stillwater (T)	Saratoga	122236	GPD	3168000	GPD
Saratoga Springs, City	Saratoga Springs (C)	Saratoga	4.128	MGD	8.373	MGD
Saratoga Water Services, Inc	Malta (T)	Saratoga				
Satur Farms	Southold (T)	Suffolk	90000	GPD	240000	GPD
Saugerties, Vg	Saugerties (T)	Ulster	961870	GPD	1659000	GPD
Saunders - Bainbridge	Bainbridge (T)	Chenango	92571	GPD	144000	GPD
Saunders - Cortland Ready Mix	Cortlandville (T)	Cortland	20042	GPD	144000	GPD
Saunders - Greene Ready Mix	Greene (T)	Chenango	20042	GPD	144000	GPD
Saunders - Ithaca Concrete	Dryden (T)	Tompkins	20042	GPD	144000	GPD
Saunders - Lisle Aggregate Plant	Lisle (T)	Broome	92571	GPD	144000	GPD
Saunders - Marcellus Plant	Camillus (T)	Onondaga	520000	GPD	576000	GPD
Saunders - Nedrow Plant	Onondaga (T)	Onondaga	20042	GPD	144000	GPD
Saunders - Norwich	Norwich (T)	Chenango	20042	GPD	108000	GPD
Saunders - South Onondaga	Onondaga (T)	Onondaga	205185	GPD	432000	GPD
Saunders - Whitney Point	Barker (T)	Broome	20042	GPD	144000	GPD
Saunderskill Farm	Rochester (T)	Ulster	100000	GPD	200000	GPD
Sauquoit Water District	Paris (T)	Oneida	293000	GPD		
Savannah Water District #1	Savannah (T)	Wayne	49953	GPD	141000	GPD
Savona, Vg	Bath (T)	Steuben	0.0345	MGD	0.225	MGD
Scarsdale Golf Club	Greenburgh (T)	Westchester	0.045	MGD	0.4	MGD
Schenectady, City	Rotterdam (T)	Schenectady	12.9	MGD	21	MGD
Schlecht Nursery	Brookhaven (T)	Suffolk	59587	GPD	118800	GPD
Schmitt Farms - Roanoke Ave	Riverhead (T)	Suffolk	92476	GPD	190000	GPD
Schmitts Farm - Manor Lane	Riverhead (T)	Suffolk	1150	GPD	420000	GPD
Schodack Water District #1	Schodack (T)	Rensselaer	38685	GPD	98416	GPD
Schodack Water District #9	Schodack (T)	Rensselaer	144283	GPD	1214000	GPD
Schoharie Quarry	Schoharie (T)	Schoharie	0.84	MGD	0.84	MGD
Schoharie Valley Farms	Schoharie (T)	Schoharie	986	GPD	180000	GPD
Schoharie, Vg	Schoharie (T)	Schoharie	134000	GPD	382000	GPD
Schroon Lake Water District	Schroon (T)	Essex	260000	GPD	728000	GPD
Schuyler Meadows Club	Colonie (T)	Albany	48329	GPD	300000	
Schweitzer-Mauduit International Inc.	Ancram (T)	Columbia	0.884	MGD	0.951	
Scio Water Dept	Amity (T)	Allegany	75175	GPD	124000	GPD
Scotia Pumping Station	Glenville (T)	Schenectady	1236536	GPD	1627000	GPD
Scott Water District #1	Scott (T)	Cortland	12600	GPD	15600	GPD
Seabert Farm	Cambria (T)	Niagara	4392	GPD	9150	GPD
Secor Strawberries	East Fishkill (T)	Dutchess	1580	GPD	71424	GPD
Seneca Falls Country Club	Seneca Falls (T)	Seneca	30186	GPD	350000	GPD
Seneca Falls, Vg	Fayette (T)	Seneca	1.1	MGD	1.5	MGD
Seneca Foods Corp	Leicester (T)	Livingston	0.397	MGD	2.16	MGD
Seneca Valley Farm	Hector (T)	Schuyler	89822	GPD	96000	GPD
Sep Farms - East Marion	Southold (T)	Suffolk	28953	GPD	336000	GPD
Sep Farms - Southold	Southold (T)	Suffolk	142909	GPD	310000	GPD
SH Water Company (Sackett Lake Esates)	Thompson (T)	Sullivan	3425	GPD	4903	GPD
Shade Tree Nursery	Riverhead (T)	Suffolk	45084	GPD	450000	GPD
Shaker Ridge Country Club	Colonie (T)	Albany	33563	GPD	0.12	MGD
Sharon Springs, Vg	Sharon (T)	Schoharie	171000	GPD	432000	GPD
Shaul Farms	Fulton (T)	Schoharie	474444	GPD	720000	GPD
Shawangunk Bulk Spring Water	Shawangunk (T)	Ulster	3337	GPD	18000	
Shawangunk, Tn (Wallkill Water District)	Shawangunk (T)	Ulster	147050	GPD	399400	GPD
Sheland Farms	Ellisburg (T)	Jefferson	57000	GPD	85000	GPD
Sheldon Farms	Salem (T)	Washington				
Shelridge Country Club	Ridgeway (T)	Orleans	104350	GPD	432000	GPD

FACILITY NAME	FACILITY TOWN/CITY	FACILITY COUNTY	ve_Day_Withdraw	Units_Ave_Day	ax_Day_Withdrav	Units_Max_Day
Sherburne, Vg	Sherburne (T)	Chenango	0.199	MGD	0.442	MGD
Shore Colony Water District	Queensbury (T)	Warren	4364	GPD	18400	GPD
Shorewood Association	Dunkirk (T)	Chautauqua	164471	GPD	313666	GPD
Shuback Farms	Warwick (T)	Orange				
SI Group	Rotterdam (T)	Schenectady	1728000	GPD	1728000	GPD
Sidney Water Supply	Sidney (T)	Delaware	671800	GPD	1.1708	MGD
Silver Bay Association	Hague (T)	Warren	30000	GPD	119000	GPD
Silver Lake Country Club	Castile (T)	Wyoming	22685	GPD	432000	GPD
Silver Springs, Vg	Gainesville (T)	Wyoming	94000	GPD	219000	GPD
Siwanoy Country Club	Eastchester (T)	Westchester	44429	GPD	355000	GPD
Skaneateles Country Club	Skaneateles (T)	Onondaga	90715	GPD	299391	GPD
Ski Plattekill, Inc.	Roxbury (T)	Delaware	3.2	MGD	3.2	MGD
Slack Hollow Farm	Argyle (T)	Washington	3000	GPD		
Sleepy Hollow Country Club	Ossining (T)	Westchester	85749	GPD	200000	GPD
Sodus Bay Heights Golf Club	Sodus (T)	Wayne	42155	GPD	859000	GPD
Somers Point Country Club	Somers (T)	Westchester	97777	GPD		
Sommer Nurseries	Southampton (T)	Suffolk	12000	GPD	15000	GPD
Sorbello & Sons	Granby (T)	Oswego	5000	GPD	5000	GPD
South Dayton, Vg	Dayton (T)	Cattaraugus	68616	GPD	115000	GPD
South Glens Falls, Vg	Moreau (T)	Saratoga	0.59	MGD	1.25	MGD
South Otselic Hatchery	Otselic (T)	Chenango	1.3	MGD	1.9	MGD
South Shore Golf Course	Richmond (T)	Richmond	42245	GPD	155116	GPD
Southern Cayuga Lake Intermunicipal Water Commission	Lansing (T)	Tompkins	2.814	MGD	4.89	MGD
Southview Farm LP	Castile (T)	Wyoming	78000	GPD	90000	GPD
Southword Ho Country Club	Islip (T)	Suffolk	75477	GPD	388000	GPD
Speculator,Vg	Lake Pleasant (T)	Hamilton	84786	GPD	245970	GPD
Spellman Farm	Ripley (T)	Chautauqua			5000	GPD
Spook Rock Golf Course	Ramapo (T)	Rockland	252324	GPD	501276	GPD
Spring Glen Water Co	Mamakating (T)	Sullivan	9000	GPD	13500	GPD
Spring Hope Dairy	Hopewell (T)	Ontario	59579	GPD		GPD
Springhouse Estates	Southeast (T)	Putnam	13390	GPD	33770	GPD
Springville Country Club	Concord (T)	Erie	23337	GPD	135000	GPD
Springville, Vg	Concord (T)	Erie	437	GPM	822	GPM
Springwater, Tn	Springwater (T)	Livingston	47150	GPD	85000	GPD
Spruce Haven Farms	Fleming (T)	Cayuga	115590	GPD	174480	GPD
St. Andrew's Golf Club	Greenburgh (T)	Westchester	39785	GPD	0.28	MGD
St. George's Golf and Country Club	Brookhaven (T)	Suffolk	104138	GPD	355750	GPD
St. Lawrence University	Canton (T)	St. Lawrence	62462	GPD	116949	GPD
St. Lawrence University Golf Course	Canton (T)	St. Lawrence	51346	GPD	75000	GPD
St. Lawrence/FDR Power Project	Massena (T)	St. Lawrence	79278	MGD	108686	MGD
St. Regis Falls Water District	Waverly (T)	Franklin				
Stafford Country Club	Stafford (T)	Genesee	18000	GPD	250000	GPD
Stamford, Vg	Jefferson (T)	Schoharie	132572	GPD	294113	GPD
Star Growers Farm LLC	Elba (T)	Genesee	117500	GPD	252	GPM
Star Lake Water District	Fine (T)	St. Lawrence	82520	GPD	148900	GPD
Starr Ridge Manor Water District	Southeast (T)	Putnam	8015	GPD	33710	GPD
State Farm	Collins (T)	Erie	0	GPD	0	GPD
Stauffer Farms LLC	Lawrence (T)	St. Lawrence	50000	GPD	60000	GPD
Stevensville Water District	Liberty (T)	Sullivan	285000	GPD	788000	GPD
Stillwater, Vg	Stillwater (T)	Saratoga	309718	GPD	404000	GPD
Stockport, Tn	Stockport (T)	Columbia	0.152	MGD	0.288	MGD
Stone Dock Golf Course	Marbletown (T)	Ulster				
Stonebridge Golf & Country Club	Smithtown (T)	Suffolk	360000	GPD	480000	GPD
Story Farms	Catskill (T)	Greene	8250	GPD	0.3	MGD
Suffern, Vg	Ramapo (T)	Rockland	1.347	MGD	2.324	MGD
Sugar Hill Golf Course	Portland (T)	Chautauqua	21800	GPD	24480	GPD
Sugar Loaf Hills	Chester (T)	Orange	50433	GPD	102000	GPD
Suit-Kote Terminal	Cortlandville (T)	Cortland	13713	GPD	29666	GPD
Sujecks Farms	Riverhead (T)	Suffolk	400000	GPD	892000	GPD
Sun Rich Farms	Barre (T)	Orleans	27019	GPD	30926	GPD
Sunningdale Country Club	Greenburgh (T)	Westchester	30000	GPD	300000	GPD
Sunny Hill Resort & Golf	Greenville (T)	Greene	28000	GPD	33000	GPD
Sunnyside Farms Inc	Venice (T)	Cayuga	173352	GPD	189263	GPD
Sunrise Farms	Catskill (T)	Greene	608640	GPD	1248000	GPD
SUNY Delhi, Lower Campus Farm	Delhi (T)	Delaware	7611	GPD	110	GPM
Surrey Meadows Water District	Chester (T)	Orange	52925	GPD	144000	GPD
Swartz Dairy and Produce LLC	Schodack (T)	Rensselaer	45000	GPD	45000	GPD
Swiss Valley Farms	Warsaw (T)	Wyoming			50000	GPD
Synergy, LLC	Covington (T)	Wyoming	108000	GPD	151500	GPD
Syracuse - Apulia	Fabius (T)	Onondaga	0	GPD	0	GPD
Syracuse - Black Creek Road	Clay (T)	Onondaga	0	GPD	0	GPD
Syracuse - Brickyard Pit	Van Buren (T)	Onondaga	0	GPD	0	GPD
Syracuse - Fulton Office	Volney (T)	Oswego	0	GPD	0	GPD
Syracuse - Gang Mills	Erwin (T)	Steuben	0	GPD	0	GPD
Syracuse - Granby Pit	Granby (T)	Oswego	720000	GPD	720000	GPD
Syracuse - Hastings Main	Hastings (T)	Oswego	0	GPD	0	GPD

FACILITY NAME	FACILITY TOWN/CITY	FACILITY COUNTY	ve_Day_Withdraw	Units_Ave_Day	ax_Day_Withdrav	Units_Max_Day
Syracuse - Lake Road Pit	Phelps (T)	Ontario	1920000	GPD	1920000	GPD
Syracuse - Norwich Pit	North Norwich (T)	Chenango	0	GPD	0	GPD
Syracuse - Sennett Pit	Sennett (T)	Cayuga	0	GPD	0	GPD
Syracuse, City	Skaneateles (T)	Onondaga	35.51	MGD	37.85	MGD
Table Rock Farm	Castile (T)	Wyoming	46180	GPD	114240	GPD
Taconic Estates	East Fishkill (T)	Dutchess	5971	GPD	13000	GPD
Taconic Farms	Germantown (T)	Columbia	31000	GPD	60000	GPD
Taliaferro Farms	New Paltz (T)	Ulster	348750	GPD	465000	GPD
Talisman Energy	Baldwin (T)	Chemung	0	GPD	0	GPD
Tan Tara Golf Club	Pendleton (T)	Niagara	83333	GPD	99288	GPD
Tannersville, Vg	Hunter (T)	Greene	176	GPM	297	GPM
Tarry Brae Golf Course (South Fallsburgh)	Fallsburg (T)	Sullivan	27610	GPD	300000	GPD
TechCity (IBM Kingston)	Ulster (T)	Ulster	0.071	MGD	0.112	MGD
Terhune Orchards	Pleasant Valley (T)	Dutchess	0	GPM	0	GPM
Terry Hills Golf Course	Batavia (T)	Genesee	24473	GPD	240000	GPD
Tetz & Sons - Mongaup	Thompson (T)	Sullivan	97700	GPD	136000	GPD
Tetz &Sons - Phillipsburg	Wallkill (T)	Orange	150	GPD	150	GPD
Texas Brine Co	Middlebury (T)	Wyoming	105	GPM	120	GPM
Thendara Golf Course	Webb (T)	Herkimer	0.36	MGD	0.36	MGD
Three Ponds Farm	Southampton (T)	Suffolk	37859	GPD	112500	GPD
Tiashoke Farm, LLC	Cambridge (T)	Washington	28894	GPD	62645	GPD
Ticonderoga Golf Corp	Ticonderoga (T)	Essex			725000	GPD
Ticonderoga, Tn - Gooseneck Pond	Ticonderoga (T)	Essex	334389	GPD	471000	GPD
Ticonderoga, Tn - Lake George	Ticonderoga (T)	Essex	450526	GPD	800000	GPD
Tilcon - Cedar Cliff Quarry	Marlborough (T)	Ulster	0	GPD	0	GPD
Tilcon - Clinton Point Quarry	Poughkeepsie (T)	Dutchess	9.5865	MGD	11.3757	MGD
Tilcon - Haverstraw Quarry	Clarkstown (T)	Rockland	0.2342	MGD	0.4217	MGD
Tilcon - High Hill Road Pit	Coxsackie (T)	Greene	0	GPD	0	GPD
Tilcon - Suffern Quarry	Ramapo (T)	Rockland	0	GPD	0	GPD
Tilcon - Tomkins Cove Quarry	Stony Point (T)	Rockland	0.1606	MGD	0.2915	MGD
Tilcon - West Nyack Quarry	Clarkstown (T)	Rockland	0.993	MGD	2.712	MGD
Timber Point Golf Course	Islip (T)	Suffolk	100000	GPD	400000	GPD
Timber Ridge Golf Club	Clarkson (T)	Monroe	156776	GPD	360000	GPD
Titus Mountain Family Ski Center	Malone (T)	Franklin	960000	GPD	2880000	GPD
Tivoli, Vg	Red Hook (T)	Dutchess	0.074	MGD	0.102	MGD
Toggenburgh Mountain	Fabius (T)	Onondaga	447386	GPD	5443200	GPD
Tonawanda Coke Corp	Tonawanda (T)	Erie	2.18	MGD	4.18	MGD
Tonawanda, Tn	Tonawanda (T)	Erie	13	MGD	16.4	MGD
Torrey Farms Dairy Inc.	Elba (T)	Genesee	96427	GPD	106681	GPD
Torrey Farms Inc.	Barre (T)	Orleans	1243000	GPD	1728000	GPD
Torrey Farms of Potter Inc.	Potter (T)	Yates	1152000	GPD	1152000	GPD
Trainer Farm	Chateaugay (T)	Franklin	42912	GPD	78253	GPD
Tre-G Farms, LLC	Pompey (T)	Onondaga	10000	GPD	12000	GPD
Tri City - Brisben Mine Site	Oxford (T)	Chenango	1.06	MGD	1.3	MGD
Tri City - Broad Street Industrial	Dickinson (T)	Broome	1.06	MGD	1.3	MGD
Tri City - Gorick Route 369 Pit	Chenango (T)	Broome	1.85	MGD	2.31	MGD
Tri City - Route 369 Pit	Kirkwood (T)	Broome	1.85	MGD	2.31	MGD
Tri City - Yary's Quarry	Fenton (T)	Broome	1.06	MGD	1.3	MGD
Tri-County Country Club	Hanover (T)	Chautauqua	40385	GPD	190412	GPD
Troncillito Brother's Inc.	Marlborough (T)	Ulster	34076	GPD	250000	GPD
Troy Country Club	Brunswick (T)	Rensselaer	51795	GPD	325000	GPD
Troy, City - John P. Buckley WTP	Pittstown (T)	Rensselaer	18.49	MGD	27.84	MGD
True Farms	Perry (T)	Wyoming	34800	GPD	40300	GPD
Trump National Golf Club Westchester	Ossining (T)	Westchester	131940	GPD	433525	GPD
Truncali Farms	Marlborough (T)	Ulster	240000	GPD	240000	GPD
Tully, Vg	Tully (T)	Onondaga	0.129	MGD	0.181	MGD
Tupper Lake, Vg	Tupper Lake (T)	Franklin	0.811	MGD	1.59	MGD
Turin, Vg	Turin (T)	Lewis	60100	GPD	111000	GPD
Turnbull Nursery	Brant (T)	Erie	25000	GPD	350000	GPD
Tuxedo Club	Tuxedo (T)	Orange			150000	GPD
Tuxedo Park, Vg	Tuxedo (T)	Orange	0.3442	MGD	0.812	MGD
Twin Birch Dairy LLC	Skaneateles (T)	Onondaga	123341	GPD	132645	GPD
Twin Hills Golf Course	Parma (T)	Monroe	20055	GPD	410000	GPD
Ty Lloyd Farm	Riverhead (T)	Suffolk	140000	GPD	280000	GPD
Ulster Water District, Tn	Ulster (T)	Ulster	770000	GPD	1363000	GPD
Unadilla, Vg	Unadilla (T)	Otsego	161000	GPD	385000	GPD
Union Springs, Vg	Springport (T)	Cayuga	279845	GPD	400000	GPD
Unionville, Vg	Minisink (T)	Orange	37959	GPD		
Unisys (Former) - OffSite Remedial Facility	North Hempstead (T)	Nassau	437	GPM	517	GPM
Unisys (Former) - OU1 - GroundwaterTreatment	North Hempstead (T)	Nassau	574	GPM	719	GPM
United Water New York	Ramapo (T)	Rockland	29.12	MGD	43.697	MGD
United Water Nichols/Owego	Nichols (T)	Tioga	1.371	MGD	2.123	MGD
US Gypsum Co	Oakfield (T)	Genesee	9.42	MGD	24.172	MGD
US Salt LLC	Reading (T)	Schuyler	8.99	MGD	10.88	MGD
Valley Dale (Hillis Park)	Pleasant Valley (T)	Dutchess	40003	GPD	98000	GPD
Valley Sand & Gravel	Caledonia (T)	Livingston	1221000	GPD	1887000	GPD

FACILITY NAME	FACILITY TOWN/CITY	FACILITY COUNTY	ve_Day_Withdraw	Units_Ave_Day	ax_Day_Withdrav	Units_Max_Day
Van Cortlandt Park Golf Course	Bronx (T)	Bronx	53384	GPD	167543	GPD
Van De Wetering Greenhouses Inc	Riverhead (T)	Suffolk	39840	GPD	65203	GPD
Van Hornesville Hatchery	Stark (T)	Herkimer	364	GPM	364	GPM
Van Houten Farms	Orangetown (T)	Rockland	1200	GPD	3000	GPD
Van Patten Golf Club	Clifton Park (T)	Saratoga	13800		350000	GPD
Van Schaick Island Country Club	Cohoes (C)	Albany	32000	GPD	55000	GPD
Van Slyke's Dairy Farm	Pike (T)	Wyoming	60000	GPD	100000	GPD
Vansridge Dairy	Scipio (T)	Cayuga	62298	GPD	68923	GPD
Vestal, Tn	Vestal (T)	Broome	2.16	MGD	4.6	MGD
Victor Hills Golf Club	Victor (T)	Ontario	256320	GPD	256320	GPD
Virgil Water District #1	Virgil (T)	Cortland	24905	GPD	71270	GPD
Virkler - Martinsburg Quarry	Martinsburg (T)	Lewis	9300	GPD	9300	GPD
Virkler - Watson Operations	Watson (T)	Lewis	0.122	MGD	0.122	MGD
Virkler - West Lowville	Lowville (T)	Lewis	0.285	MGD	0.285	MGD
Voorheesville, Vg	New Scotland (T)	Albany	0.348	MGD	0.547	MGD
W Polak Farms	Riverhead (T)	Suffolk	220000	GPD	327000	GPD
Waccabuc Country Club	Lewisboro (T)	Westchester	99421	GPD	422341	GPD
Waddington, Vg	Waddington (T)	St. Lawrence	0.06	MGD	0.126	MGD
Wadeson Mini Mall	Hancock (T)	Delaware	973	GPD		
Walden, Vg	Montgomery (T)	Orange	0.71	MGD	1.3	MGD
Walker Farm - Wayland	Springwater (T)	Livingston	25927	GPD	30000	GPD
Walker Farms - Fort Ann	Fort Ann (T)	Washington	97500	GPD	113000	GPD
Walker McCall, LLC	Southold (T)	Suffolk	0	GPM	0	GPM
Wallkill (Watchtower Farms I)	Shawangunk (T)	Ulster	0.123	MGD	0.187	MGD
Wallkill Correctional Facility	Shawangunk (T)	Ulster	0.02	MGD	0.46	MGD
Wallkill Golf Club	Wallkill (T)	Orange	24199	GPD	216095	GPD
Wallkill Water District #1	Wallkill (T)	Orange	2.43	MGD	3.8	MGD
Walter Zilnicki	Riverhead (T)	Suffolk	1.25	MGD	2.3	MGD
Walton, Vg	Walton (T)	Delaware	0.365	MGD	0.416	MGD
Wanakah Country Club	Hamburg (T)	Erie	65810	GPD	250000	GPD
Wappinger, Tn - Atlas Wells	Wappinger (T)	Dutchess	0.6205	MGD	1.297	MGD
Wappinger, Tn - Hilltop Wells	Wappinger (T)	Dutchess	0.3178	MGD	0.815	MGD
Warren W Fane	Schaghticoke (T)	Rensselaer	1710	GPM	1810	GPM
Warren W Fane - Wynantskill Pit	North Greenbush (T)	Rensselaer	1.5	MGD	3.5	MGD
Warrensburg Water District	Warrensburg (T)	Warren	414532	GPD	978000	GPD
Warsaw, Vg	Gainesville (T)	Wyoming	350000	GPD	850000	GPD
Warwick, Vg	Warwick (T)	Orange	710356	GPD	1361000	GPD
Wassaic TDDSO	Amenia (T)	Dutchess	66667	GPD	170000	GPD
Watchtower Bible and Tract Society	Patterson (T)	Putnam	0.097	MGD	0.213	MGD
Watchtower Farms	Shawangunk (T)	Ulster	0.0095	MGD	0.239	MGD
Waterloo, Vg	Fayette (T)	Seneca	1.325	MGD	2.826	
Watertown, City	Watertown (C)	Jefferson	5.03	MGD	6.91	MGD
Waterville, Vg	Sangerfield (T)	Oneida	0.248	MGD	0.339	MGD
Watervliet, City	Guilderland (T)	Albany	2.84	MGD	3.195	MGD
Watkins Glen, Vg	Dix (T)	Schuyler	311372	GPD	767300	GPD
Waverly, Vg	Barton (T)	Tioga			1.1	MGD
Wayland, Vg	Wayland (T)	Steuben	350000	GPD	350000	GPD
Wayne County Eggs	Wolcott (T)	Wayne	50233	GPD	57484	GPD
Wayne Hills Country Club	Galen (T)	Wayne	131922	GPD	350000	GPD
Webster, Vg	Webster (T)	Monroe	468337	GPD	1.192	MGD
Wehrle Plant #23	Lancaster (T)	Erie	13884	GPM	24900	GPM
Wellesley Island Water Corp	Alexandria (T)	Jefferson	0.045	MGD	0.162	MGD
Wells College	Ledyard (T)	Cayuga	0.09	MGD	0.15	MGD
Wells Water District	Wells (T)	Hamilton	0.18	MGD	0.435	MGD
Wellsville Country Club	Wellsville (T)	Allegany	170441	GPD	414425	GPD
Wellsville, Vg	Wellsville (T)	Allegany	0.701	MGD	1.4	MGD
West Beekman	Beekman (T)	Dutchess	84328	GPD	624000	GPD
West Hill Golf Course	Camillus (T)	Onondaga	144000	GPD	144000	GPD
West Hook Sand & Gravel	East Fishkill (T)	Dutchess	1968685	GPD	5712000	GPD
West Point - Camp Buckner	Highlands (T)	Orange	97175	GPD	328000	GPD
West Point - Lusk	Highlands (T)	Orange	2.03	MGD	2.82	MGD
West Point - Stoney Lonesome	Highlands (T)	Orange	1.22	MGD	2.56	MGD
West Point - Transportation Pool	Highlands (T)	Orange	1125	GPD	5200	GPD
West Sayville	Islip (T)	Suffolk				
West Valley Crystal Water Company, Inc.	Ashford (T)	Cattaraugus	250000	GPD	250000	GPD
West Valley Demonstration Project	Ashford (T)	Cattaraugus	93278	GPD	195552	GPD
West Winfield, Vg	Winfield (T)	Herkimer	96240	GPD	181000	GPD
Westbrook Water Corp	Deerpark (T)	Orange	22265	GPD	56400	GPD
Westchester Country Club	Harrison (T)	Westchester	390000	GPD	500000	GPD
Westchester Hills Golf Club	White Plains (C)	Westchester	47321	GPD	160000	GPD
Westfield, Vg	Westfield (T)	Chautauqua	563599	GPD	1281600	GPD
Westport Consolidated Water District	Westport (T)	Essex	0.074	MGD	0.1983	MGD
Westwood Country Club	Amherst (T)	Erie	28997	GPD	168000	GPD
WH Walker & Son	Lloyd (T)	Ulster	0	GPD	0	GPD
Wheelabrator Hudson Falls LLC	Kingsbury (T)	Washington	23.496	MGD	25.79	MGD

FACILITY NAME	FACILITY TOWN/CITY	FACILITY COUNTY	ve_Day_Withdraw	Units_Ave_Day	ax_Day_Withdrav	Units_Max_Day
Wheelabrator Westchester	Peekskill (C)	Westchester	46	MGD	49	MGD
White Eagle Farms	Eaton (T)	Madison	96698	GPD	106981	GPD
White Plains, City	White Plains (C)	Westchester	0	GPD	0	GPD
White Sulphur Springs Water District	Liberty (T)	Sullivan	43000	GPD	218000	GPD
Whiteface Club	North Elba (T)	Essex	45506	GPD	0.38	MGD
Whitehall, Vg	Dresden (T)	Washington	625000	GPD	795000	GPD
Whitlock Farms Water Co.	Wallkill (T)	Orange	11200	GPD	16800	GPD
Whitney Point, Vg	Triangle (T)	Broome				
Wickham Village Water District	Warwick (T)	Orange	0.00778	MGD	0.01605	MGD
Wickham's Fruit Farm LLC	Southold (T)	Suffolk	30800	GPD	500000	GPD
Wiecek Well (Zangrillo)	Goshen (T)	Orange	576000	GPD	576000	GPD
Wildwood Country Club	Rush (T)	Monroe	109000	GPD	450000	GPD
Wilklow Orchards LLC	Lloyd (T)	Ulster	22027	GPD	600000	GPD
Willard Drug Treatment Campus	Romulus (T)	Seneca	195100	GPD	347000	GPD
Willard Mountain	Easton (T)	Washington	0.576	MGD	1.152	MGD
Willet Dairy	Genoa (T)	Cayuga	203712	GPD	299667	GPD
Williamson, Tn	Williamson (T)	Wayne	1.55	MGD	3.41	MGD
Willocrest Farms	Manchester (T)	Ontario	81917	GPD	91437	GPD
Willow Bend Farm	Manchester (T)	Ontario	34699	GPD	153130	GPD
Willow Ridge Country Club	Harrison (T)	Westchester	58125	GPD	250000	GPD
Willowbrook Golf Club	Cortlandville (T)	Cortland	13678.93	GPD	316800	GPD
Willowbrook Golf Course	Lockport (T)	Niagara	400000	GPD	720000	
Wilmington Water District #2	Wilmington (T)	Essex	250	GPM	250	GPM
Wilna Water District #2	Wilna (T)	Jefferson	12001	GPD	27569	GPD
Wilton Water and Sewer Authority	Wilton (T)	Saratoga	652000	GPD	1124000	GPD
Wiltwyck Golf Club	Ulster (T)	Ulster	22417	GPD	184000	GPD
Wind Acres Farm	Riverhead (T)	Suffolk	176000	GPD	900000	GPD
Windemere Highlands	Red Hook (T)	Dutchess	26734	GPD	85000	GPD
Windham Country Club	Windham (T)	Greene	58117	GPD	85474	GPD
Windham Mountain Ski Resort	Windham (T)	Greene	486000	GPD	2.88	MGD
Windham Mountain, Vg	Windham (T)	Greene	49883	GPD	64712	GPD
Windham Water District #1, Hensonville	Windham (T)	Greene	81438	GPD	144400	GPD
Windsor, Vg	Windsor (T)	Broome	0.168	MGD	0.36	MGD
Windy Hills Golf Course	Easton (T)	Washington			94000	GPD
Winebrook Hills Water District	Newcomb (T)	Essex				
Winged Foot Golf Club	Mamaroneck (T)	Westchester	116219	GPD	4.12	MGD
Winsor Acres	Colesville (T)	Broome	86676	GPD	95893	GPD
Win-Sum Ski Corp	Ellicottville (T)	Cattaraugus	340157	GPD	6.9	MGD
Wm Wickham Farm	Southold (T)	Suffolk	79500	GPD	360000	GPD
Wolcott, Vg	Wolcott (T)	Wayne	214000	GPD	707000	GPD
Wolferts Roost Country Club	Albany (C)	Albany	46575	GPD	561000	GPD
Woodbourne Correctional Facility	Fallsburg (T)	Sullivan	0.185	MGD	0.268	MGD
Woodbourne Nursery	Huntington (T)	Suffolk	840000	GPD	1008000	GPD
Woodbury, Vg	Woodbury (T)	Orange	0.94	MGD	1.48	MGD
Woodland Water District	Oneonta (T)	Otsego	19060	GPD	57100	GPD
Woodlynn Hills Golf Course	Nunda (T)	Livingston	1808	GPD	40000	GPD
Woodridge, Vg	Fallsburg (T)	Sullivan	0.323	MGD	0.407	MGD
Woodstock, Tn	Woodstock (T)	Ulster	137000	GPD	517000	GPD
Woody Hill Farms	Salem (T)	Washington	115916	GPD	123053	GPD
Worcester Water District #2	Worcester (T)	Otsego	70110	GPD	204900	GPD
Word of Life Ranch / Bible Institute	Chester (T)	Warren	27828	GPD	119600	GPD
World Financial Center	New York (T)	New York	15.24	MGD	28.55	MGD
World Kitchen - Pressware Plant	Corning (C)	Steuben	1654248	GPD	2912136	GPD
Wowak Farms	Riverhead (T)	Suffolk	50000	GPD	150000	GPD
WPS Beaver Falls Generation	Croghan (T)	Lewis	1.36	MGD	44.6	MGD
Wurtsboro, Vg	Mamakating (T)	Sullivan	204198	GPD	480800	GPD
Wyeth Pharmaceuticals	Orangetown (T)	Rockland	1148708	GPD	3474669	GPD
Xerox Joseph C.Wilson Center for Technology	Webster (T)	Monroe	147785	GPD	215088	GPD
Yonder Fruit Farms	Kinderhook (T)	Columbia				
Yorkshire Water District	Yorkshire (T)	Cattaraugus	78600	GPD	174000	GPD
Zilnicki Farms	Riverhead (T)	Suffolk	1800000	GPD	1800000	GPD
Zuber Farms	Byron (T)	Genesee	52000	GPD	65000	GPD

EXHIBIT E TO TREICHLER AFFIRMATION — BILL JACKET FOR 2012 ASSEMBLY BILL 5318-A [330- 394]

BR

CHAPTER 401

LAWS OF 20 11

SENATE BILL _____ ASSEMBLY BILL 5318-A

STATE OF NEW YORK

5318--A

2011-2012 Regular Sessions

IN ASSEMBLY

February 15, 2011

Introduced by M. of A. SWEENEY, PEOPLES-STOKES, ZEBROWSKI, GUNTHER, TITONE, REILLY, SPANO, JACOBS, PAULIN, SCHIMEL, ENGLEBRIGHT, HOYT -- Multi-Sponsored by -- M. of A. BRENNAN, GABRYSZAK, MARKEY, McENENY, M. MILLER, PHEFFER, ROBINSON -- (at request of the Department of Environmental Conservation) -- read once and referred to the Committee on Environmental Conservation -- committee discharged, bill amended, ordered reprinted as amended and recommitted to said committee

AN ACT to amend the environmental conservation law, in relation to regulating the use of the state's water resources; and to repeal titles 16 and 33 of article 15 of such law relating to Great Lakes water conservation and management and water withdrawal reporting

S3798 Grisanti

DATE RECEIVED BY GOVERNOR:

ACTION MUST BE TAKEN BY:

DATE GOVERNOR'S ACTION TAKEN:

SENATE VOTE 62 Y 0 N HOME RULE MESSAGE ___ Y ___ N

DATE 6/16/11

ASSEMBLY VOTE 136 Y 0 N

DATE 5/2/11

A5318-A Sweeney (MS) Same as S 3798 GRISANTI

06/16/11	A5318-A	Senate Vote	Aye: 62	Nay: 0
05/02/11	A5318-A	Assembly Vote	Yes: 136	No : 0

Go to Top of Page

Floor Votes:

06/16/11 A5318-A Senate Vote Aye: 62 Nay: 0

Aye Adams	**Aye** Addabbo	**Aye** Alesi	**Aye** Avella
Aye Ball	**Aye** Bonacic	**Aye** Breslin	**Aye** Carlucci
Aye DeFrancisco	**Aye** Diaz	**Aye** Dilan	**Aye** Duane
Aye Espaillat	**Aye** Farley	**Aye** Flanagan	**Aye** Fuschillo
Aye Gallivan	**Aye** Gianaris	**Aye** Golden	**Aye** Griffo
Aye Grisanti	**Aye** Hannon	**Aye** Hassell-Thompson	**Aye** Huntley
Aye Johnson	**Aye** Kennedy	**Aye** Klein	**Aye** Krueger
Aye Kruger	**Aye** Lanza	**Aye** Larkin	**Aye** LaValle
Aye Libous	**Aye** Little	**Aye** Marcellino	**Aye** Martins
Aye Maziarz	**Aye** McDonald	**Aye** Montgomery	**Aye** Nozzolio
Aye O'Mara	**Aye** Oppenheimer	**Aye** Parker	**Aye** Peralta
Aye Perkins	**Aye** Ranzenhofer	**Aye** Ritchie	**Aye** Rivera
Aye Robach	**Aye** Saland	**Aye** Sampson	**Aye** Savino
Aye Serrano	**Aye** Seward	**Aye** Skelos	**Aye** Smith
Aye Squadron	**Aye** Stavisky	**Aye** Stewart-Cousins	**Aye** Valesky
Aye Young	**Aye** Zeldin		

Go to Top of Page

Floor Votes:

05/02/11 A5318-A Assembly Vote Yes: 136 No : 0

Yes Abbate	**Yes** Abinanti	**Yes** Amedore	**ER** Arroyo
Yes Aubry	**Yes** Barclay	**Yes** Barron	**Yes** Benedetto
Yes Bing	**Yes** Blankenbush	**Yes** Boyland	**Yes** Boyle
Yes Braunstein	**Yes** Brennan	**Yes** Bronson	**Yes** Brook-Krasny
Yes Burling	**Yes** Butler	**Yes** Cahill	**Yes** Calhoun
Yes Camara	**Yes** Canestrari	**Yes** Castelli	**Yes** Castro
Yes Ceretto	**Yes** Clark	**Yes** Colton	**Yes** Conte
Yes Cook	**Yes** Corwin	**ER** Crespo	**Yes** Crouch
Yes Curran	**Yes** Cusick	**Yes** Cymbrowitz	**Yes** DenDekker
Yes Destito	**Yes** Dinowitz	**Yes** Duprey	**Yes** Englebright
Yes Farrell	**Yes** Finch	**ER** Fitzpatrick	**Yes** Friend
Yes Gabryszak	**Yes** Galef	**Yes** Gantt	**Yes** Gibson

Yes Giglio	**Yes** Glick	**Yes** Goodell	**Yes** Gottfried
Yes Graf	**Yes** Gunther A	**Yes** Hanna	**Yes** Hawley
Yes Hayes	**ER** Heastie	**Yes** Hevesi	**Yes** Hikind
Yes Hooper	**Yes** Hoyt	**Yes** Jacobs	**Yes** Jaffee
Yes Jeffries	**Yes** Johns	**Yes** Jordan	**Yes** Katz
Yes Kavanagh	**Yes** Kellner	**ER** Kirwan	**Yes** Kolb
Yes Lancman	**Yes** Latimer	**Yes** Lavine	**Yes** Lentol
Yes Lifton	**Yes** Linares	**Yes** Lopez P	**Yes** Lopez V
Yes Losquadro	**Yes** Lupardo	**Yes** Magee	**Yes** Magnarelli
ER Maisel	**Yes** Malliotakis	**ER** Markey	**Yes** McDonough
Yes McEneny	**Yes** McKevitt	**Yes** McLaughlin	**ER** Meng
Yes Miller D	**Yes** Miller J	**Yes** Miller M	**Yes** Millman
Yes Molinaro	**Yes** Montesano	**Yes** Morelle	**Yes** Moya
Yes Murray	**ER** Nolan	**Yes** Oaks	**Yes** O'Donnell
Yes Ortiz	**Yes** Palmesano	**Yes** Paulin	**Yes** Peoples-Stokes
Yes Perry	**Yes** Pheffer	**Yes** Pretlow	**Yes** Ra
Yes Rabbitt	**Yes** Raia	**Yes** Ramos	**Yes** Reilich
Yes Reilly	**Yes** Rivera J	**ER** Rivera N	**Yes** Rivera P
Yes Roberts	**Yes** Robinson	**Yes** Rodriguez	**Yes** Rosenthal
Yes Russell	**Yes** Saladino	**ER** Sayward	**Yes** Scarborough
Yes Schimel	**Yes** Schimminger	**Yes** Schroeder	**Yes** Simotas
Yes Smardz	**Yes** Spano	**Yes** Stevenson	**Yes** Sweeney
Yes Tedisco	**Yes** Tenney	**Yes** Thiele	**Yes** Titone
Yes Titus	**Yes** Tobacco	**Yes** Weinstein	**Yes** Weisenberg
ER Weprin	**Yes** Wright	**Yes** Zebrowski K	**Yes** Mr. Speaker

A5318

ROBERT K. SWEENEY
Assemblyman 11TH District

THE ASSEMBLY
STATE OF NEW YORK
ALBANY

CHAIRMAN
Environmental Conservation

COMMITTEES
Education
Rules
Veterans' Affairs

June 21, 2011

Governor Andrew Cuomo
Executive Chamber
Albany, NY 12224

A.5318A: An act to amend the Environmental Conservation Law, in relation to regulating the use of the state's water resources; and to repeal titles 16 and 33 of article 15 of such law relating to Great Lakes water conservation and management and water withdrawal reporting

Dear Governor Cuomo,

I write you now regarding the above captioned bill, which authorizes the Department of Environmental Conservation (DEC) to implement a water withdrawal permitting program to regulate the use of the State's water resources. This is a Departmental Bill.

Under current law, which hasn't been updated in nearly 50 years, the DEC only has the authority to regulate withdrawals for public drinking water suppliers. As a result, use of water for commercial and industrial purposes remains largely unregulated.

New York State has plentiful water resources. The preservation and protection of these resources is vital to New York's residents and businesses, which rely on them for drinking water, and to support agriculture, manufacturing, other industries and recreation in the State.

Demand for New York's freshwater is increasing: population growth, maintaining fisheries and wildlife habitats, and the increasing use of water for commercial, industrial and other purposes have all put pressure on water resources. In addition, potential impacts from climate change, and proposals to export vast amounts of water from New York to other states and abroad could pose new threats to the State's water supply.

DISTRICT OFFICE: 640 West Montauk Highway, Lindenhurst, New York 11757-5538 • 631-957-2087, FAX 631-957-2998
ALBANY OFFICE: Room 625, Legislative Office Building, Albany, New York 12248 • 518-455-5787, FAX 518-455-3976
E-MAIL: sweeney@assembly.state.ny.us

These issues have served to highlight the need to better regulate the State's water and modify the DEC's currently very limited ability to regulate water withdrawals for most purposes.

Enclosed are the following documents your office requested:

- copies of the bill and sponsor's memorandum in support of this bill
- copies of memoranda from outside organizations

I respectfully urge that you sign this bill into law.

Very truly yours,

Robert K. Sweeney
Member of Assembly

RKS/amd

NEW YORK STATE ASSEMBLY
MEMORANDUM IN SUPPORT OF LEGISLATION
submitted in accordance with Assembly Rule III, Sec 1(f)

BILL NUMBER: A5318A

SPONSOR: Sweeney (MS)

TITLE OF BILL: An act to amend the environmental conservation law, in relation to regulating the use of the state's water resources; and to repeal titles 16 and 33 of article 15 of such law relating to Great Lakes water conservation and management and water withdrawal reporting

Purpose: The purpose of this bill is to authorize the Department of Environmental Conservation (DEC) to implement a water withdrawal permitting program to regulate the use of the State's water resources.

Summary of provisions: Section 1 of the bill would amend Environmental Conservation Law (ECL) § 15- 1501 to simplify the existing water supply permit program and to expand the program to require permits for the most significant water uses. Specifically, ECL § 15-1501 would be amended to: (1) require that, once DEC adopts regulations, all persons that operate or propose to operate a water withdrawal system with a capacity equal to or greater than the "threshold volume" of 100,000 gallons per day (gpd) obtain a permit from DEC, except that a water withdrawal for agricultural purposes would require a permit if it exceeded an average of 100,000 gpd over any 30-day period; (2) provide that all valid public water supply permits or approvals issued by DEC or its predecessors remain in full force and effect for purposes of satisfying the new permit requirement; (3) provide that existing water withdrawals would be entitled to an initial permit based on their maximum water withdrawal capacity reported to DEC on or before February 15, 2012 pursuant to existing law; (4) clarify that a supplier of public water may not install or construct a public water supply system until it has received approval from the New York State Department of Health (DOH) as may be required by the State Sanitary Code; (5) require DEC to adopt regulations to implement a permitting program for water withdrawals equaling or exceeding the threshold volume; (6) authorize DEC to consolidate existing multiple public water supply permits covering a single existing water withdrawal system for administrative efficiency; and (7) exempt certain water withdrawals from permitting requirements, including withdrawals for agricultural purposes that have been registered or reported to DEC on or before February 15 2012.

Section 2 of the bill would amend ECL § 15-1502 to add definitions for the following terms: "agricultural purpose," "compact basin commission," "environmentally sound and economically feasible water conservation measures," "interbasin diversion," "person," "potable water," "public water supply system," "threshold volume," "water withdrawal system" and "withdrawal."

Section 3 of the bill would amend ECL § 15-1503 to: (1) make conforming amendments necessitated by other amendments to Title 15 made by the bill; (2) clarify the information that must be provided with a permit application; (3) require that, in making its permit decisions, DEC shall determine whether a proposed withdrawal takes into consideration other sources of supply that are or may become available, will be adequate for

the proposed use, is just and equitable to all affected municipalities and their inhabitants, cannot be reasonably avoided through efficient use and conservation of existing water supplies, is limited to quantities that are considered reasonable for the 'purposes for which the water use is proposed, will be implemented in a manner that ensures it will result in no significant individual or cumulative adverse impacts, incorporates environmentally sound and economically feasible water conservation - measures, and is consistent with applicable municipal, state and federal laws and regional and international agreements; and (4) provide that a new permit for a water withdrawal system and any renewal thereof will be valid for a period not to exceed ten years.

Section 4 of the bill would add a new ECL § 15-1504 to make the provisions in existing Titles 16 and 33 of ECL Article 15, which would be repealed by sections 8 and 9 of the bill, applicable to water withdrawals for agricultural purposes that are registered or reported to DEC under such titles on or before February 15, 2012. While such existing, agricultural withdrawals would not require a water withdrawal permit, they must continue to be registered and reported under the new ECL § 15-1504 in the same manner as required under Titles 16 and 33.

Section 5 of the bill would amend ECL § 15-1505 to: (1) provide that no person may make a new or increased interbasin diversion of water which results in a diversion in excess of one million gpd until the person has registered the diversion with DEC; (2) provide that no later than February 15, 2013, all existing diversions in excess of one million gpd must be registered with DEC; and (3) provide that no person shall make a new or increased interbasin diversion which results in a significant adverse impact on the water quantity of the source New York major drainage basin. This section would exempt from the registration requirement an interbasin diversion which is part of a water withdrawal permitted by DEC or its predecessors.

Section 6 of the bill would amend ECL § 15-1521 to provide that the Public Service Commission has jurisdiction to set the rates for the supply of water by one public water supply system to another and make technical and conforming amendments necessitated by other amendments to Title 15 made by the bill.

Section 7 of the bill would amend ECL § 15-1529 to provide that, in lieu of DEC inspection and approval, the construction of any water withdrawal system must be supervised by a licensed professional engineer that will certify to DEC that the system has been fully completed in accordance with the approved engineering report, plans and specifications, and the permit.

Section 8 of this bill would repeal Title 16 of ECL Article 15 (Title 16), related to Great Lakes water conservation and management, because the provisions of Title 16 will be incorporated into the permitting requirements of Title 15 as amended by this bill.

Section 9 of the bill would repeal Title 33 of ECL Article 15 (Title 33), which was added by Chapter 59 of the Laws of 2009 to enable the State to gain information about large water withdrawals, because the information collected pursuant to Title 33 will be incorporated into the permitting requirements of Title 15 as amended by this bill.

Section 10 of the bill would amend ECL § 71-1127 to increase the maximum civil penalty for violations of ECL Article 15 from $500 to $2,500 per violation and from $100 to $500 for each day during which the violation

continues.

Section 11 of the bill would provide for an effective date of February 15, 2012, except that section 4 of the bill would take effect immediately, and sections 7 and 8 of the bill, which would repeal Title 16 and Title 33, would take effect on December 31, 2013.

Existing law: ECL Article 15 sets forth New York's water resources program. Title 15 sets forth then provisions related to regulating water supply. ECL § 15-1501 requires public water suppliers to obtain a permit from DEC. ECL § 15-1502 provides the definitions applicable to Title 15. ECL § 15-1503 sets forth the criteria applicable to DEC's decision to grant or deny a permit. ECL § 15-1505 requires a permit for supplying water to other states. ECL § 15-1521 authorizes DEC to require that an applicant for a water supply permit make provisions for and supply water to other areas of the state if the areas should be supplied by the water source sought by the applicant. ECL § 15-1529 requires DEC approval of completed construction before a project may be operated. ECL § 71-1127 establishes the maximum civil penalty for any person who violates the provisions of ECL Article 15 or any rule, regulation, order or permit issued thereunder.

Legislative history: A similar bill, 2010 Governor's Program Bill 451, passed the Senate (S.8280-A) and was introduced in the Assembly (A.11436-13).

Statement in support: New York State is fortunate to have plentiful water resources. The preservation and protection of these resources is vital to New York's residents and businesses, who rely on these resources for drinking water supplies, and to support agriculture, manufacturing and other industries and recreation in the State. Aquatic and terrestrial flora and fauna are also dependent on these critical resources to maintain healthy populations. Good policy and sound natural resource management practices are critical to assuring long-term supplies of water to meet these needs now and into the future.

Pursuant to ECL Article 15, DEC has been entrusted with the responsibility to conserve and control New York State's water resources for the benefit of all the inhabitants of the State. However, the water supply provisions of Title 15 derive primarily from statutes written in the first half of last century, and therefore are outdated. Under the provisions of Title 15, DEC's regulatory authority is largely limited to public water supplies to ensure adequate quantities of potable water. As a result, consumptive uses of water for agricultural, commercial, and industrial purposes remain largely unregulated by the State.

Moreover, since the provisions of Article 15 were enacted, population growth, pressures to keep water instream for fisheries and the environment, and increased use of water for commercial, industrial and other purposes have resulted in substantially increased demands on the State's water resources. In addition, potential impacts from climate change, and proposals to export vast amounts of water from New York to other states and abroad could pose new threats to the State's water supply. These issues have served to highlight the limitations on the State's water resources program and DEC's limited ability to regulate water withdrawals for many purposes. In contrast, neighboring states of Connecticut, New Jersey, Rhode Island, and Massachusetts all have programs that regulate industrial, commercial and agricultural water withdrawals.

Another important recent development is enactment of the Great Lakes-St. Lawrence River Basin Water Resources Compact (Compact) which includes a number of provisions to preserve and protect the water resources of the Great Lakes-St. Lawrence River Basin (Great Lakes Basin). The Great Lakes Basin is home to 20 percent of New York's population and covers approximately 50 percent of New York State by area. A key provision of the Compact requires New York to regulate all water withdrawals occurring in the New York portion of the Great Lakes Basin.

This bill, by authorizing DEC to implement a permitting program for all water withdrawal systems with a capacity equal to or greater than 100,000 gpd, would allow New York to meet its Compact obligation to implement a regulatory program for water withdrawals in the Great Lakes Basin. Moreover, application of the program statewide assures consistent requirements throughout New York and creates an even regulatory playing field while at the same time protecting the State's finite water resources. Further, this bill would result in a strengthening of the water conservation elements of the current permitting program and encourage water reuse, consistent with the Compact and sound resource management.

Finally, by focusing DEC's jurisdiction on significant withdrawals, DEC would no longer be required to issue permits for smaller public water supplies. This change would allow DEC to focus its attention on large withdrawals that have the potential to have significant impact on the quantity and quality of the State's water resources, while relieving smaller communities of the regulatory burden of obtaining a permit from DEC. Although small public water supplies would be exempt from DEC's permitting process, DOH would continue to regulate them to ensure their adequacy and the protection of public health.

Budget Implications: This bill would not have any significant fiscal impact on the State because DEC would implement the new requirements with existing resources.

Effective date: This bill would take effect February 15, 2012; provided, however, that section 4 would take effect immediately; sections 8 and 9 would take effect December 31, 2013; and that any proceeding commenced prior to February 15, 2012 pursuant to ECL § 151521 shall remain under the jurisdiction of DEC.

DIVISION OF THE BUDGET BILL MEMORANDUM

Session Year 201

SENATE:
No.

ASSEMBLY:
No. 5318

Primary Sponsor: Sweeney

Law: Environmental Conservation **Sections: 15 and 71**

Division of the Budget recommendation on the above bill

APPROVE: X **NO OBJECTION: __**

Departmental

1. Subject and Purpose:

To better oversee the use of the State's valuable water resources, this bill authorizes the Department of Environmental Conservation (DEC) to implement a water withdrawal permitting program.

The bill amends Environmental Conservation Law to:

- Simplify the existing water supply permit program and expand the program to require permits for the most significant water uses;
- Add definitions for terms such as "agricultural purpose," "compact basin commission," "interbasin diversion," "threshold volume," and "water withdrawal system;"
- Clarify the information that must be provided with a permit application and provide that a new permit for water withdrawal system and a permit renewal will be valid for no more than ten years;
- Provide that no person make a new or increased interbasin diversion of water which results in a diversion in excess of one million gallons per day (gpd) until registered with DEC;
- Repeal certain provisions of previous laws that enable the State to gain information about large water withdrawals and incorporate into the permitting requirements amended by this bill; and
- Increases the maximum civil penalty for violations of ECL Article 15 from $500 to $2,500 per violation and from $100 to $500 for each day during which the violation continues.

Under current law DEC has the responsibility to conserve and control the State's water resources. Since the current law was enacted many new issues have evolved -- such as climate change, horizontal well drilling and proposals to export vast amounts of water from New York to other states and abroad. Any of these pose new threats to the State's water supply. Neighboring states of Connecticut, New Jersey, Rhode Island and Massachusetts all have programs that regulate industrial, commercial and agricultural water withdrawals. At the same time, some regulatory burdens are reduced by limiting jurisdiction to withdrawals which exceed 100,000 gpd, since DEC would no longer be required to issue permits for smaller public water supplies. This change allows DEC to focus its attention on large withdrawals that

Validation: Document ID: 2832952-0
Robert L. Megna, Director of the Budget
By Denise M. Gagnon
Date: 8/25/2011 12:37:00 PM

have the potential to have significant impact on the quantity and quality of the State's water resources, while relieving smaller communities of the regulatory burden of obtaining a permit from DEC.

This bill would take full effect February 15, 2012.

2. Budget Implications:

This bill would not have any significant fiscal impact on the State because DEC would implement the new requirements with existing resources. This bill is a major priority for DEC and the Governor's Office and was included as a departmental bill. Additionally, DEC has done significant outreach with all known interested stakeholders and resolved objections to the bill that were raised.

3. Recommendation:

This bill would not have a fiscal impact as DEC is expected to implement within current resources. This bill is considered a priority for DEC as well as the Executive Chamber and was included as a departmental bill. Accordingly, the Division of the Budget recommends approval of this legislation.

Validation: Document ID: 2832952-0
Robert L. Megna, Director of the Budget
By Denise M. Gagnon
Date: 8/25/2011 12:37:00 PM

New York State Department of Environmental Conservation
Office of Legislative Affairs, 14th Floor
625 Broadway, Albany, New York 12233-1050
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Website: www.dec.ny.gov

Joseph Martens
Commissioner

August 3, 2011

MEMORANDUM

TO: Mylan L. Denerstein, Esq.
Counsel to the Governor

RE: A5318-A/S.3798–Assemblymember Sweeney/Senator Grisanti
Recommendation: Approval

The Department of Environmental Conservation (DEC) submits the following comments on A.5318-A, which has passed both houses of the Legislature and will be delivered to the Governor for his consideration.

This bill, which is DEC departmental bill #01-11, would amend several provisions of Article 15 of the Environmental Conservation Law (ECL) to authorize DEC to implement a comprehensive permitting system for significant water withdrawals across the state, to enhance DEC's ability to manage the State's water resources to promote economic growth and address droughts. The bill would take effect February 15, 2012; however, permits for withdrawals other than for public water supplies (that are already subject to permitting) would not be required until DEC adopts implementing regulations. In addition, the provisions applicable to withdrawals for agricultural purposes take effect immediately.

Description of the bill:

More specifically, this bill would amend ECL §15-1501 to simplify the existing water supply permit program and to expand the program to require permits for the most significant water withdrawals. ECL §15-1501 as amended would require that, once DEC promulgates regulations, all persons that operate or propose to operate a water withdrawal system with a capacity equal to or greater than the "threshold volume" of 100,000 gallons per day (gpd) obtain a permit from DEC, with certain exceptions. The bill would amend ECL §15-1502 to add new definitions applicable to the new permitting program and ECL §15-0503 to set forth the criteria DEC shall use in making its permit decisions.

This bill would also add a new ECL §15-1504 to make the existing registration and reporting provisions in Titles 16 and 33 of ECL Article 15, which would be repealed by this bill, applicable to water withdrawals for agricultural purposes that are registered or reported to DEC under these titles on or before February 15, 2012. While these existing agricultural withdrawals would not require a water withdrawal permit, they must continue to register and report under the

new ECL §15-1504. The threshold for reporting withdrawals for agricultural purposes would be consistent with the threshold for registrations of withdrawals in the Great Lakes Basin under existing Title 16: a withdrawal of water of a volume in excess of an average of 100,000 gallons per day in any consecutive 30-day period.

The bill makes amendments to several other provisions of ECL Article 15 to: prohibit a new or increased interbasin diversion of water which results in a diversion in excess of one million gpd until the person has registered the diversion with DEC; transfer to the Public Service Commission jurisdiction to set the water rates in the limited cases where DEC specifically requires that one public water supplier provide water service to another and they cannot agree upon a rate; and provide that, in lieu of DEC inspection and approval, the construction of any water withdrawal system must be supervised by a licensed professional engineer that will certify to DEC that the system has been fully completed in accordance with the approved engineering report, plans and specifications, and the permit. The bill also would repeal, effective December 31, 2013, Titles 16 and 33 of ECL Article 15, related to Great Lakes water conservation and management, and reporting of water withdrawals, respectively, because the information collected pursuant to these titles will be incorporated into the new permitting requirements of Title 15.

Finally, this bill would amend ECL §71-1127 to increase the maximum civil penalty for violations of ECL Article 15 from $500 to $2,500 per violation and from $100 to $500 for each day during which the violation continues.

Discussion:

New York State is fortunate to have plentiful water resources. The preservation and protection of these resources is vital to New York's residents, farmers, and businesses who rely on these resources for drinking water supplies, and to support agriculture, manufacturing and other industries and recreation in the State. Aquatic and terrestrial flora and fauna are also dependent on these critical resources to maintain healthy populations. Good policy and sound natural resource management practices are critical to assuring long-term supplies of water to meet these needs.

Pursuant to ECL Article 15, DEC has been entrusted with the responsibility to conserve and manage New York State's water resources for the benefit of all the inhabitants of the State. The water supply provisions of Title 15 of ECL Article 15, however, derive primarily from statutes written in the first half of last century, and therefore are outdated. Under the provisions of Title 15, DEC generally only has authority to regulate public water supplies to ensure adequate quantities of potable water. As a result, consumptive uses of water for agricultural, commercial, and industrial purposes remain largely unregulated across the State.

This bill would allow DEC to comply with a significant commitment under the Great Lakes-St. Lawrence River Basin Water Resources Compact (Compact): regulation of all significant water withdrawals occurring in the New York portion of the Great Lakes Basin. This bill also directs DEC to establish a water conservation and efficiency program, another key responsibility of New York State under the Compact.

This bill would result in a strengthening of the water conservation elements of the current

permitting program for public water supplies and encourage water reuse, consistent with the Compact and sound resource management. Further, increasing the penalties applicable to violations of ECL Article 15 should deter violations that threaten the quality and quantity of the State's water resources.

DEC worked extensively with stakeholders, including agriculture, industry and environmental advocates, to resolve their concerns. As a result, existing agricultural withdrawals are exempt from the new permit requirement as long as these withdrawals are reported to DEC as required under current law. In addition, all existing water withdrawals would be entitled to an initial permit, subject to appropriate terms and conditions, based on the maximum water withdrawal capacity reported to DEC on or before February 15, 2012 pursuant to existing law. Language was also added to the bill to authorize DEC to establish quantitative standards that maintain stream flows protective of aquatic life, consistent with the policy objectives of ECL Article 15. Further, the criteria that DEC must consider in making its permit decisions are based on the decision-making standard in the Compact.

This bill, by authorizing a comprehensive statewide permitting program for significant water withdrawals, would help ensure that water remains available for drinking water supply, agriculture, hydropower, manufacturing, wildlife and plant species, navigation, water-based recreation, wetlands, and other uses, while allowing DEC to regulate withdrawals of water that are unregulated now, like water taken by bottled water companies, or large withdrawals of water for hydraulic fracturing. It would help DEC to protect existing water users, especially for drinking water purposes, and help new businesses to know where to locate in New York, especially if the business is heavily water dependent.

This bill reflects a balanced approach to protecting the State's water resources. It recognizes the importance of regulating significant water withdrawals while not placing undue regulatory burdens on New York's farmers or businesses.

DEC strongly supports this legislation and recommends its approval.

/s/
Maureen A. Coleman
Legislative Counsel

c: Commissioner Martens
Steven Russo
James Tierney

C40

Brookfield

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August 17, 2011

RECEIVED
NEW YORK STATE
EXECUTIVE CHAMBER

The Honorable Andrew M. Cuomo
Governor of the State of New York
Capitol Building
Albany, NY 12224

Dear Governor Cuomo,

The purpose of this letter is to provide information to you in advance of your anticipated signing of the "Water Resources" legislation., A. 5318-A/S.3798, sponsored by Assemblyman Sweeney and Senator Grisanti. As the operator of the State's most extensive fleet of 75 hydropower facilities in 13 New York Counties, we at Brookfield Renewable Power have raised our specific concerns with this bill.

On April 11, we mailed the attached letter expressing our concerns with this matter to your Department of Environmental Conservation (DEC) Commissioner Joe Martens, along with the two legislative sponsors. On April 15, we met with a cross section of the staff of the DEC working on this matter. At that time, we shared with them the attached letter and spoke about the potential for amendments to the bill, as well as the plans for the Department to address certain matters in the regulatory process after the legislation was signed into law.

In that session, DEC staff indicated to us that they were strongly opposed to further amendments to the legislation, since so many parties had specific concerns they wished to see addressed, but they assured us the concerns we raised would be addressed to our satisfaction in the regulatory process to follow.

Specifically, we were informed that:

- hydropower facilities are not a target of this legislation,
- there was no desire by DEC to supersede the exclusive jurisdiction over hydroelectric facilities currently under the jurisdiction of the Federal Energy Regulatory Commission (FERC), and
- there were no changes foreseen for any run of river or "non consumptive" hydropower.

These assurances were comforting, and we have been proceeding under the presumption that these items would specifically be excluded in the regulatory process to follow. If so, Brookfield can be supportive of the direction of the state in this regard.

Brookfield has a substantial economic presence in New York. Brookfield Renewable Power is a wholly owned subsidiary of Brookfield Asset Management, whose companies collectively employs over 700 and pay over $155 million annually in property taxes within New York State.

Thank you for the opportunity to comment on this matter, and we trust the assurances we received from the DEC will become part of the final regulations on this legislation.

Sincerely,

Daniel White
Vice President

Attachment: April 11, 2011 Letter to DEC Commissioner Joe Martens

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RECEIVED
APR 18 2011
NEW YORK STATE
EXECUTIVE CHAMBER
COUNSEL

April 11, 2011

Commissioner Joe Martens
Department of Environmental Conservation
625 Broadway
Albany, NY 12233-0001

Dear Commissioner Martens,

The Department of Environmental Conservation ("Department") has requested Senate Bill 3798/Assembly Bill 5318-A, "An Act to Amend the Conservation Law". This bill would require permits for inter-basin diversions of water and approval of modifications to existing systems. Brookfield is concerned about the implication that the Department may try to super cede Federal Energy Regulatory Commission authority over hydropower facilities.

Brookfield Renewable Power owns and operates 75 hydropower facilities in 13 New York counties and 25 additional facilities in eight other states. We are also developing wind and transmission. Brookfield Renewable Power is a wholly-owned subsidiary of Brookfield Asset Management whose companies collectively pay over $155 million a year in New York Property taxes and employ over 700 people within the state. Brookfield has over 100 years of experience operating hydropower facilities. In New York, more than half of our hydropower facilities are certified by the Low Impact Hydropower Institute (www.lowimpacthydr.org).

SB 3798/AB 5318-A modifies certain sections of the Conservation Law regarding water withdrawals. It is our understanding that hydropower facilities are not a target of these changes. However, the language contained within the bill leaves open the possibility that the Department will try to use this law to make additional requirements for hydropower facilities even though the Federal Energy Regulatory Commission ("FERC") has exclusive jurisdiction over these facilities.

For example, in Section 1 (2), which amends §15-1501, the bill states that "Until the department promulgates regulations pursuant to subdivision four of this section, nothing contained in subdivision one of this section concerning permits from the department shall be applicable to water withdrawals other than for a public water supply system." This language implies that the regulations may be more expansive and thereby require compliance with the permitting requirements of subdivision one for more water systems than just public water supply systems.

In addition, Section 1 (4), starting at line 31, says "Such regulations may establish quantitative standards that maintain stream flows protective of aquatic life, consistent with the policy objectives of this article and any other conditions, limitations and restrictions that the department, in consultation with the department of health, determines are necessary to protect the environment and the public health, safety and welfare and to ensure the proper management of the waters of the state." This language is very similar to standards established by FERC and incorporated by reference into our FERC licenses.

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Despite the implication that the Department may be able to require permits for hydropower operations, FERC would take jurisdiction.

Similarly, Section 1 (9) makes reference to "diversion" and (15) makes reference to "storage" both of which could be inferred to include hydropower operations.

Brookfield respectfully requests that the bill be amended to include language that recognizes FERC jurisdiction over hydropower facilities therefore exempting such facilities from the provisions of the bill. Brookfield suggests amending Sections 15-501, 15-503, and 15-505 of the environmental conservation law to include the following:

> *Nothing contained herein shall require the owner or operator of a hydro-electric generation facility licensed by the Federal Energy Regulatory Commission to obtain a permit under any portion of this Section.*

If you have further questions regarding our concerns, please do not hesitate to contact me.

Sincerely,

Daniel Whyte
Vice President

342 Hamilton Street, Albany, NY 12210 phone (518) 432-1770 www.adirondackcouncil.org

2011 Legislative Session

MEMORANDUM IN SUPPORT

A. 5318-A (Sweeney) / S. 3798 (Grisanti)

AN ACT to amend the environmental conservation law, in relation to regulating the use of the state's water resources; and to repeal titles 16 and 33 of article 15 of such law relating to Great Lakes water conservation and management and water withdrawal reporting

The Adirondack Council supports this legislation which would permit the Department of Environmental Conservation (DEC) to create a water withdrawal permitting program for the purposes of regulating the use of New York's water resources. New York's most valuable resource, our abundant fresh water, is at risk from the increased demand for the exportation of vast amounts of our water.

Population shifts and urban sprawl has resulted in increased use of water for commercial, agricultural and industrial purposes that have placed strains on the state's water supply in special places like the Adirondack Park. This legislation would update current regulations regarding water supply and extraction by authorizing DEC to create a statewide water management plan requiring a permit or permit modification in order to make water withdrawals from both new and existing sources as well as regulate water withdrawal systems with the capacity to withdraw 100,000 or more gallons per day.

The bill would strengthen water conservation efforts and assure compliance with the Great Lakes Compact which requires that New York regulate all water withdrawals occurring in the New York portion of the Great Lakes Basin. Similar efforts have been implemented by our neighbors Connecticut, New Jersey, Massachusetts, and Vermont.

For the above mentioned reasons, the Adirondack Council supports this legislation and urges its passage.

The Adirondack Council is a member based not-for-profit organization dedicated to ensuring the ecological integrity and wild character of the Adirondack Park.

For more information contact:
Scott M. Lorey or Alanah N. Keddell

The Nature Conservancy
Protecting nature. Preserving life.™

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nature.org/newyork

August 16, 2011

Hon. Andrew M. Cuomo
Governor
Executive Chamber
New York State Capitol
Albany, New York 12224

Re: S. 3798 (Grisanti) / A. 5318-A (Sweeney)
New York State Water Resources Protection Act

Dear Governor Cuomo:

On behalf of the 70,000 members of The Nature Conservancy in New York, I am writing to express our strong support for the New York State Water Resources Protection Act (A. 5318-A Sweeney / S. 3798 Grisanti) and urge you to sign the bill into law. As you know, this legislation is a departmental bill. We appreciate the support that you and the Commissioner have given this legislation to date, and look forward to partnering with the state to implement important programs to protect our water resources.

The Nature Conservancy supports this legislation because it would create a comprehensive statewide water management program that protects New York's ecologically important water resources, addresses the limitations of the State's current water resources program, and assist the state with the implementation of the Great Lakes – St. Lawrence River Water Resources Compact. There is an urgent need for a comprehensive water management program in New York to allow the state works to address emerging threats to our water resources. The legislation provides the Department of Environmental Conservation (DEC) the authority to develop scientifically based streamflow standards as part of a water management program in New York State, a key reason for the Conservancy's support.

The Conservancy is committed protecting freshwater resources, and believes that the protection of water for people and nature are not only inseparable but two sides of the same coin. In New York, our rivers, lakes and streams provide clean drinking water for millions of residents and offer countless opportunities for recreation, generating millions of dollars in tourism revenue. They have historically supported fisheries from brook trout to oysters, some of which are now critically endangered. Our rivers, lakes and streams also support a wide array of globally important aquatic species. Freshwater mussels like the federally endangered dwarf wedgemussel and the brook floater live in the rivers and streams of New York State. Ancient fish like the federally endangered shortnose sturgeon, American eel and paddlefish, unchanged for nearly 100 million years are found in New York's waters. A rich heritage of native fish including the treasured brook trout and American shad also occupy New York's freshwater habitats.

These important species and their habitats depend on a natural pattern of flows with seasonal highs and lows and with the changes from wet years to dry years. These natural variations are a key 'driver' of ecological health in freshwater ecosystems. State laws currently regulate water quality but do not adequately protect water levels and flows, which can be significantly altered by water withdrawals, diversions or retention.

Establishing scientific streamflow protection standards for the state's rivers, lakes and streams will allow DEC to determine whether a proposed water withdrawal, diversion or retention can be made without significant adverse impacts to natural resources. These standards should explicitly protect New York's diversity of native aquatic life, be based on the natural variation of water flows and levels, and be developed using the best available scientific information and approaches. Several other states in the northeast have recently enacted legislation establishing streamflow standards, including Maine and Connecticut. Their experience in developing these statutes and the resultant regulations may be instructive for New York. The Conservancy offers our assistance to the state in developing scientifically based flows standards that respect both private rights and public needs, as well as the tools to implement credible, scientifically-based approaches to water management.

The Nature Conservancy urges you to sign this bill into law and create a comprehensive statewide water management program in New York State.

Thank you for your consideration of this important matter.

Sincerely,

R. Darryl Banks

R. Darryl Banks
Deputy Director for Conservation Strategies and External Affairs

Cc: Ms. Mylan Denerstein, Counsel to the Governor
Mr. Joseph Martens, Commissioner, Department of Environmental Conservation
Mr. Thomas Congdon, Deputy Secretary for Energy and the Environment
Senator Mark Grisanti
Assemblyman Robert Sweeney

New York Farm Bureau • 159 Wolf Road P.O. Box 5330 • Albany, New York 12205 • (518) 436-8495 Fax: (518) 431-5656

June 30, 2011

The Honorable Mylan L. Denerstein
Counsel to the Governor
State Capitol Building, Second Floor
Albany, New York 12224-0341

RE: A. 5318-A

Dear Ms. Denerstein,

New York Farm Bureau, the State's largest agricultural advocacy organization, is offering our comments in support of this legislation, A. 5318-A. This bill, if enacted, would ease current water reporting requirements on farms in New York State.

New York's farmers depend upon timely access to our abundant sources of water for crop production and watering livestock. Given this need, the integrity of the water supply from the water resources of this region must be protected for use by the next generation of farmers. As such, we recognize that this legislation could help to protect existing water users, including farm operations, from new unpermitted large water users. Given the potential of drilling in the Marcellus Shale and the considerable water use associated with the drilling process, we generally support the effort to protect water supplies.

Farmers are often forced to comply with a vast number of burdensome reporting regulations that require an extensive amount of work by the farmer. The current law that requires farms to report water use capacity exceeding 100,000 gallons in one day is a perfect example of such a requirement, as virtually every farmer meets this threshold. The existing statute was enacted at the last minute as part of the 2009-2010 final state budget. This legislation ignored previous statute and interstate agreements governing water withdrawals enacted as part of the Great Lakes Basin Compact, which had already set a water withdrawal threshold at an average of 100,000 gallons of water used per day during a 30 day time frame.

These new, overly strict record keeping and water use requirements only hurt agricultural operations that are unable to afford the time and/or resources to spend managing yet another regulatory program. The artificially low threshold volume of 100,000 gallons in one day is inequitable for farm operations, because it does not recognize the seasonality of farming in the Northeast.

New York Farm Bureau is appreciative of the language included in A. 5318-A that adopts the threshold of 100,000 gallons used on a 30 day average. As such, this language recognizes that a farm is not like a factory, water bottling facility or a power plant -- farms don't need to use water every day. At certain times during the growing season a farm may need to irrigate their crop in dry weather, but they are not large scale year- round water users and should not be regulated as such.

We stand prepared to work with the Departments of Environmental Conservation and Agricultural and Markets to publicize these new requirements to the agricultural industry. It is also imperative that when the Department of Environmental Conservation promulgates the regulations governing water use permits, that it does so in a way that facilitates the provision of permits in a timely manner.

We must ensure that new projects requiring permitting by the Department are not delayed without reason -- this could negatively impact rural communities that sorely need economic investment.

This legislation takes a step forward in easing a regulation that impacts the farm economy negatively. For these reasons, New York Farm Bureau respectfully requests the Governor's support of this legislation.

Thank you for your time and consideration of these comments. Should you have any questions or concerns please do not hesitate to contact me at any time.

Sincerely,

Jeff Williams
Manager of Government Relations
New York Farm Bureau

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SCENIC HUDSON

MEMORANDUM OF SUPPORT

Water Resources Repealer

A. 5318 (Sweeny, et. al) / S.3798 (Grisante)

Summary of Legislation
An act to amend the environmental conservation law, this legislation authorizes the Department of Environmental Conservation (DEC) to implement a water withdrawal permitting program to regulate the use of the State's water resources and to repeal titles 16 and 33 of article 15 of such law relating to Great Lakes water conservation and management and water withdrawal reporting.

These provisions intend to simplify existing water supply permit criteria, expand the program to require permits for the most significant water uses and would allow New York to meet its legal obligations under the enactment of the Great Lakes-St. Lawrence River Basin Water Resources Compact.

Justification for Position
New York enjoys an abundance of clean water for drinking and recreation. Residents, businesses, agricultural operations and manufacturing industries all depend on this resource to survive and flourish. On behalf of all the state's inhabitants—including aquatic and terrestrial flora and fauna—the responsibility to conserve and control this precious asset belongs primarily with the DEC.

Substantially increasing demands on the State's water resources remain largely unregulated due to outdated statutes written for an environment and an economy from the first half of the last century. The DEC's ability to effectively manage water supplies and health must be reflected in more current legislative language and authority. The new provisions and water-related definitions in this bill will allow DEC to address changes in water use, including increased demand for commercial, industrial and agricultural water operations and potential threats created by oncoming climate change impacts.

Furthermore, attention to significant water withdrawals ensures that the DEC will be focused on the most serious risks to the quantity and quality of the State's water resources. This legislation also includes important provisions that address the unique needs of New York's agricultural industry. This element of the measure is to be commended as farms and farmland play an important role in the region's culture and economy.

Scenic Hudson supports this legislation.

June 2011

Adirondack
ADK
Mountain Club

Conservation
Education
Recreation
Since 1922

MEMORANDUM OF SUPPORT

Bill: A.5318-A by Assemblymember Sweeney
S. 3798 by Senator Grisanti

Status: Assembly Committee on Environmental Conservation
Advanced to Third Reading on Senate Floor

Purpose: Relates to the regulation of the use of the state's water resources; requires permits for interbasin diversions of water and approval of modification to existing systems.

The Adirondack Mountain Club (ADK) strongly supports this legislation.

This legislation amends the Environmental Conservation Law Section 15 to simplify the current permitting system, and require anyone with the capacity to withdraw more than 100,000 gallons of water per day obtain a permit from the New York State Department of Environmental Conservation.

The new article will clarify the information needed for a permit, along with requiring the DEC to determine whether a proposed withdrawal takes into consideration other water supply sources that have the potential to become available. The agency will decide if the withdrawal can be implemented in a manner that ensures it will not result in significant individual or cumulative adverse impacts. The DEC will also incorporate environmentally sound and economically feasible water conservation measures, consistent with applicable municipal, state and federal laws and regional and international agreements.

This would not be the first time that New York State has taken a proactive step to protect our water resources. New York State has an excellent record cooperating with other states and protecting our waters from mismanagement. Currently New York regulates withdrawals from the Delaware and Susquehanna Rivers as a member of a multi-state river commission. There is no logical reason that the state should regulate withdrawals from some rivers, while leaving others vulnerable to severe degradation.

ADK strongly supports this legislation to protect New York's clean water supply and safe guard this important asset from dwindling due to a lack of oversight. Our clean water resources support multi-million dollar fishing and tourism industries, and provide millions of New Yorker's with fresh drinking water. With the threat of natural gas exploitation consuming water at unprecedented levels, it is more important than ever that we have a regulatory system in place to protect our state's valuable resources.

For these reasons, ADK respectfully and strongly urges you to support this important legislation.

The Adirondack Mountain Club is dedicated to conservation, education, outdoor recreation and protection of New York's Forest Preserve, parks, wild lands and waters. The club represents over 28,000 hikers, paddlers, skiers and backpackers.

For further information contact: ADK Office of Public Affairs at (518) 449-3870.

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Executive Director

MEMORANDUM IN SUPPORT

CREATING A WATER MANAGEMENT PROGRAM FOR NEW YORK STATE

ASSEMBLY BILL 5318-A SENATE BILL 3798

Audubon New York, the state program of the National Audubon Society representing 50,000 members and 27 local chapters, strongly supports Assembly Bill 5318-A (Assemblyman Sweeney) and Senate Bill 3798 (Senator Grisanti), An act to amend the environmental conservation law, in relation to regulating the use of the state's water resources; and to repeal titles 16 and 33 of article 15 of such law relating to Great Lakes water conservation and management and water withdrawal reporting

New York is blessed with an abundance of fresh water which is critical to the quality of life and economic well being for the state's residents. Each day our incredible freshwater ecosystems like the Great Lakes, Hudson River, and the thousands of other rivers, lakes and streams in the state provide millions of people with clean drinking water, and countless other important benefits from supporting commerce and industry to providing for recreation and tourism. Most importantly, our freshwater resources provide vital habitat for birds, fish and other wildlife species, including many which are threatened and endangered. Many of the aquatic habitats that support this great diversity of species are highly susceptible to artificial changes in water levels resulting from misuse and mismanagement of water.

Although seemingly limitless, water is a finite resource which must be properly managed and protected to prevent against depletion. Each day, new threats to our water quantity are emerging from proposals to establish water bottling facilities to expanded natural gas drilling using hydraulic fracturing, all signaling that the state needs a new comprehensive water management program to protect our water resources. This legislation provides for the creation of such a water management program in New York State which would regulate all users who withdraw more than 100,000 gallons/day, and provide the department with better information on the amount of water being used in the State. In addition, this important bill requires the creation of a strong water efficiency and conservation program that will ensure we are not wasting this precious resource. This legislation is also critical for implementing key provisions of the Great Lakes St. Lawrence River Basin Water Resources Compact, an important water management program for the Great Lakes which was passed by each of the eight Great Lakes states and signed by the President in 2008.

While this legislation is a strong step forward for conserving our water resources, this bill could be strengthened by including a permit fee structure which will provide the necessary resources for the Department to properly implement this important program. Additionally, the bill could be furthered strengthened by requiring the Department to develop and adopt strong flow standards, instead of only suggesting the Department may adopt such standards. While we strongly support the bill as drafted, we do urge for these strengthening provisions to be considered during negotiations or in subsequent legislation.

It is for these reasons that Audubon New York strongly supports A.5318-A / S.3798, an act to create a water management program for New York State, and urges its passage in the 2010 legislative session.

For more information contact Sean Mahar, Director of Government Relations for Audubon New York at 518-869-9731

Reported to Assembly Codes Committee Agenda: March 15, 2011
On Third Reading in the Senate: March 10, 2011

Brookfield

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April 11, 2011

Assemblyman Robert Sweeney
Room 625 Legislative Office Building
Albany, NY 12248

Dear Assemblyman Sweeney,

The Department of Environmental Conservation ("Department") has requested Senate Bill 3798/Assembly Bill 5318-A, "An Act to Amend the Conservation Law". This bill would require permits for inter-basin diversions of water and approval of modifications to existing systems. Brookfield is concerned about the implication that the Department may try to super cede Federal Energy Regulatory Commission authority over hydropower facilities.

Brookfield Renewable Power owns and operates 75 hydropower facilities in 13 New York counties and 25 additional facilities in eight other states. We are also developing wind and transmission. Brookfield Renewable Power is a wholly-owned subsidiary of Brookfield Asset Management whose companies collectively pay over $155 million a year in New York Property taxes and employ over 700 people within the state. Brookfield has over 100 years of experience operating hydropower facilities. In New York, more than half of our hydropower facilities are certified by the Low Impact Hydropower Institute (www.lowimpacthydr.org).

SB 3798 modifies certain sections of the Conservation Law regarding water withdrawals. It is our understanding that hydropower facilities are not a target of these changes. However, the language contained within the bill leaves open the possibility that the Department will try to use this law to make additional requirements for hydropower facilities even though the Federal Energy Regulatory Commission ("FERC") has exclusive jurisdiction over these facilities.

For example, in Section 1 (2), which amends §15-1501, the bill states that "Until the department promulgates regulations pursuant to subdivision four of this section, nothing contained in subdivision one of this section concerning permits from the department shall be applicable to water withdrawals other than for a public water supply system." This language implies that the regulations may be more expansive and thereby require compliance with the permitting requirements of subdivision one for more water systems than just public water supply systems.

In addition, Section 1 (4), starting at line 31, says "Such regulations may establish quantitative standards that maintain stream flows protective of aquatic life, consistent with the policy objectives of this article and any other conditions, limitations and restrictions that the department, in consultation with the department of health, determines are necessary to protect the environment and the public health, safety and welfare and to ensure the proper management of the waters of the state." This language is very similar to standards established by FERC and incorporated by reference into our FERC licenses.

Brookfield

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Despite the implication that the Department may be able to require permits for hydropower operations, FERC would take jurisdiction.

Similarly, Section 1 (9) makes reference to "diversion" and (15) makes reference to "storage" both of which could be inferred to include hydropower operations.

Brookfield respectfully requests that the bill be amended to include language that recognizes FERC jurisdiction over hydropower facilities therefore exempting such facilities from the provisions of the bill. Brookfield suggests amending Sections 15-501, 15-503, and 15-505 of the environmental conservation law to include the following:

> *Nothing contained herein shall require the owner or operator of a hydro-electric generation facility licensed by the Federal Energy Regulatory Commission to obtain a permit under any portion of this Section.*

If you have further questions regarding our concerns, please do not hesitate to contact me.

Sincerely,

Daniel Whyte
Vice President

The Business Council

Legislative Memo

Contact:
Marcus Ferguson
Director of Government Affairs
T 518.465.7517 x212
www.bcnys.org

BILL: **S.3798 (Grisanti) / A.5318-A (Sweeney)**

SUBJECT: **Water Withdrawal Permits**

DATE: **March 11, 2011**

SUPPORT

S.3798 (Grisanti) / A.5318-A (Sweeney)

The Business Council supports the amended version of this legislation, however we maintain concerns regarding the need for this new regulatory mandate and its potential impact on businesses with direct water withdrawals.

This legislation would establish a major new statewide water withdrawal permitting program within the Department of Environmental Conservation (DEC) for new and existing users. It would authorize DEC to implement a statewide permitting program for all water withdrawals equal to or greater than 100,000 gpd in accordance with the Great Lakes Basin Compact ("Compact").

There were a number of concerns with the original bill which have been addressed. These include:

1. The "grandfathering" of existing water withdrawal capacities;
2. Exemptions for water withdrawals made in connection with remedial projects subject to federal or state judicial or administrative orders;
3. The applicability of minimum water withdrawal standards to newly constructed, not existing, water withdrawal systems; and
4. Requirements that any regulation of quantitative stream flows to be consistent with the policy objectives of Article 15 of the ECL.

We are still concerned that the bill goes beyond the established provisions of the Compact by imposing a regulatory scheme on the entire state that regulates water users with "capacity" to withdraw 100,000 gpd. Under the Compact, water users are regulated when they use more than 100,000 gpd on average over a 30-day period. We would like to have seen the exact Compact standard applied to industrial users under this legislation.

We are also reluctant to support additional statewide regulatory programs at a time when we, along with others in industry and government, have raised alarms about the growth of regulation in the state and its impact on business.

However, in light of the good faith efforts on the part of the Governor's office and DEC and their willingness to make the appropriate changes to the bill, The Business Council will support S.3798/A.5318-A.

Moreover, The Business Council looks forward to participating in expected water withdrawal stakeholder meetings and to working with DEC as it promulgates the rules and regulations necessary to implement the provisions of this bill, once it becomes law, under the State Administrative Procedures Act (SAPA) process.

EARTHWORKS

April 29, 2011

Memorandum of support: S3798-Grisanti/A5318-A-Sweeney et al.

Bill summary: This legislation would require any water users with the capacity to withdraw more than 100,000 gallons of water per day to first obtain a permit from the New York State Department of Environmental Conservation (DEC), unless the withdrawer is already permitted to do so by another entity (such as a basin commission). The bill directs the DEC to promulgate rules and regulations to implement the withdrawal program, create a water conservation and efficiency program, and require registration with the agency for inter-basin transfers of more than one million gallons per day.

Justification for support: New York is at a decision point with regard to potential expansion of the natural gas industry that would have significant and potentially devastating impacts on water resources and communities. Like many other states, New York must update and greatly strengthen its regulations if it is to protect people and the environment from modern-day, industrial gas development.

In more than a decade of work nationwide, the EARTHWORKS Oil and Gas Accountability Project has seen water resources severely depleted by extractive energy industries that are under-regulated and under-monitored, and whose demands for water are given primacy over the needs of agriculture, communities, and ecosystem stability. We support New York for taking a step to help avoid this situation through the proposed legislation.

S3798-Grisanti/A5318-A-Sweeney et al. provides—for the first time in New York—a mechanism by which the state must track and measure large withdrawals from streams, rivers, and lakes. This mechanism is one critical piece that will enable the state to prevent withdrawals that could compromise aquatic systems, public health, and other equally important economic activities. By establishing a water conservation and efficiency program, the bills will also help to reduce current and future stresses on New York's vital and precious water.

EARTHWORKS would strongly prefer to see clear statements added to the bills that reaffirm (1) Title 7 of the Environmental Conservation Law as it pertains to private (riparian) rights and (2) that these rights cannot be abrogated by large-scale use permits. In addition, we call on the state to restrict issuance of withdrawal permits if the needs of communities and the environment would be compromised. Elected officials must also ensure that the DEC has the necessary resources to enforce the water permitting and conservation programs and to conduct rigorous oversight of large water users.

On this basis, EARTHWORKS Oil & Gas Accountability Project urges your support of S3798-Grisanti/A5318-A-Sweeney et al.

000031

ENVIRONMENTAL ADVOCATES OF NEW YORK

ASSEMBLY & SENATE THIRD READING CALENDARS — May 2, 2011

SUPPORTS

Key to Legislative Ratings: ♣♣♣ Major Benefit ♣♣ Substantial Benefit ♣ Beneficial

A.5318-A (Sweeney, et. al)
S.3798 (Grisanti, Avella)
Departmental Bill #36

SUPERBILL

Summary

This legislation would require anyone with the capacity to withdraw more than 100,000 gallons of water per day to first obtain a permit from the New York State Department of Environmental Conservation (DEC), unless the withdrawer is already permitted to do so by another entity (such as a basin commission). The bill will not require farms to be permitted, but would instead establish a registration and regulation program for agricultural uses. The bill further directs the DEC to promulgate rules and regulations to implement the withdrawal program, create a water conservation and efficiency program, and require inter-basin transfers of more than one million gallons per day to be registered with the agency.

Explanation

New York State is home to fresh, high-quality water. From the Finger Lakes to the Great Lakes, to the St. Lawrence and the Hudson, our waters are the backbone of our economy and our way of life. These resources support vital multi-million dollar fishing and tourism industries, serve as a means of conveying goods across the state and the country, provide millions of New Yorkers with clean, fresh, drinking water, and provide opportunities to swim, play, and relax.

Although New York's waters may seem abundant, they are a finite resource. The Great Lakes replenish at a rate of less than one percent per year and are at their lowest levels in decades. One need only look west to the Colorado River, which due to poor management decisions no longer flows to the Sea of Cortez, to see how misuse depletes natural flows and decimates ecosystems. New York has a history of protecting our waters from mismanagement. The Delaware and Susquehanna rivers each have multi-state and federal river commissions to oversee water use within their respective basins. The Great Lakes Compact, passed in New York and signed as a multi-state compact by President Bush in 2008, provides for responsible water management within the Great Lakes Basin.

However, nearly 31 percent of New York's waters enjoy a management program. Currently, the state has no formal program to guide large users in water-protective practices. Furthermore, in order to implement the Great Lakes Compact, the DEC needs direction for promulgating regulations. This bill will close these loopholes while addressing limitations in our water resources program.

Environmental Advocates of New York strongly supports this bill.

000032

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Memo #7

New York Farm Bureau
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SUPPORTS

March 10, 2011

S. 3798	**Senator Grisanti**	**Full Senate**
A. 5318-A	**Assemblyman Sweeney**	**Assembly En. Con. Committee**

AN ACT IN RELATION TO REGULATING THE USE OF THE STATE'S WATER RESOURCES.

New York Farm Bureau, the state's largest general farm advocacy organization, requests your support of this legislation. This bill, if enacted, would ease current water reporting requirements on farms in New York State.

New York's farmers depend upon timely access to our abundant sources of water for crop production and watering livestock. Given this need, the integrity of the water supply from the water resources of this region must be protected for use by the next generation of farmers. As such, we recognize that this legislation could help to protect existing water users, including farm operations, from new unpermitted large water users. Given the potential of drilling in the Marcellus Shale and the considerable water use associated with the drilling process, we generally support the effort to protect water supplies.

Farmers are often forced to comply with a vast number of burdensome reporting regulations that require an extensive amount of work by the farmer. The current law that requires farms to report water use capacity exceeding 100,000 gallons in one day is a perfect example of such a requirement, as virtually every farmer meets this threshold. The existing statute was enacted at the last minute as part of the 2009-2010 final state budget. This legislation ignored previous statute and interstate agreements governing water withdrawals enacted as part of the Great Lakes Basin Compact, which had already set a water withdrawal threshold at an average of 100,000 gallons of water used per day during a 30 day time frame.

These new, overly strict record keeping and water use requirements only hurt agricultural operations that are unable to afford the time and/or resources to spend managing yet another regulatory program. The artificially low threshold volume of 100,000 gallons in one day is inequitable for farm operations, because it does not recognize the seasonality of farming in the Northeast.

New York Farm Bureau is appreciative of the language included in S. 3798/A. 5318-A that adopts the threshold of 100,000 gallons used on a 30 day average. As such, this language recognizes that a farm is not like a factory, water bottling facility or a power plant -- farms don't need to use water every day. At certain times during the growing season a farm may need to irrigate their crop in dry weather, but they are not large scale year- round water users and should not be regulated as such.

(Continued on next page)

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March 29, 2011

Senator Mark Grisanti
NY State Senate - Legislative Office Building, Room 902
Albany, NY 12247

Assemblyman Robert Sweeney
NY State Assembly, Legislative Office Building, Room 625
Albany, NY 12248

RE: Senate Bill No. S3798 and Assembly Bill No. A5318A – Relates to the Regulation of the Use of the State Water Resources – NYWEA's Evaluation

Dear Senator Grisanti and Assemblyman Sweeney,

As you know, the New York Water Environment Association (NYWEA) is a statewide nonprofit organization of approximately 2,500 water and wastewater professionals, environmental engineers and scientists, and water quality management professionals dedicated to protecting and enhancing the waters of New York. NYWEA is primarily an educational organization dedicated to educating not only our members but also those who are charged with setting policy and practices intended to protect the water environment here in New York.

Recently, NYWEA was asked by a representative of the New York State Department of Conservation (NYSDEC) if we have a position on the above-referenced Bill. While NYWEA has not routinely taken positions on individual bills, we have a program that uses a series of questions through which we review individual bills in an effort to provide an objective, unbiased third party review of proposed legislation by technical experts in protecting the water environment. Accordingly, NYWEA has reviewed proposed Bill S3798/A5318A and offers the attached summary review and recommendations for your consideration.

"1. The quality of our environment is fundamental to our concern for the quality of life. It is hereby declared to be the policy of the State of New York to conserve, improve and protect its natural resources and environment... in order to enhance the health, safety and welfare of the people of the state and their overall economic and social well being.

2. It shall further be the policy of the state to ...develop and manage the basic resources of water, land, and air to the end that the state may fulfill its responsibility as trustee of the environment for the present and future generations".

Fresh water resources are becoming scarcer throughout the world and throughout the United States. NYWEA agrees with the Senate's supporting statement accompanying this Bill that "Good policy and sound natural resource management practices are critical to assuring long-term supplies of water to meet these needs now and into the future." Not only are our State's fresh water resources integral to the quality of life of current New Yorkers, careful management of this resource is imperative to New York's ability to attract positive economic development throughout the state.

The Bill will strengthen DEC's regulatory authority to carry out its duties as the trustee of the State's waters. While New York has recently begun requiring individuals and entities which withdraw 100,000 gpd or more of ground or surface water within the State to register with the State, DEC currently lacks a clear and uncontestable power to prohibit or otherwise regulate water withdrawals for uses other than for use in a Public Water Supply system. Likewise, it is currently not clear whether DEC has the uncontestable authority to regulate the transfer of waters from one water basin to another.

The proposed amendment to 33 ECL 15-3301 provides the DEC with the necessary authority to regulate on the aforementioned issues. It allows DEC to first adopt and then implement, through a permitting program, regulations relating to:

- minimum standards for operation and new construction of water withdrawal systems;
- monitoring, reporting and recordkeeping requirements;
- protections of sources of potable water supply for present and future needs;
- maintaining stream flows protective of aquatic life; and
- requirements deemed necessary to protect the environment and the public health, safety and welfare and to ensure the proper management of the waters of the state.

As good quality water becomes an increasingly scarce commodity, New York's fresh waters may be increasingly targeted for commercial, industrial and, to a lesser extent, new agricultural uses. The state needs clear authority to regulate any and all potentially significant (100,000 gpd or greater) proposed water withdrawals. In addition, the state also needs a clear framework, established within the public purview, for decision making on water withdrawal and interbasin water transfer proposals. The proposed Bill would

On behalf of NYWEA, I commend you and your colleagues' leadership on this important topic. Please contact either me at 718-675-9947 or tdellavalle@arcadis-us.com or NYWEA's Executive Director Patricia Cerro-Reehil at 315-422-7811, or pcr@nywea.org, if you would like to discuss our evaluation or believe that we can be of further assistance.

If there are other bills which you would like NYWEA to review and comment on, please do not hesitate to contact us.

Respectfully,

A. DellaValle

Anthony Della Valle
President

cc: Commissioner Joe Martens, NYS DEC
Assistant Commissioner James Tierney, NYS DEC
Angus Eaton, NYS DEC
NYWEA Board
NYWEA Government Affairs Committee

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NYWEA Legislative Monitoring

Bill No.: Senate Bill No. S3798 and Assembly Bill No. A5318A – ***Relates to the Regulation of the Use of the State's Water Resources*** – NYWEA's Evaluation

Sponsors: Mark Grisanti (Senate) and **Robert Sweeny (Assembly)**
Co-Sponsors: Senate: Avella; **Assembly:** Peoples-Stokes, Zebrowski, Gunther, Titone, Reilly, Spano, Jacobs, Paulin, Schimel, Englebright, Hoyt (and multiple other sponsors)

Brief Summary of the Bill: The purpose of this Bill is to establish a comprehensive statewide water withdrawal permitting program for new and existing users. The Bill amends the Environmental Conservation Law (ECL) to authorize the New York State Department of Conservation (NYSDEC) to issue permits for all non-agricultural water withdrawals with the capacity to withdraw of 100,000 gallons or more per day from the state's waters and all agricultural water withdrawals who withdraw in excess of an average of 100,000 gallons per day (gpd) in any consecutive 30-day period (withdrawals approved by the Delaware River Basin Commission and Susquehanna River Basin Commission are exempt from these requirements). The Bill also restricts interbasin diversions, requiring that any diversions in excess of one million gpd be registered with DEC. The Bill is consistent with the water withdrawal requirements of the Great Lakes – St. Lawrence River Basin Water Resources Compact (Great Lakes Compact), of which the New York State is a signatory member, and expands these requirements statewide.[1]

1. How would passage of this bill improve NY waters?

The proposed bill will improve New York waters by providing clear authority to the DEC to regulate proposed withdrawal and use of New York waters consistent with established New York Policy. New York is blessed with abundant quantities of fresh water, and the DEC has been entrusted with overseeing both the protection and long term management of State waters. As articulated in the State's Environmental Conservation Law[2]:

[1] This extrapolation of the Great Lakes Compact's water withdrawal requirements to the entire State is reasonable since Great Lakes-St. Lawrence River Basin covers approximately 50% of New York State by area.

[2] NY ECL Section 1-0101. Declaration of Policy

provide both the needed regulatory authority, and mandate the establishment of the needed regulatory framework.

2. How would passage of this bill improve the environmental and/or the public health of NY?

In addition to creating a transparent mechanism for regulating significant water withdrawals and interbasin transfers, Section 6 of the Bill mandates that when evaluating whether to issue a permit, DEC consider whether a proposed withdrawal

- takes into consideration other sources of supply that are or may become available;
- will be adequate for the proposed use;
- is just and equitable to all affected municipalities and their inhabitants
- cannot be reasonably avoided through efficient use and conservation of existing water supplies;
- is limited to quantities that are considered reasonable for the purposes for which the water use is proposed;
- will be implemented in a manner that ensures it will result in no significant individual or cumulative adverse impacts;
- incorporates environmentally sound and economically feasible water conservation measures; and
- is consistent with applicable municipal, state and federal laws and regional interstate and international agreements.

Thus the Bill, if enacted, will insure that water-related usage decisions are made within a context of the State's long-term water needs, with an emphasis on water conservation and reuse (the latter being a very important environmental protection measure for hydraulic fracturing performed by gas drilling companies) and within the context of possible current and long-term competing uses for our fresh water resources.

The Bill also restricts interbasin diversions (i.e., transfer of water, done by piping or other means, from one river basin into another) requiring that any diversions in excess of one million gpd be registered with DEC. Interbasin diversions could have a detrimental impact on river ecosystem, including fish and wildlife, and could require a significant energy use for pumping.[3]

Finally, passage of the Bill would help address potential negative impacts of climate change through conservation and planned uses of valuable water resources of New York State.

3. Does this bill address statewide, regional or local impact?

This Bill would have a statewide impact.

[3] As stated in the Bill, diversions from the Great Lakes-St. Lawrence River Basin are already prohibited by the Great Lakes-St. Lawrence River Basin Water Resources Compact. The Bill states that only limited exceptions specifically for public water supply systems will be considered when in compliance with the Great Lakes Compact.

4. Who will have new requirements under this bill (*i.e.*, individual, state agency, municipality, industry, etc.)?

Large public water supplies, and those industrial and commercial facilities (water bottling facilities, hotels, etc.), oil and gas production facilities, new agricultural users, institutions and recreational facilities (golf courses, etc.) that have their own water supply and are not connected to a public water supply.

NYWEA recommends that **the Bill be amended to include** appropriate language clarifying the applicability of the Bill to dewatering operations from construction activities and whether certain types of construction dewatering operations should be exempt from the water withdrawal permit requirements. **Specifically, NYWEA recommends that in Section 1; Subsection 7, the listing of exemptions from the permit requirements be amended to add a new item (G) which would read:**

(G) Waters from dewatering operations which are returned to the waters of the State within the local watershed.

5. Relative to any other environmental mandates on the affected entities, rate the importance of this bill in terms of protecting/improving (i) water quality (ii) environmental protection and/or protection of human health.

High – Unregulated water withdrawals and interbasin diversions, especially in the Great Lakes-St. Lawrence River Basin, have been the source of increased concern related to potential impacts on State's water resources. The passage of the Bill is important for protection of natural water ecosystems and water quality of our waters.

6. What entity would bear the cost for complying with the proposed law?

Additional costs will be borne by enterprises and facilities withdrawing water for commercial, industrial, oil and gas production and agricultural uses. Most of the significant public water supplies already have the permits and corresponding fee structure in place and hence the impacts on them should be minor. Furthermore, most agricultural uses of 100,000 gpd or more of water will have already registered their usages, and will not be additionally regulated.

7. Using the relative scale of low, medium and high, what will be the:

(i) Cost to comply

Generally, **Low** for existing municipal water suppliers and agricultural users, since addressing the permitting requirements primarily requires payment of the permit fee and staff time needed to ensure compliance with these requirements. The cost for new consumptive commercial, industrial and institutional entities could be **high** if costly permit conditions are imposed or if the permit (and hence the water withdrawal) is denied and alternate sources of water must be relied on. NYWEA also recognizes an additional cost to DEC to regulate this new program and supports future increase in DEC funding to manage this new regulation.

(ii) Water quality, environmental and/or human health benefit

Potentially **High**. As stated earlier, restriction of water diversions can have a positive impact on natural water ecosystems, thus improving the water quality and recreational conditions and, where applicable, navigability of our waters. Expansion of permitting requirements to include all significant water withdrawal will allow DEC to regulate and better assess individual and cumulative impacts of water withdrawals, consumptive uses and diversions, in order to retain the quantity of the surface water and groundwater in the river basin and, thereby, ensuring sustainable use of waters of the State.

8. Other NYWEA Comments, Recommendations and an Offer of Assistance

Based on estimates by NYS DEC and NYS DOH, the conservative costs of upgrading State's aging and deteriorating wastewater and drinking water infrastructure is $36.2 billion and $38.7 billion, respectively, over the next 20 years. NYWEA recommends that strong consideration be given to including in this Bill or in a subsequent amendment to this section of the ECL, appropriate language allowing this permitting system to also become a partial dedicated funding mechanism for the State's wastewater and drinking water infrastructure. Specifically, we propose imposing a low volume based fee (along the lines of $10 per each 100,000 gallons) for water withdrawn or transferred out of basin for commercial, industrial and/or oil and gas related consumptive uses, including such uses as water bottlers/soda bottlers and hydraulic fracturing. The collected fees should be deposited in a dedicated fund for water/wastewater related infrastructure.

In addition to creating a dedicated fund which can be drawn upon to help underwrite the huge water and wastewater infrastructure needs within the State, the establishment of this fund will promote and support's New York's return to a sound fiscal state. According to the U.S. Conference of Mayors, the US Department of Commerce estimates that each public dollar invested in water infrastructure increases private long-term GDP output by $6.35 and every job created in water infrastructure leads to the creation of 3.7 jobs elsewhere.[4]

As an organization with a strong educational component, NYWEA would be interested in working with both the Senate and Assembly Environmental Conservation Committees as well as the DEC to educate our elected officials at every level of government and the general public on the benefits of this Bill. The two major benefits that could be emphasized in the educational campaign are the establishment of a long term program to insure that New York's waters are used in a sustainable manner which should lead to improvements in water quality and the recreational condition of our waters together with an increased focus on water conservation, recycling and reuse.

[4] Source: U.S. Conference of Mayors' press release entitled "Mayors Water Infrastructure Report Shows Investment Yields High Return," available at http://www.usmayors.org/urbanwater/documents/NYWATERREPORTRELEASE_081408.pdf

IRRIGATION ASSOCIATION OF NEW YORK
Dennis Realmuto, President – P.O. Box 237, Greenlawn, N.Y. 11740

MEMORANDUM OF SUPPORT

S. 3798 / A. 5318–A

(Departmental Bill # 36 – Water Withdrawal Regulation)

Sponsors:
Sen. Grisanti
M. of A. Sweeney

Subject:
To amend the Environmental Conservation Law, in relation to regulating the use of the state's water resources.

Reasons for Support:

The **Irrigation Association of New York** represents more than 80 professional businesses from across the state, who subscribe to the principles of professional competence and good business practice in the installation and maintenance of lawn irrigation systems.

We strongly support this legislation because it helps advance a number of important public policy goals that are also supported by the **Irrigation Association of New York**. Among other things, it protects, and promotes the wise use of, natural resources. Specifically, it would help achieve two of the Association's primary goals:

- Promote the wise use of natural resources, particularly through public water supply systems.
- Enhance New York's compliance with the Great Lakes Compact, by incorporating technologies and practices that improve efficiency and minimize wasted water.

We note that this legislation gives the DEC strong regulatory powers. In particular, it requires that prior to issuing a water withdrawal permit, DEC determine that:

"***g. the proposed water withdrawal will be implemented in a manner that incorporates environmentally sound and economically feasible water conservation measures;***"

Ensuring that proper installation techniques are employed by professional irrigation installers operating within the supply territory of a public water supply permit holder, is one of those sound and feasible measures. In issuing this memorandum of support, the **Irrigation Association of New York** fully anticipates that DEC will make appropriate use of these regulatory powers. Specifically, we urge that upon enactment, DEC undertake a regulatory process which would achieve one of the Association's other goals – certification of professional irrigation installers.

In addition to establishing a certification process for installers, we believe this regulatory process would be able to achieve a number of other laudable goals of the Association:

- Require installation of rain sensors, to prevent automatic sprinklers from switching on when it is raining.
- Protect public health, by ensuring that certified contractors are skilled in the proper installation of backflow devices, which prevent contamination of public drinking water.
- Protect consumers, by preventing the wasting of water.
- Provide public water supply permit holders with a convenient means to determine which contractors operating within their service territory are qualified.
- Require that certified contractors obtain continuing education credits.

The **Irrigation Association of New York** was formed to help raise the professional standards of those engaged in the business of installing irrigation systems. This legislation will promote that goal.

For the reasons above, we respectfully urge that you support S. 3798 / A. 5318–A.

For further information contact:
Tom Shanahan – THE SHANAHAN GROUP – 518–732–3312
tom@shanahangroup.com

The Nature Conservancy
Protecting nature. Preserving life.™

MEMORANDUM OF SUPPORT

New York State Water Management Program

S. 3798 (Grisanti) **A. 5318-A (Sweeney)**

The Nature Conservancy supports this legislation because it would create a comprehensive statewide water management program that protects New York's ecologically important water resources, addresses the limitations of the State's current water resources program, and assist the state with the implementation of the Great Lakes – St. Lawrence River Water Resources Compact. The urgent need for a comprehensive water management program in New York has been underscored as the state works to address emerging threats to our water resources associated with activities such as natural gas drilling. The legislation has been strengthened to provide the Department of Environmental Conservation (DEC) the authority to develop scientifically based streamflow standards as part of a water management program in New York State.

The Conservancy is committed protecting freshwater resources, and believes that the protection of water for people and nature are not only inseparable but two sides of the same coin. In New York, our rivers, lakes and streams provide clean drinking water for millions of residents and offer countless opportunities for recreation, generating millions of dollars in tourism revenue. They have historically supported fisheries from brook trout to oysters, some of which are now critically endangered. Our rivers, lakes and streams also support a wide array of globally important aquatic species. Freshwater mussels like the federally endangered dwarf wedgemussel and the brook floater live in the rivers and streams of New York State. Ancient fish like the federally endangered shortnose sturgeon, American eel and paddlefish, unchanged for nearly 100 million years are found in New York's waters. A rich heritage of native fish including the treasured brook trout and American shad also occupy New York's freshwater habitats.

These important species and their habitats depend on a natural pattern of flows with seasonal highs and lows and with the changes from wet years to dry years. These natural variations are a key 'driver' of ecological health in freshwater ecosystems. State laws currently regulate water quality but do not adequately protect water levels and flows, which can be significantly altered by water withdrawals, diversions or retention.

Establishing scientific streamflow protection standards for the state's rivers, lakes and streams will allow DEC to determine whether a proposed water withdrawal, diversion or retention can be made without significant adverse impacts to natural resources. These standards should explicitly protect New York's diversity of native aquatic life, be based on the natural variation of water flows and levels, and be developed using the best available scientific information and approaches. Several other states in the northeast have recently enacted legislation establishing streamflow standards, including Maine and Connecticut. Their experience in developing these statutes and the resultant regulations may be instructive for New York. The Conservancy offers our assistance to the state in developing scientifically based flows standards that respect both private rights and public needs, as well as the tools to implement credible, scientifically-based approaches to water management.

The Nature Conservancy urges members of the Legislature to support this bill, which will create a comprehensive statewide water management program in New York State.

For more information contact:
Jessica Ottney Mahar, Director of State Government Relations, 518-690-7873 or jottney@tnc.org
George Schuler, Director of Conservation Science & Practice, 845-642-6716 or gschuler@tnc.org

NYPIRG
NEW YORK PUBLIC INTEREST RESEARCH GROUP

FOR: Assembly Floor, Cal. #212

NYPIRG SUPPORTS

LEGISLATIVE MEMORANDUM NO: 51-2011 **CONTACT:** Cathleen Breen **PHONE:** 212 349-6460

A.5318A

IN ASSEMBLY, BILL NUMBER 5318A. INTRODUCED BY M. OF A. SWEENEY, PEOPLES-STOKES, ZEBROWSKI, GUNTHER, TITONE, REILLY, SPANO, JACOBS, PAULIN, SCHIMEL, ENGLEBRIGHT, HOYT, RUSSELL, BRENNAN, GABRYSZAK, MARKEY, MCENENY, MILLER M, PHEFFER, ROBINSON

AN ACT to amend the environmental conservation law, in relation to regulating the use of the state's water resources; and to repeal titles 16 and 33 of article 15 of such law relating to Great Lakes water conservation and management and water withdrawal reporting.

SUMMARY OF PROVISIONS:
The bill would authorize the New York State Department of Environmental Conservation (DEC) to implement a statewide permitting program, including promulgating rules and regulations, for water withdrawals of equal or greater than 100,000 gallons per day unless the withdrawer is already permitted to do so by another entity such as a basin commission. The bill only requires registration and regulation of agricultural uses and, therefore, will not require farms to obtain permits. However, the bill does direct DEC to create a water conservation and efficiency program, and will require registration of inter-basin transfers of more than one million gallons per day.

STATEMENT OF SUPPORT:
The importance of protecting both the quality and the quantity New York State's waters cannot be overstated. New York's waters are under siege with many interests competing for this limited resource. When water withdrawals go unchecked, problems of concentrated use can abound threatening acquifer levels and aquatic stream habitats. DEC must be able to ascertain how much water is being used at any given time and for what purpose. To ensure the protection of these critical water supplies it is vital that DEC have the ability to expand its water withdrawal program and water conservation programs.

The importance of the Great Lakes is undeniable and this natural resource is not only vital to New York, but to the entire region and nation. The Great Lakes waters are interconnected and interdependent. Effective management of these waters is critical to habitat and ecosystem protection. The Great Lakes Compact was established to promote the informed use, management and protection of the water and related land resoucres of the basin. This bill speaks to this need and allows DEC to manage water withdrawals.

Safeguarding New York's water resources is of vital concern; therefore, NYPIRG urges your support of this important legislation.

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107 WASHINGTON AVENUE, 2ND FLOOR • ALBANY, NEW YORK 12210-2270 • 518-436-0876 • FAX 518-432-6178

Mar-25-11 10:20am From-HRD 4159775796 T-350 P.001/001 F-292

SIERRA CLUB
FOUNDED 1892

March 25, 2011

Senators Mark Grisanti, Chair, and Tony Avella
Environmental Conservation Committee

Assembly Members Robert Sweeney, Chair, and Sean Hanna
Environmental Conservation Committee

New York State Legislature
Albany, New York

Dear Senators and Assembly Members:

Implementation of the Great Lakes Compact is a priority of the Sierra Club, and passage of A.5318-A/ S.3798 in New York will be a key component to protecting this vast water resource from misuse and diversion. To be clear, the Sierra Club does not oppose these bills.

We do not mean to minimize concerns expressed by the local chapter, as this broad new permitting authority should come with the strongest guidance possible in the enacting legislation. But within the context of what is feasible in the New York State Legislature at present, we find nothing in A.5318-A/ S.3798 that will impair either the protection of New York's water or the multi-state agreement set forth in the Compact. We thank you for your leadership in advancing A.5318-A/ S.3798 and we look forward to working with you to implement the strongest and most comprehensive water withdrawal permitting program possible.

Sincerely,

Dave Scott /jc

David Scott, Vice-President for Conservation
Board of Directors
Sierra Club

cc: Maureen Coleman, Counsel
Department of Environmental Conservation

85 Second Street, Second Floor San Francisco, CA 94105-3441 TEL: (415) 977-5500 FAX: (415) 977-5792 www.sierraclub.or

A 5318

THE WEST FIRM

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www.westfirmlaw.com

March 23, 2011

VIA ELECTRONIC AND
FIRST CLASS MAIL

Senator Mark Grisanti
902 LOB
Albany, NY 12247

Re: S. 3798 Grisanti

Dear Senator Grisanti:

This legislation should be amended because it does nothing to grandfather existing permits that already regulate water withdrawals. Also, the legislation does not properly reflect the balancing process contemplated by existing law when allocating water among competing uses.

There are number of ski areas across New York State that have permits from the New York State Department of Environmental Conservation ("DEC") that regulate the amount of water that can be withdrawn to support snowmaking at those ski areas. Although this legislation grandfathers public water supply systems that have permits from the DEC, it does nothing to grandfather private companies that have obtained permits from the DEC that regulate water withdrawals. As such, the legislation is flawed. Appropriate amendments should be implemented to provide the same grandfathering rights that are provided to public water supply systems.

Although the legislation attempts to ameliorate its consequences relative to established water withdrawals by providing a registration process and an automatic permit based upon that registration that last for 10 years, the automatic permit is subject to "appropriate terms and conditions," which are not defined. Also, this phase-in process does not take into account operations, such as ski areas, that already have permits that regulate water withdrawals. The lack of a transition in the legislation could affect the rights of ski areas and other businesses that have received permits that regulate water withdrawals to the protections afforded by Section 401 of the State Administrative Procedure Act. That section of law protects the rights of permittees when a new permit requirement is established relative to an ongoing activity. Without recognizing the permitted status of these operations, these important protections may not apply.

In addition, the standards set forth in this legislation do not take into account the balancing process contemplated by Article 15 of the Environmental Conservation Law when there are competing users of the water resources of New York State. ECL § 15-0105 charges the Commissioner with conserving and controlling the state's water resources for the benefit of all inhabitants of the state. As interpreted by the courts of this state, "[t]hat responsibility includes ensuring adequate and suitable water not only for the maintenance of fish and wildlife but also for commercial uses and recreational enjoyment." *In the matter of Catskill Center for Conservation and Development vs. New York State Department of Environmental Conservation and Shanty Hollow Corporation*, 235 A.D.2d 4 (3rd Dep't 1997). Notwithstanding this established law, the standards set forth in this proposed legislation for issuing water withdrawal permits does not mention the balancing process already established in law. As such, the legislation should be amended to reflect the balancing process contemplated by existing law.

Lastly, the legislation should be amended to incorporate public safety into the criteria for issuing permits. Although snowmaking is used to support a recreational use, the lack of water at critical times in the skiing season can be a significant safety issue. Following rain events and quick freezes, skiing conditions can be dangerous because of the ice that forms. The ability to rapidly recover through an efficient snowmaking system is important to public safety.

For the foregoing reasons, we respectfully urge that the legislation be amended in accordance with the attached amendments before this legislation is adopted into law.

Thank you for your attention to these issues.

Very truly yours,

Thomas S. West

TSW/rsb
Encl.
cc: Laura Manley (via electronic mail)
Anne Tarpinian (via electronic mail)

THE SHANAHAN GROUP
GOVERNMENT RELATIONS & COMMUNICATIONS

Tom Shanahan, President www.shanahangroup.com 518-732-3312

July 5, 2011

RECEIVED
JUL 06 2011
NEW YORK STATE
EXECUTIVE CHAMBER
COUNSEL

Ms. Mylan Denerstein, Counsel to the Governor
Executive Chamber - Room 225
The Capitol
Albany, New York 12224

Re: A. 5318-A (Departmental Bill # 36) Water Withdrawal – Approval recommended

Dear Ms. Denerstein:

This letter is written in support of the above-referenced legislation, which has passed the Legislature and is awaiting action by Governor Cuomo. This legislation provides for the permitting of large water withdrawals by the Department of Environmental Conservation (DEC), and the development of regulations by DEC to encourage efficiency and minimize wasted water.

My client, the Irrigation Association of New York, supports this measure, and respectfully urges that the Governor grant his approval to this legislation. Attached is a memorandum of support from the Association, detailing its position in support of this legislation.

This legislation helps advance a number of important public policy goals which are also supported by the Irrigation Association of New York. Among other things, it protects, and promotes the wise use of, natural resources. Specifically, it would help achieve two of the Association's primary goals:

- Promote the wise use of natural resources, particularly through public water supply systems.
- Enhance New York's compliance with the Great Lakes Compact, by incorporating technologies and practices that improve efficiency and minimize wasted water.

We note that this legislation gives the DEC strong regulatory powers. In particular, it requires that prior to issuing a water withdrawal permit, DEC determine that:

"g. the proposed water withdrawal will be implemented in a manner that incorporates environmentally sound and economically feasible water conservation measures;"

Ensuring that proper installation techniques are employed by professional irrigation installers operating within the territory of a public water supply permit holder, is one of those sound and

tom@shanahangroup.com

P.O. Box 2224, Albany, New York 12220

feasible measures. In issuing this memorandum of support, the Irrigation Association fully anticipates that DEC will make appropriate use of these regulatory powers.

The Irrigation Association of New York was formed to help raise the professional standards of those engaged in the business of installing irrigation systems. My clients anticipate that if the legislation is approved, DEC will address the requirement that it develop ***"environmentally sound and economically feasible water conservation measures"*** by, among other measures, addressing the question of professionally-installed irrigation systems. Such systems are growing in popularity because they allow people to enhance the value of their most important investment – their homes – while reducing the amount of time required. It is also important to recognize that professionally-installed systems are a feature at many commercial properties.

We would anticipate that such regulations would address the following issues:

- Require that professional irrigation installers be certified.
- Establish professional standards that do not currently exist.
- Guarantee a high level of professional knowledge, by requiring that certified contractors obtain continuing education credits by attending technical and business related classes.
- Protect public health by ensuring that certified contractors are skilled in the proper installation of backflow devices, which prevent contamination of public drinking water.
- Promote conservation by requiring rain sensors, to prevent wasting water by preventing automatic sprinkling systems from switching on at a time when it is already raining.

The Irrigation Association of New York was formed to raise the professional standards of those engaged in the business of installing irrigation systems. The Association represents more than 80 businesses from across the state who subscribe to the principles of professional competence and good business practice in the installation and maintenance of lawn irrigation systems.

The Association stands ready to provide any assistance DEC may require in the development of appropriate regulations with regard to professionally-installed irrigation. The Association, and its national counterpart – the Irrigation Association, have developed an extensive body of knowledge, and are prepared to serve as a resource in the regulatory process.

For the reasons stated above, my clients respectfully urge that the Governor grant his approval to the above-referenced legislation.

Sincerely,

Tom Shanahan

cc: Joe Martens, Commissioner, DEC

IRRIGATION ASSOCIATION OF NEW YORK

Dennis Realmuto, President – P.O. Box 237, Greenlawn, N.Y. 11740

MEMORANDUM OF SUPPORT

S. 3798 / A. 5318–A

(Departmental Bill # 36 – Water Withdrawal Regulation)

Sponsors:

Sen. Grisanti

M. of A. Sweeney

Subject:

To amend the Environmental Conservation Law, in relation to regulating the use of the state's water resources.

Reasons for Support:

The **Irrigation Association of New York** represents more than 80 professional businesses from across the state, who subscribe to the principles of professional competence and good business practice in the installation and maintenance of lawn irrigation systems.

We strongly support this legislation because it helps advance a number of important public policy goals that are also supported by the **Irrigation Association of New York**. Among other things, it protects, and promotes the wise use of, natural resources. Specifically, it would help achieve two of the Association's primary goals:

- Promote the wise use of natural resources, particularly through public water supply systems.
- Enhance New York's compliance with the Great Lakes Compact, by incorporating technologies and practices that improve efficiency and minimize wasted water.

We note that this legislation gives the DEC strong regulatory powers. In particular, it requires that prior to issuing a water withdrawal permit, DEC determine that:

"***g. the proposed water withdrawal will be implemented in a manner that incorporates environmentally sound and economically feasible water conservation measures;***"

Ensuring that proper installation techniques are employed by professional irrigation installers operating within the supply territory of a public water supply permit holder, is one of those sound and feasible measures. In issuing this memorandum of support, the **Irrigation Association of New York** fully anticipates that DEC will make appropriate use of these regulatory powers. Specifically, we urge that upon enactment, DEC undertake a regulatory process which would achieve one of the Association's other goals – certification of professional irrigation installers.

In addition to establishing a certification process for installers, we believe this regulatory process would be able to achieve a number of other laudable goals of the Association:

- Require installation of rain sensors, to prevent automatic sprinklers from switching on when it is raining.
- Protect public health, by ensuring that certified contractors are skilled in the proper installation of backflow devices, which prevent contamination of public drinking water.
- Protect consumers, by preventing the wasting of water.
- Provide public water supply permit holders with a convenient means to determine which contractors operating within their service territory are qualified.
- Require that certified contractors obtain continuing education credits.

The **Irrigation Association of New York** was formed to help raise the professional standards of those engaged in the business of installing irrigation systems. This legislation will promote that goal.

For the reasons above, we respectfully urge that you support S. 3798 / A. 5318–A.

For further information contact:
Tom Shanahan – THE SHANAHAN GROUP – **518–732–3312**
tom@shanahangroup.com

ADIRONDACK COUNCIL · ADIRONDACK MOUNTAIN CLUB · ALLIANCE FOR THE GREAT LAKES · AUDUBON NEW YORK · BUFFALO AUDUBON SOCIETY · BUFFALO NIAGARA RIVERKEEPER · CENTRAL WESTCHESTER AUDUBON SOCIETY · CITIZENS CAMPAIGN FOR THE ENVIRONMENT · DELAWARE-OTSEGO AUDUBON SOCIETY · EARTHJUSTICE · ENVIRONMENTAL ADVOCATES OF NEW YORK · GENESEE VALLEY AUDUBON SOCIETY · GREAT LAKES COMMISSION · GREAT LAKES UNITED · GREAT SOUTH BAY AUDUBON SOCIETY · IRRIGATION ASSOCIATION OF NEW YORK · LAKE ONTARIO TROUT & SALMON ASSOCIATION · NATIONAL WILDLIFE FEDERATION · NATURAL RESOURCES DEFENSE COUNCIL · NEW YORK CITY AUDUBON · NEW YORK LEAGUE OF CONSERVATION VOTERS · NEW YORK PUBLIC INTEREST RESEARCH GROUP · NORTH FORK AUDUBON · NORTH SHORE AUDUBON SOCIETY · ONONDAGA AUDUBON · ORANGE COUNTY AUDUBON ASSOCIATION, INC · PUTNAM HIGHLANDS AUDUBON SOCIETY · RIVERKEEPER, INC. · SAVE THE RIVER · SAW MILL RIVER AUDUBON · THE NATURE CONSERVANCY IN NEW YORK · TROUT UNLIMITED

July 11, 2011

Hon. Andrew M. Cuomo
Governor
Executive Chamber
New York State Capitol
Albany, NY 12224

Re: A. 5318-A (Sweeney) / S. 3798 (Grisanti)

Dear Governor Cuomo:

As organizations representing hundreds of thousands of New Yorkers committed to protecting our shared water resources, we write to request that you sign into law the Water Resources Protection Act (A. 5318-A Sweeney / S. 3798 Grisanti), a departmental bill from the New York State Department of Environmental Conservation (DEC). We strongly urge you to hold a bill signing ceremony to celebrate this important legislation becoming law.

The bill enjoys widespread support amongst the environmental community, conservationists, outdoor recreation organizations, business interests and the agricultural community and would set up critically needed protections for New York's surface and groundwaters. The bill passed unanimously in both houses during the 2011 session.

Our state has a great resource in our fresh, high-quality water. From the Finger Lakes to the Great Lakes, to the St. Lawrence and Hudson Rivers, our waters are the backbone of our economy and our way of life. They support our vital multi-billion dollar fishing and tourism industries, serve as a means of conveying goods around the state and the country, provide millions of New Yorkers with clean, fresh, drinking water, sustain our family farms, and provide opportunities to swim, play, and relax.

New York has a history of protecting our waters from mismanagement. The Delaware and Susquehanna Rivers each have multi-state river commissions that oversee water use within their respective basins and the Long Island water protection program oversees groundwater

withdrawals. The Great Lakes Compact, passed in New York and signed as a multi-state compact, provides for responsible water management within the Great Lakes Basin.

However, two-thirds of the state remains excluded from any water protection regulatory program and New York has no water conservation and efficiency program to guide large users in water-protective practices. Further, in order to implement the Great Lakes Compact and to comply with the mutually agreed upon deadlines within the Compact, the DEC needs immediate direction to promulgate regulations. This bill will close these loopholes while addressing significant limitations in our water resources program.

Although concerns have been raised by some critics that the 100,000 gallon per day threshold included in the proposed legislation is too low, the level is consistent with programs in other neighboring states (CT, MA, RI, NJ). Now, more than two years in the making, this legislation has been the subject of several Assembly and Senate public hearings. The legislation also in no way, jeopardizes New York's public trust obligation which provides that waters of the state are held in trust for everyone. Clearly, the bill provides New York with better protections for our state's waters.

With your approval New York can join other Northeastern states in setting strong state-wide water protections. We look forward to working with you to celebrate the enactment of this important legislation and recognize your administration and the legislative champions that worked so hard to achieve this success.

Thank you in advance for your support.

Sincerely,

Jeanne Alpert, President, Central Westchester Audubon Society
Rich Anderson, President, Putnam Highlands Audubon Society
R. Darryl Banks, Deputy State Director, The Nature Conservancy in New York
Lynn Barber, President, Orange County Audubon Association, Inc.
Joel Brammeier, President and CEO, Alliance for the Great Lakes
Cathleen Breen, Watershed Coordinator, New York Public Interest Research Group
Marcia Bystryn, President, New York League of Conservation Voters
Albert E. Caccese, Executive Director, Audubon New York
Jennifer Caddick, Executive Director and Upper St. Lawrence Riverkeeper, Save the River
Judy Davis, President, Great South Bay Audubon Society
Patrick DiNicola, Treasurer, Lake Ontario Trout & Salmon Assn., and South Shore Landowner
Katy Dunlap, Esq., Eastern Water Project Director, Trout Unlimited
Tim Eder, Executive Director, Great Lakes Commission
Adrienne Esposito, Executive Director, Citizens Campaign for the Environment
Paul Gallay, Executive Director and Hudson Riverkeeper, Riverkeeper, Inc.
Deborah Goldberg, Managing Attorney, Earthjustice
Brian Houseal, Executive Director, The Adirondack Council
Peggy Maslow, President, North Shore Audubon Society
Andrew Mason, Conservation Chair, Delaware-Otsego Audubon Society
Robert Moore, Executive Director, Environmental Advocates of New York
Julie Barrett O'Neill, Esq., Riverkeeper and Executive Director, Buffalo Niagara Riverkeeper
Glenn Phillips, Executive Director, New York City Audubon
Thomas Riley, Conservation Chair, Onondaga Audubon
Richard Schrader, New York Legislative Director, Natural Resources Defense Council

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EXECUTIVE CHAMBER
SECTION

Richard Silverman, Legislative Liaison, Irrigation Association of New York
Loren H. Smith, Ph.D., Executive Director, Buffalo Audubon Society
Marc Smith, Senior Policy Manager, National Wildlife Federation
Derek Stack, Executive Director, Great Lakes United
June Summers, President, Genesee Valley Audubon Society
Anne Swaim, Executive Director, Saw Mill River Audubon
Diana Van Buren, President, North Fork Audubon
Neil Woodworth, Executive Director and Counsel, Adirondack Mountain Club

Cc: Ms. Mylan Denerstein, Counsel to the Governor
Mr. Joseph Martens, Commissioner, Department of Environmental Conservation
Mr. Thomas Congdon, Deputy Secretary for Energy and the Environment
Senator Mark Grisanti, Chair, Committee on Environmental Conservation
Assemblyman Robert Sweeney, Chair Committee on Environmental Conservation

Legislative Secretary

From: Elizabeth Reisinger <Elizabeth_Reisinger/NYEC@chamber.state.ny.us>
Sent: Tuesday, August 02, 2011 4:13 PM
To: Legislative Secretary
Subject: Correspondence [Weinstein, Naomi] #173425A

*** Please Do Not Reply to this e-mail Message. ***
*** Any questions regarding this correspondence should be directed to the staff person listed below as the 'Please Respond To' contact. ***

For Your Information

Ms. Naomi Weinstein
136 West 24th Street
New York, NY 10011
naomi.weinstein@us.penguingroup.com
County New York
Addressed to: Governor

Issue 1 82022 Legislation

Correspondence Number 173425A
Date Of Correspondence 07/14/2011
Date Received 07/14/2011
Date Entered 08/02/2011
Referred To Legislative Secretary
Date Referred

Routing History

08/02/2011 04:12 PM (Routed By --> Elizabeth Reisinger) (Routed Via Outside Agency Email to --> Legislative Secretary)
For Your Information

Protect New York's Water! Pass A.5318A & S.3798. thank you.

C401

Legislative Secretary

From: Elizabeth Reisinger <Elizabeth_Reisinger/NYEC@chamber.state.ny.us>
Sent: Monday, August 22, 2011 5:08 PM
To: Legislative Secretary
Subject: Correspondence [Thuma, David] #177754A

*** Please Do Not Reply to this e-mail Message.***
*** Any questions regarding this correspondence should be directed to the staff person listed below as the 'Please Respond To' contact. ***

For Your Information

Mr. David Thuma
PO Box 613
Cooperstown, NY 13326
dave.thuma@wildblue.net
County Otsego
Addressed to: Governor

Issue 1 82022 Legislation

Correspondence Number 177754A
Date Of Correspondence 08/20/2011
Date Received 08/20/2011
Date Entered 08/22/2011
Referred To Legislative Secretary
Date Referred

Routing History

08/22/2011 05:08 PM (Routed By --> Elizabeth Reisinger) (Routed Via Outside Agency Email to --> Legislative Secretary)
For Your Information

Dear Mr Cuomo ,
during the recent campaign you said NY states water was sacrosanct . Obviously
You were lying by the recent law that came across your desk upon which gives
ANYONE FROM ANYWHERE CAN COME TO OUR (NY) RIVERS AND STREAMS AND TAKE UP
100,000 GALLONS A DAY FOR FREE. So much for your lying statement that NY states
water is sacrosanct. Your father you are not .

STATE OF NEW YORK

5318--A

2011-2012 Regular Sessions

IN ASSEMBLY

February 15, 2011

Introduced by M. of A. SWEENEY, PEOPLES-STOKES, ZEBROWSKI, GUNTHER, TITONE, REILLY, SPANO, JACOBS, PAULIN, SCHIMEL, ENGLEBRIGHT, HOYT -- Multi-Sponsored by -- M. of A. BRENNAN, GABRYSZAK, MARKEY, McENENY, M. MILLER, PHEFFER, ROBINSON -- (at request of the Department of Environmental Conservation) -- read once and referred to the Committee on Environmental Conservation -- committee discharged, bill amended, ordered reprinted as amended and recommitted to said committee

AN ACT to amend the environmental conservation law, in relation to regulating the use of the state's water resources; and to repeal titles 16 and 33 of article 15 of such law relating to Great Lakes water conservation and management and water withdrawal reporting

The People of the State of New York, represented in Senate and Assembly, do enact as follows:

Section 1. Section 15-1501 of the environmental conservation law, as amended by chapter 233 of the laws of 1979, is amended to read as follows:

§ 15-1501. [~~New or additional sources of water supply~~] Water withdrawals; permit.

1. Except as otherwise provided in this title, no person [~~or public corporation~~] who is [~~authorized and~~] engaged in, or proposing to engage in, the [~~acquisition, conservation, development, use and distribution of water for potable purposes, for the irrigation of agricultural lands, for projects taken pursuant to Article 5-B of the County Law, or for multi-purpose projects authorized by a general plan adopted and approved pursuant to title 11 of this article,~~] operation of a water withdrawal system with a capacity of greater than or equal to the threshold volume, shall have any power to do the following until such person [~~or public corporation~~] has first obtained a permit or permit modification from the department pursuant to this title:

EXPLANATION--Matter in *italics* (underscored) is new; matter in brackets [-] is old law to be omitted.

LBD08389-03-1

a. To [~~acquire or take~~] make a water [~~supply~~] withdrawal from an existing or new source or an [~~additional~~] increased water [~~supply~~] withdrawal from an existing [~~approved~~] permitted source; [~~or~~]

b. To take or condemn lands for the protection of any existing sources of public water supply; or for the development or protection of any new or additional sources of public water supply [~~or for the utilization of such supplies~~]; [~~or~~]

c. To commence or undertake the construction of any works or projects in connection with the proposed [~~plans~~] withdrawal; or

d. [~~To exercise any franchise hereafter granted to supply water to any inhabitants of the state; or~~

~~e.~~] To extend its supply or distribution mains into [~~a municipality, water district, water supply district, or other civil division of the state wherein it~~] any new water service area or extension that has not [~~heretofore legally supplied water~~] been approved by the department or a predecessor commission; or

[~~f. To construct any extension of its supply mains except within a service area approved by the department after public hearing; or~~

~~g. To extend the boundaries of a water district; or~~

~~h. To supply water in or for use in any other municipality or civil division of the state which owns and operates a water supply system therein, or in any duly organized water supply or fire district supplied with water by another person or public corporation~~]

e. To make a significant change in the principal use of the water withdrawal system from that specified in the permit, or permit application.

2. [~~A permit shall not be necessary for the extension of supply or distributing mains or pipes of a municipal water supply plant into and for the purpose of supplying water in any territory within the limits of the municipality owning such plant, including territory which has not been heretofore supplied with water by such plant, nor for the reconstruction or replacement of existing facilities in connection with an existing plant wherein the capacity of the plant is in no way increased, nor for the construction of filtration or other treatment facilities which will not in any way increase the amount of water which can be made available from the present sources of supply. A permit shall not be necessary for the extension of supply or distributing mains or pipes of a county water authority into and for the purpose of supplying water in any territory assigned to such county water authority within the limits of the county but excluding territory specifically assigned to private or other municipal water companies by the department which has not been heretofore supplied with water by such county water authority, nor for the reconstruction or replacement of existing facilities in connection with an existing plant wherein the capacity of the plant is in no way increased, nor for the construction of filtration or other treatment facilities which will not in any way increase the amount of water which can be made available from the present sources of supply, provided, however, that nothing herein contained shall be held to authorize such county water authority to enter into competition with, for the purpose of service in the area served by the mains, the transmission or distribution mains of any other water works system, either publicly or privately owned, already legally established in said county for the sale of water at wholesale or retail, or which hereafter may legally be established for said purpose; or to sell water to any other water works system, either publicly or privately owned, and not now served by said county authority~~] All valid public water supply permits and approvals

issued by the department or its predecessors shall remain in full force and effect for the purpose of satisfying the permit requirements of subdivision one of this section for existing water withdrawals from a source and in an amount authorized by such permit or approval. Until the department promulgates regulations pursuant to subdivision four of this section, nothing contained in subdivision one of this section concerning permits from the department shall be applicable to water withdrawals other than for a public water supply system.

3. Nothing contained in this [~~section provided~~] title concerning permits from the department for water withdrawals shall be deemed to nullify the requirements [~~of Regulation 2, Chapter V~~] of the State Sanitary Code[~~, as~~] applicable to drinking water supplies, including public water systems and bottled water facilities, in effect on [~~January 1, 1960, that plans for a new water treatment plant for the treatment of an existing public water supply or for any addition to or modification of an existing water treatment plant, or for any addition to or modification of a public water supply system which will or may affect the quality of the public water supply, shall be submitted to and approved by the Commissioner of Health, which regulation has no application to a new or additional source or sources of public water supply of a permanent character which require a permit from the Department of Environmental Conservation under the provisions of this article~~] February 15, 2012, as may be amended from time to time. No supplier of water shall make, install or construct, or allow to be made, installed or constructed, a public water supply system or any addition or deletion to or modification of a public water supply system until the plans and specifications therefor have been submitted to and approved by the commissioner of health or his or her designee as may be required by the state sanitary code.

4. The department shall promulgate regulations to implement a permitting program for water withdrawals equal to or greater than the threshold volume consistent with the requirements of this section which shall establish: (a) minimum standards for operation and new construction of water withdrawal systems; (b) monitoring, reporting and recordkeeping requirements; and (c) protections for present and future needs for sources of potable water supply. Such regulations may establish quantitative standards that maintain stream flows protective of aquatic life, consistent with the policy objectives of this article and any other conditions, limitations and restrictions that the department, in consultation with the department of health, determines are necessary to protect the environment and the public health, safety and welfare and to ensure the proper management of the waters of the state. The regulations may establish exemptions from permitting requirements in addition to those exemptions specified in this section.

5. The department is authorized to consolidate existing water supply permits for a public water supply system into one permit, and may require submission of an application for such permit where the department determines that such actions are necessary to protect the environment and the public health, safety and welfare and to ensure the proper management of the waters of the state.

6. Each person who is required under this section to obtain a permit shall annually, on a form prescribed by the department, report all information requested by the department, including but not limited to water usage and water conservation measures undertaken during the reporting period. Information on water usage and water conservation measures shall be posted on the department's website.

7. The following water withdrawals are exempt from the permit requirements established by this section: (a) withdrawals used for fire suppression or public emergency purposes; (b) withdrawals that have received an approval from a compact basin commission which administers a program governing water withdrawals; (c) closed loop, standing column, or similar non-extractive geothermal heat pumps; (d) withdrawals for which a permit has been issued pursuant to the requirements of section 15-1527 of this title; (e) existing withdrawals for agricultural purposes provided the withdrawal has been registered with the department pursuant to the requirements of title sixteen of this article or reported to the department pursuant to the requirements of title thirty-three of this article on or before February fifteenth, two thousand twelve; and (f) withdrawals at remediation sites conducted pursuant to a federal or state court order or federal or state government agency agreement or order.

8. The department shall establish a water conservation and efficiency program with the goals of (a) ensuring improvement of the waters and water dependent natural resources, (b) protecting and restoring the hydrologic and ecosystem integrity of watersheds throughout the state, (c) retaining the quantity of surface water and groundwater in the state, (d) ensuring sustainable use of state waters, and (e) promoting the efficiency of use and reducing losses and waste of water.

9. The department shall issue an initial permit, subject to appropriate terms and conditions as required under this article, to any person not exempt from the permitting requirements of this section, for the maximum water withdrawal capacity reported to the department pursuant to the requirements of title sixteen or title thirty-three of this article on or before February fifteenth, two thousand twelve.

§ 2. Section 15-1502 of the environmental conservation law is amended by adding ten new subdivisions 7, 8, 9, 10, 11, 12, 13, 14, 15 and 16 to read as follows:

7. "Agricultural purpose" shall mean the practice of farming for crops, plants, vines and trees, and the keeping, grazing, or feeding of livestock for sale of livestock or livestock products, and the on-farm processing of crops, livestock and livestock products.

8. "Compact basin commission" shall mean an interstate commission having jurisdiction with respect to the regulation of water resources within a basin in the state, created by interstate compact or federal-interstate compact, including but not limited to, the Susquehanna river basin commission and the Delaware river basin commission.

9. "Environmentally sound and economically feasible water conservation measures" shall mean those measures, methods, technologies or practices for efficient water use and for reduction of water loss and waste or for reducing a withdrawal, consumptive use or diversion that: (i) are environmentally sound; (ii) reflect best practices applicable to the water use sector; (iii) are technically feasible and available; (iv) are economically feasible and cost effective based on an analysis that considers direct and avoided economic and environmental costs; and (v) consider the particular facilities and processes involved, taking into account the environmental impact, age of equipment and facilities involved, the processes employed, energy impacts and other appropriate factors.

10. "Interbasin diversion" shall mean the transfer of water or wastewater from one New York major drainage basin to another drainage basin.

11. "Person" shall mean any individual, public or private corporation, political subdivision, government agency, department or bureau of the

state, municipality, industry, co-partnership, association, firm, trust, estate or any other legal entity whatsoever.

12. "Potable water" shall mean water intended for human consumption that meets the requirements for a public water system as set forth in the state sanitary code.

13. "Public water supply system" shall mean a permanently installed water withdrawal system including its source, collection, pumping, treatment, transmission, storage and distribution facilities used in connection with such system, which provides piped potable water to the public for potable purposes, if such system has at least five service connections used by year-round residents.

14. "Threshold volume" shall mean the withdrawal of water of a volume of one hundred thousand gallons or more per day, determined by the limiting maximum capacity of the water withdrawal, treatment, or conveyance system; provided that for agricultural purposes the threshold volume shall mean a withdrawal of water of a volume in excess of an average of one hundred thousand gallons per day in any consecutive thirty-day period.

15. "Water withdrawal system" shall mean any equipment or infrastructure operated or maintained for the provision or withdrawal of water including, but not limited to, collection, pumping, treatment, transportation, transmission, storage, and distribution.

16. "Withdrawal" or "withdrawal of water" shall mean the removal or taking of water for any purpose from the waters of the state.

§ 3. Section 15-1503 of the environmental conservation law, as amended by chapter 364 of the laws of 1988, is amended to read as follows:

§ 15-1503. Permits.

1. A permit application or request for a permit renewal or modification shall be made on forms [~~provided~~] prescribed by the department and shall [~~be accompanied by~~] contain all information requested by the department relative to the withdrawal, use and discharge of water, including:

a. with respect to a public water supply system, proof of adequate authorization for the proposed project[~~,~~];

b. such exhibits as may be necessary clearly to indicate the scope of the proposed project[~~,~~];

c. a map of any lands to be acquired [~~and~~];

d. project plans[~~. The application shall also indicate~~];

e. a statement of the need for and the reasons why the proposed source or sources of supply were selected among the alternative sources which are or may become available[~~,~~] and the adequacy of the supply selected [~~and the method proposed to determine and provide for the proper compensation for any direct and indirect legal damages to persons or property that will result from the acquisition of any lands in connection with the proposed project or from the execution of the proposed project. The application shall also contain, in accordance with local water resource needs and conditions,~~]; and

f. a description of the applicant's proposed near term and long range water conservation program that incorporates environmentally sound and economically feasible water conservation measures, including implementation and enforcement procedures, effectiveness to date and any planned modifications for the future. [~~Such~~] For a public water supply system, the water conservation program may include but [~~shall~~] need not be limited to:

[~~a.~~] i. the identification of and cost effectiveness of distribution system rehabilitation to correct sources of lost water;

[~~b.~~] ii. measures which encourage proper maintenance and water conservation;

[~~c.~~] iii. a public information program to promote water conservation, including industrial and commercial recycling and reuse;

[~~d.~~] iv. household conservation measures; and

[~~e.~~] v. contingency measures for limiting water use during seasonal or drought shortages. [~~If the proposed project provides for the use of water for potable purposes, the application shall also include adequate proof of the character and purity of the water supply to be acquired or used and the proposed method of treatment.~~]

2. In making its decision to grant or deny a permit or to grant a permit with conditions, the department shall determine whether:

a. the proposed [~~project is justified by the public necessity, whether it~~] water withdrawal takes proper consideration of other sources of supply that are or may become available[~~, whether all work connected with the project will be proper and construction safe, whether~~];

b. the quantity of supply will be adequate[~~, whether there will be proper protection of the supply and watershed or whether there will be proper treatment of any additional supply, whether~~] for the proposed use;

c. the project is just and equitable to all affected municipalities and their inhabitants [~~and in particular~~] with regard to their present and future needs for sources of potable water supply[~~, whether there is provision for fair and equitable determinations of and payments of any direct and indirect legal damages to persons or property that will result from the acquisition of any lands in connection with the proposed project or from the execution of the proposed project, and whether the applicant has developed and implemented a water conservation program in accordance with local water resource needs and conditions. If the proposed project is a multi-purpose project, in whole or in part authorized by a general plan adopted and approved pursuant to title 11 of this article, the department in addition shall determine if the proposed project is in conformity with the general plan~~];

d. the need for all or part of the proposed water withdrawal cannot be reasonably avoided through the efficient use and conservation of existing water supplies;

e. the proposed water withdrawal is limited to quantities that are considered reasonable for the purposes for which the water use is proposed;

f. the proposed water withdrawal will be implemented in a manner to ensure it will result in no significant individual or cumulative adverse impacts on the quantity or quality of the water source and water dependent natural resources;

g. the proposed water withdrawal will be implemented in a manner that incorporates environmentally sound and economically feasible water conservation measures; and

h. the proposed water withdrawal will be implemented in a manner that is consistent with applicable municipal, state and federal laws as well as regional interstate and international agreements.

3. In order to assist the development of local water conservation [~~plans~~] programs for public water supply systems, the department shall[~~, by the effective date of this subdivision,~~] continue to publish and distribute a [~~model local water conservation plan~~] water conservation manual that includes beneficial near term and long range water conservation procedures which reflect local water resource needs and conditions. Such [~~plan~~] manual shall include examples of:

a. methods of identifying and determining the cost effectiveness of distribution system rehabilitation to correct sources of lost water;

b. measures which encourage proper maintenance and water conservation;

c. a public information program to promote water conservation, including industrial and commercial recycling and reuse;

d. household conservation measures; and

e. contingency measures for limiting water use during seasonal or drought shortages.

4. The department may grant or deny a permit or grant a permit with such conditions as may be necessary to provide satisfactory compliance by the applicant with the matters subject to department determination pursuant to subdivision 2 of this section, or to bring into cooperation all persons [~~or public corporations~~] that may be affected by the project, but it shall make a reasonable effort to meet the needs of the applicant, with due regard to the actual or prospective needs, interests and rights of others that may be affected by the project.

5. The rules and regulations adopted by the department to implement this title and the provisions of article 70 of this chapter and rules and regulations adopted thereunder shall govern permit applications, renewals, modifications, suspensions and revocations under this title.

6. A new permit for a water withdrawal system and any subsequent renewal thereof shall be valid for a period of time not to exceed ten years from the date of issuance. A new permit or permit modification must be obtained from the department prior to any transfer or change of ownership of a water withdrawal system.

§ 4. The environmental conservation law is amended by adding a new section 15-1504 to read as follows:

§ 15-1504. Water withdrawals for agricultural purposes.

1. Applicability.

a. This section applies to withdrawals of water for agricultural purposes that have been registered with the department pursuant to the requirements of title sixteen of this article or reported to the department pursuant to the requirements of title thirty-three of this article on or before February fifteenth, two thousand twelve.

b. All persons making a withdrawal of water for agricultural purposes shall annually register or report the withdrawal to the department under the provisions of this section by March thirty-first of each year.

2. When used in this section:

a. "Great Lakes basin" shall mean the watershed of the Great Lakes and the St. Lawrence River, upstream from Trois-Rivieres, Quebec, consisting in New York state of the Lake Erie-Niagara River, Lake Ontario minor tributaries, Genesee River, Seneca-Oneida-Oswego River, Black River, St. Lawrence River and Lake Champlain drainage basins.

b. "Great Lakes water" shall mean the water contained in the watershed, including the lakes and rivers, of the Great Lakes basin.

3. Registration of water withdrawals in the Great Lakes basin.

a. All persons withdrawing Great Lakes water for agricultural purposes in excess of an average of one hundred thousand gallons per day in any consecutive thirty-day period shall annually register such withdrawal with the department.

b. Each registration shall be on a form and contain such information as may be prescribed by the department and consist of a statement of and supporting documentation which shall include but not be limited to the following:

(1) The place and source of the proposed or existing withdrawal;

(2) The location of any discharge or return flow;

(3) The location and nature of the proposed or existing water use;

(4) The actual or estimated average annual and monthly volumes and rates of withdrawal; and

(5) The actual or estimated average annual and monthly volumes and rates of water loss from the withdrawal.

c. In calculating the total amount of an existing or proposed withdrawal for the purpose of determining the applicability of this subdivision, a person shall combine all separate withdrawals which the person makes or proposes to make, whether or not such withdrawals are for a single agricultural purpose or are for related but separate agricultural purposes.

d. Registrations shall be valid for a period of one year.

e. A registration may be transferred by submitting a notice of transfer to the department prior to the date of a transfer or change of ownership of a water withdrawal system associated with a registered withdrawal.

f. The department may cooperate with state soil and water conservation districts for the preparation and distribution of informational materials to persons who withdraw water for agricultural purposes, regarding the purposes, benefits and requirements of this section, and which may also provide information on complying with the registration program and on any general or applicable methods for calculating or estimating water withdrawals or water loss.

4. Water withdrawal reporting.

a. Any person who withdraws water for agricultural purposes in excess of an average of one hundred thousand gallons per day in any consecutive thirty-day period shall annually report to the department. The report shall be made on a form and contain such information as may be prescribed by the department and shall be based on the water withdrawals for the previous calendar year, and shall include but not be limited to:

(1) the water source, the location of the water source and the source capacity if known;

(2) the amount of water withdrawn for the reporting period, including the average or peak withdrawals for intervals specified by the department;

(3) a description of the use of the water withdrawn; and

(4) estimated amounts of water to be returned, if any, the locations of such returns and the method of such returns.

b. The following water withdrawals are exempt from the reporting requirements of this subdivision:

(1) a withdrawal registered with the department under subdivision three of this section;

(2) a withdrawal permitted pursuant to section 15-1501 of this title;

(3) a withdrawal reported to the department under any program that requires the reporting of substantially similar data, including withdrawals regulated by the Susquehanna River Basin Commission and the Delaware River Basin Commission;

(4) a withdrawal permitted under section 15-1527 of this title;

(5) closed loop, standing column, or similar non-extractive geothermal heat pumps; and

(6) reclaimed wastewater withdrawn for reuse.

5. Withdrawals of water for agricultural purposes registered or reported to the department under the requirements of this section shall be deemed to be in compliance with the requirements of title sixteen and title thirty-three of this article, as applicable.

§ 5. Section 15-1505 of the environmental conservation law, as amended by chapter 233 of the laws of 1979, is amended to read as follows:

§ 15-1505. [~~Water~~] Interbasin diversions and water supply to other states.

1. No person [~~or public corporation~~] shall transport or carry through pipes, conduits, ditches or canals the waters of any fresh water lake, pond, brook, river, stream, or creek in this state or any well, subsurface or percolating waters of this state into any other state for use therein without first obtaining a permit from the department pursuant to this title.

2. No person shall make a new or increased interbasin diversion which results in a diversion in excess of one million gallons per day, as determined by the limiting maximum capacity of the treatment or conveyance system, or construct facilities or equipment therefor, until such person has registered the diversion with the department. No later than February fifteenth, two thousand thirteen, all existing interbasin diversions in excess of one million gallons per day, as determined by the limiting maximum capacity of the treatment or conveyance system, shall be registered with the department.

3. Registration is not required for an interbasin diversion which is part of a water withdrawal system for which the department has issued a permit under this title, or which is operating pursuant to a duly authorized permit issued by the department or its predecessors.

4. Registration shall be renewed every year or whenever ownership of the facilities which create an interbasin diversion is transferred, whichever occurs first. Registration shall be made on forms prescribed by the department and shall contain all information requested by the department relative to the water withdrawal, use and discharge. Each person who is required under this section to register shall annually, on a form prescribed by the department, report all information requested by the department, including the amount of water diverted. Information on interbasin diversions shall be posted on the department's website.

5. No person shall make a new or increased interbasin diversion which results in a significant adverse impact on the water quantity of the source New York major drainage basin.

6. Diversions from the Great Lakes-St. Lawrence river basin are prohibited by the Great Lakes-St. Lawrence River Basin Water Resources Compact, as enacted in title ten of article twenty-one of this chapter. Limited exceptions for public water supply systems will only be considered when in compliance with that Compact.

§ 6. Section 15-1521 of the environmental conservation law, as amended by chapter 233 of the laws of 1979, is amended to read as follows:

§ 15-1521. Supply of water to other public water supply systems.

On any application for a new or [~~additional~~] increased withdrawal of water for a public water supply [~~or source of water supply~~] system, the department may require or authorize [~~any~~] the applicant to make provisions for the supply and to supply water to any area of the state which as determined by the department in its decision on that application properly should be supplied with water from the source or sources of water supply sought by the applicant. The owner or operator of any existing or proposed [~~water works~~] public water supply system within such area may apply to the department for a permit to take water from that source of water supply or from any part of the public water supply system of the applicant supplied in whole or in part from that source. If the department so requires, or if it grants a permit, it shall be the duty of the applicant so to supply water, subject to such requirements

as the department may impose. The price to be paid for the amount of water so to be taken [~~and the price to be paid therefor~~] may be agreed upon between the applicant and the taker of the water, or if they cannot agree, fair and reasonable amounts and rates shall be, after due hearings thereon, fixed by the [~~department, provided however, that such department shall have no power to fix rates in any case where the Public Service Commission has such power, and provided further, that nothing in this section contained shall be construed as diminishing the powers of said Public Service Commission in respect to rates of water works companies subject to its jurisdiction~~] public service commission. Any such agreement or determination of the [~~department~~] public service commission may from time to time be modified by further agreement between the parties affected thereby or by the further order of the [~~department~~] commission.

§ 7. Section 15-1529 of the environmental conservation law is amended to read as follows:

§ 15-1529. [~~Final approval of work~~] Approval of completed water withdrawal systems.

[~~Before any project authorized to be developed or carried out under this title 15 shall be operated, it must, as completed, have been approved by the department~~] The construction of any new or modified water withdrawal system authorized under this title shall be under the general supervision of a person or firm licensed to practice professional engineering in the state. Upon completion of construction, such person or firm shall certify to the department that the water withdrawal system has been fully completed in accordance with the approved engineering report, plans and specifications, and the permit issued by the department pursuant to this title. The owner shall not commence operation of the new or modified water withdrawal system prior to the department receiving such certificate and prior to approval of the system by the department of health or its designee as may be required by the state sanitary code.

§ 8. Title 16 of article 15 of the environmental conservation law is REPEALED.

§ 9. Title 33 of article 15 of the environmental conservation law is REPEALED.

§ 10. Subdivision 1 of section 71-1127 of the environmental conservation law, as amended by chapter 640 of the laws of 1977, is amended to read as follows:

1. Any person who violates any of the provisions of, or who fails to perform any duty imposed by article 15 except section 15-1713, or who violates or who fails to comply with any rule, regulation, determination or order of the department heretofore or hereafter promulgated pursuant to article 15 except section 15-1713, or any condition of a permit issued pursuant to article 15 of this chapter, or any determination or order of the former water resources commission or the [~~Department of Environmental Conservation~~] department heretofore promulgated pursuant to former article 5 of the Conservation Law, shall be liable for a civil penalty of not more than two thousand five hundred dollars for such violation and an additional civil penalty of not more than [~~one~~] five hundred dollars for each day during which such violation continues, and, in addition thereto, such person may be enjoined from continuing such violation as otherwise provided in article 15 except section 15-1713.

§ 11. This act shall take effect February 15, 2012; provided, however that section four of this act shall take effect immediately; and provided, further that sections eight and nine of this act shall take

effect December 31, 2013, and provided further that any application for an adjudication of water rates pursuant to section 15-1521 of the environmental conservation law that is filed with the department of environmental conservation and for which the department has issued a notice of hearing prior to February 15, 2012 shall remain under the jurisdiction of the department of environmental conservation.

VERIFIED ANSWER OF RESPONDENT JOSEPH MARTENS, DATED APRIL 24, 2014 [395- 411]

SUPREME COURT OF THE STATE OF NEW YORK
COUNTY OF QUEENS
----------X
In the Matter of the Petition of the

SIERRA CLUB, and HUDSON RIVER FISHERMEN'S ASSOCIATION, NEW JERSEY CHAPTER, INC.,

Petitioners,

For a Judgment Pursuant to Article 78 of the Civil Practice Law and Rules,

- against -

JOSEPH MARTENS, COMMISSIONER, NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION,

Respondent,

TC RAVENSWOOD LLC,

Necessary Party.
----------X

Index No. 2949-2014

Hon. Robert J. McDonald

VERIFIED ANSWER

Respondent Joseph Martens, Commissioner of the New York State Department of Environmental Conservation ("Respondent" or "DEC"), by its attorney, the New York Office of the Attorney General, for its verified answer to the verified petition, dated February 18, 2014 (the "Petition") and submitted by Sierra Club and Hudson River Fishermen's Association, New Jersey Chapter, Inc. (collectively "Petitioners"), avers as set forth below:

1. Paragraph 1 of the Petition is a statement of the relief sought by Petitioners and requires no response. To the extent an answer is required, the allegations are denied.

2. Denies knowledge or information sufficient to form a belief as to the truth of the allegations set forth in paragraph 2 of the Petition. To the extent any legal conclusion is set forth in paragraph 2, it is denied.

3. Denies knowledge or information sufficient to form a belief as to the truth of the allegations set forth in paragraph 3 of the Petition. To the extent any legal conclusion is set forth in paragraph 3, it is denied.

4. Admits the allegations in paragraph 4 of the Petition, except denies that Respondent's Region 2 Office is the office administering the Ravenswood Generating Station ("Ravenswood") permit application and avers that Respondent's central office in Albany administered the Ravenswood Initial permit application.

5. Denies knowledge or information sufficient to form a belief as to the truth of the allegations set forth in paragraph 5 of the Petition, except admits that TC Ravenswood LLC is a necessary party in this matter.

6. Denies the allegations set forth in paragraph 6 of the Petition.

7. Admits the allegations set forth in paragraph 7 of the Petition, except denies knowledge or information sufficient to form a belief as to the truth of the allegation utilizing the undefined phrase "New York Harbor," and affirmatively contends that Ravenswood applied for a permit to withdraw up to approximately 1.534 billion gallons of water per day from the East River.

8. As to the allegations set forth in paragraph 8 of the Petition, admits that DEC published notices to the public in the Environmental Notice Bulletin on August 7, 2013

and August 28, 2013; admits that petitioner Sierra Club submitted comments in response; admits that DEC responded to public comments on November 15, 2013; but denies the remainder of the allegations.

9. As to the allegations set forth in paragraph 9 of the Petition, respectfully refers the Court to the State Environmental Quality Review Act ("SEQRA") and its accompanying regulations as the best evidence and most complete statement of their contents, and denies the allegations to the extent they are incomplete or inconsistent therewith.

10. Denies the allegations set forth in paragraph 10 of the Petition.

11. Denies knowledge or information sufficient to form a belief as to the truth of the allegations set forth in paragraph 11 of the Petition.

12. Denies knowledge or information sufficient to form a belief as to the truth of the allegations set forth in paragraph 12 of the Petition.

13. As to the allegations set forth in paragraph 13 of the Petition, admits that the engineer's report attached to the Ravenswood application contains the quoted statement, but denies the remainder of the allegations.

14. As to the allegations set forth in paragraph 14 of the Petition, admits that the engineer's report attached to the Ravenswood application contains the quoted statement.

15. Denies knowledge or information sufficient to form a belief as to the truth of the allegations set forth in paragraph 15 of the Petition.

16. Denies knowledge or information sufficient to form a belief as to the truth of the allegations set forth in paragraph 16 of the Petition.

17. As to the allegations set forth in paragraph 17 of the Petition, admits that DEC denied the Indian Point nuclear power plant a Clean Water Act section 401 water quality certificate in 2010, but denies the remainder of the allegations.

18. As to the allegations set forth in paragraph 18 of the Petition, admits that the East River is part of the Hudson-Raritan Estuary System, except denies knowledge or information sufficient to form a belief as to the truth of the allegation utilizing the undefined phrase "Hudson River watershed."

19. Denies knowledge or information sufficient to form a belief as to the truth of the allegations set forth in paragraph 19 of the Petition.

20. As to the allegations set forth in paragraph 20 of the Petition, admits that Ravenswood's operations rely on a once through cooling system, but denies knowledge or information sufficient to form a belief as to the truth of the remainder of the allegations.

21. Denies knowledge or information sufficient to form a belief as to the truth of the allegations set forth in paragraph 21 of the Petition.

22. Denies knowledge or information sufficient to form a belief as to the truth of the allegations set forth in paragraph 22 of the Petition.

23. Denies the allegations in paragraph 23 of the Petition and respectfully refers the Court to the referenced regulation as the best evidence and most complete statement of its contents.

24. As to the allegations set forth in paragraph 24 of the Petition, respectfully refers the Court to the referenced regulation as the best evidence and most complete statement of its contents, and denies the allegations to the extent they are incomplete or inconsistent therewith.

25. Denies knowledge or information sufficient to form a belief as to the truth of the allegations set forth in paragraph 25 of the Petition, particularly with respect to the Petitioners' use of the undefined phrase "New York Harbor."

26. Denies knowledge or information sufficient to form a belief as to the truth of the allegations set forth in paragraph 26 of the Petition.

27. Admits the allegations set forth in paragraph 27 of the Petition.

28. Denies knowledge or information sufficient to form a belief as to the truth of the allegations set forth in paragraph 28 of the Petition, particularly with respect to Petitioners' use of the undefined phrase "coastal area."

29. As to the allegations set forth in paragraph 29 of the Petition, respectfully refers the Court to the referenced regulation as the best evidence and most complete statement of its contents, and denies the allegations to the extent they are incomplete or inconsistent therewith.

30. As to the allegations set forth in paragraph 30 of the Petition, respectfully refers the Court to the referenced statute and regulations as the best evidence and most complete statement of their contents, and denies the allegations to the extent they are incomplete or inconsistent therewith.

31. As to the allegations set forth in paragraph 31 of the Petition, respectfully refers the Court to the referenced statute and regulations as the best evidence and most complete statement of their contents, and denies the allegations to the extent they are incomplete or inconsistent therewith. Affirmatively avers that pursuant to 19 N.Y.C.R.R. § 600.2(b), only "type I or unlisted actions as defined in SEQR (6 NYCRR 617.2), which are undertaken by State agencies" are subject to 19 N.Y.C.R.R. § 600.4.

32. As to the allegations set forth in paragraph 32 of the Petition, admits that on November 15, 2013, DEC issued its response to public comments on its tentative determination to issue an Initial water withdrawal permit to Ravenswood, respectfully refers the Court to the referenced DEC response as the best evidence and most complete statement of its contents, and denies the allegations to the extent they are incomplete or inconsistent therewith.

33. Denies the allegations set forth in paragraph 33 of the Petition.

34. As to the allegations set forth in paragraph 34 of the Petition, admits that the Water Resources Protection Act of 2011 ("WRPA") was signed into law by Governor Cuomo on August 15, 2011 with the support of many of New York's largest environmental and conservation organizations, respectfully refers the Court to the

referenced statute as the best evidence and most complete statement of its contents, and denies the allegations to the extent they are incomplete or inconsistent therewith.

35. Denies the allegations set forth in paragraph 35 of the Petition, and respectfully refers the Court to the referenced statute as the best evidence and most complete statement of its contents.

36. Denies the allegations set forth in paragraph 36 of the Petition.

37. Admits the allegations set forth in paragraph 37 of the Petition.

38. As to the allegations set forth in paragraph 38 of the Petition, respectfully refers the Court to the referenced regulations as the best evidence and most complete statement of their contents, and denies the allegations to the extent they are incomplete or inconsistent therewith.

39. Denies knowledge or information sufficient to form a belief as to the truth of the allegations set forth in paragraph 39 of the Petition.

40. Denies the allegations set forth in paragraph 40 of the Petition.

41. As to the allegations set forth in paragraph 41 of the Petition, respectfully refers the Court to the referenced regulation as the best evidence and most complete statement of its contents, and denies the allegations to the extent they are incomplete or inconsistent therewith.

42. Denies the allegations set forth in paragraph 42 of the Petition, and respectfully refers the Court to the referenced regulation as the best evidence and most complete statement of its contents.

43. As to the allegations set forth in paragraph 43 of the Petition, respectfully refers the Court to the referenced regulations as the best evidence and most complete statement of their contents, and denies the allegations to the extent they are incomplete or inconsistent therewith.

44. As to the allegations set forth in paragraph 44 of the Petition, respectfully refers the Court to the referenced regulation as the best evidence and most complete statement of its contents, and denies the allegations to the extent they are incomplete or inconsistent therewith.

45. As to the allegations set forth in paragraph 45 of the Petition, admits that the Ravenswood initial permit application does not consider closed-cycle cooling, but affirmatively asserts that no such consideration is required.

46. As to the allegations set forth in paragraph 46 of the Petition, respectfully refers the Court to the referenced regulations as the best evidence and most complete statement of their contents, and denies the allegations to the extent they are incomplete or inconsistent therewith.

47. As to the allegations set forth in paragraph 47 of the Petition, respectfully refers the Court to the referenced Water Conservation Program Form as the best evidence

and most complete statement of its contents, and denies the allegations to the extent they are incomplete or inconsistent therewith.

48. As to the allegations set forth in paragraph 48 of the Petition, respectfully refers the Court to the referenced regulations as the best evidence and most complete statement of their contents, and denies the allegations to the extent they are incomplete or inconsistent therewith.

49. As to the allegations set forth in paragraph 49 of the Petition, respectfully refers the Court to the referenced regulations as the best evidence and most complete statement of their contents, and denies the allegations to the extent they are incomplete or inconsistent therewith.

50. Denies the allegations set forth in paragraph 50 of the Petition, and respectfully refers the Court to the referenced regulation as the best evidence and most complete statement of its contents.

51. As to the allegations set forth in paragraph 51 of the Petition, respectfully refers the Court to the referenced statute as the best evidence and most complete statement of its contents, and denies the allegations to the extent they are incomplete or inconsistent therewith.

52. As to the allegations set forth in paragraph 52 of the Petition, respectfully refers the Court to the referenced statute as the best evidence and most complete statement of its contents, and denies the allegations to the extent they are incomplete or inconsistent therewith.

53. As to the allegations set forth in paragraph 53 of the Petition, respectfully refers the Court to the referenced statute as the best evidence and most complete statement of its contents, and denies the allegations to the extent they are incomplete or inconsistent therewith.

54. As to the allegations set forth in paragraph 54 of the Petition, respectfully refers the Court to the referenced statute as the best evidence and most complete statement of its contents, and denies the allegations to the extent they are incomplete or inconsistent therewith.

55. In response to paragraph 55 of the Petition, repeats and realleges paragraphs 1 through 54 of this Verified Answer as though fully set forth in this paragraph.

56. Denies the allegations set forth in Paragraph 56 of the Petition.

57. Denies the allegations set forth in Paragraph 57 of the Petition.

58. As to the allegations set forth in paragraph 58 of the Petition, refers the Court to the referenced regulation as the best evidence and most complete statement of its contents, and denies the allegations to the extent they are incomplete or inconsistent therewith.

59. As to the allegations set forth in paragraph 59 of the Petition, refers the Court to the referenced regulation as the best evidence and most complete statement of its contents, and denies the allegations to the extent they are incomplete or inconsistent therewith.

60. As to the allegations set forth in paragraph 60 of the Petition, refers the Court to the referenced regulation as the best evidence and most complete statement of its contents, and denies the allegations to the extent they are incomplete or inconsistent therewith.

61. As to the allegations set forth in paragraph 61 of the Petition, refers the Court to the referenced regulation as the best evidence and most complete statement of its contents, and denies the allegations to the extent they are incomplete or inconsistent therewith.

62. As to the allegations set forth in paragraph 62 of the Petition, refers the Court to the referenced regulation as the best evidence and most complete statement of its contents, and denies the allegations to the extent they are incomplete or inconsistent therewith.

63. Denies the allegations set forth in paragraph 63 of the Petition.

64. In response to paragraph 64 of the Petition, repeats and realleges paragraphs 1 through 63 of this Verified Answer as though fully set forth in this paragraph.

65. The allegations set forth in paragraph 65 of the Petition state a legal conclusion for which no response is required, to the extent that a response is required, they are denied.

66. As to the allegations set forth in paragraph 66 of the Petition, respectfully refers the Court to the referenced regulation as the best evidence and most complete

statement of its contents, and denies the allegations to the extent they are incomplete or inconsistent therewith.

67. Denies the allegations set forth in paragraph 67 of the Petition.

68. As to the allegations set forth in paragraph 68 of the Petition, respectfully refers the Court to the referenced regulation as the best evidence and most complete statement of its contents, and denies the allegations to the extent they are incomplete or inconsistent therewith.

69. As to the allegations set forth in paragraph 69 of the Petition, respectfully refers the Court to the referenced regulation as the best evidence and most complete statement of its contents, and denies the allegations to the extent they are incomplete or inconsistent therewith.

70. Admits the allegations set forth in paragraph 70 of the Petition.

71. The allegations set forth in paragraph 71 of the Petition state a legal conclusion for which no response is required, to the extent that a response is required, they are denied.

72. As to the allegations set forth in paragraph 72 of the Petition, respectfully refers the Court to the referenced regulation as the best evidence and most complete statement of its contents, and denies the allegations to the extent they are incomplete or inconsistent therewith.

73. As to the allegations set forth in paragraph 73 of the Petition, respectfully refers the Court to the referenced regulations as the best evidence and most complete statement of their contents, and denies the allegations to the extent they are incomplete or inconsistent therewith.

74. The allegations set forth in paragraph 74 of the Petition state a legal conclusion for which no response is required, to the extent that a response is required, they are denied.

75. The allegations set forth in paragraph 75 of the Petition state a legal conclusion for which no response is required, to the extent that a response is required, they are denied.

76. Denies the allegations set forth in paragraph 76 of the Petition.

77. The allegations set forth in paragraph 77 of the Petition state a legal conclusion for which no response is required, to the extent that a response is required, they are denied.

78. The allegations set forth in paragraph 78 of the Petition state a legal conclusion for which no response is required, to the extent that a response is required, they are denied.

79. In response to paragraph 79 of the Petition, repeats and realleges paragraphs 1 through 78 of this Verified Answer as though fully set forth in this paragraph.

80. The allegations set forth in paragraph 80 of the Petition state a legal conclusion for which no response is required, to the extent that a response is required, they are denied.

81. In response to paragraph 81 of the Petition, repeats and realleges paragraphs 1 through 80 of this Verified Answer as though fully set forth in this paragraph.

82. The allegations set forth in paragraph 82 of the Petition state a legal conclusion for which no response is required, to the extent that a response is required, they are denied.

83. In response to paragraph 83 of the Petition, repeats and realleges paragraphs 1 through 82 of this Verified Answer as though fully set forth in this paragraph.

84. The allegations set forth in paragraph 84 of the Petition state a legal conclusion for which no response is required, to the extent that a response is required, they are denied.

85. The allegations set forth in paragraph 85 of the Petition state a legal conclusion for which no response is required, to the extent that a response is required, they are denied.

86. The allegations set forth in paragraph 86 of the Petition state a legal conclusion for which no response is required, to the extent that a response is required, they are denied.

STATEMENT OF MATERIAL FACTS

87. The statement of material facts is contained in the affidavits of Kent P. Sanders and Roy A. Jacobson, Jr., sworn to April 24, 2014, and submitted herewith.

AFFIRMATIVE DEFENSE

88. The DEC's determinations challenged in this proceeding are reasonable and rational and are fully consistent with law, as is more fully set forth in the agency's memorandum of law submitted herewith.

89. Respondent refers to the Memorandum of Law attached in support of this Verified Answer and incorporates in this Verified Answer any other affirmative defenses listed therein.

90. Respondent will rely on any and all additional defenses that become available or appear during this action and specifically reserves the right to amend this Answer for the purpose of asserting additional defenses.

91. WHEREFORE, Respondent respectfully requests judgment against petitioners as follows:

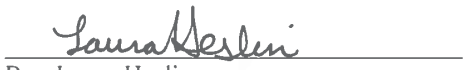
(a) dismissing and denying the claims in the Verified Petition against Respondent in their entirety;

(b) and for such other and further relief as this Court deems appropriate.

Dated: New York, New York
April 24, 2014

Respectfully submitted,

ERIC T. SCHNEIDERMAN
Attorney General of the State of New York
Attorney for Respondent



By: Laura Heslin
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STATE OF NEW YORK)
: ss.:
COUNTY OF ALBANY)

SCOTT CRISAFULLI, being duly sworn, deposes and says:

I am Associate Counsel in the Office of General Counsel of the New York State Department of Environmental Conservation. I have reviewed the annexed Verified Answer and know its contents. The Verified Answer is true to my knowledge, information, and belief. The sources of my knowledge, information and belief are my personal knowledge, DEC files, my discussions with DEC technical and legal staff, affidavits that have been submitted in this action, and relevant provisions of the New York Environmental Conservation Law, the Waterfront Revitalization and Coastal Resources Act, and the applicable regulations.

Dated: April 24, 2014

Scott Crisafulli

Sworn to before me this 24th day of April, 2014.

Notary:

JENNIFER ANDALORO
Notary Public, State of New York
No. 02AN6098246
Qualified in Suffolk County
Commission Expires January 14, 2016

412

MEMORANDUM OF LAW IN SUPPORT OF RESPONDENT JOSEPH MARTEN'S VERIFIED ANSWER AND IN OPPOSITION TO VERIFIED PETITION, DATED APRIL 24, 2014 [412- 439]

SUPREME COURT OF THE STATE OF NEW YORK
COUNTY OF QUEENS
----------x
In the Matter of the Application of

SIERRA CLUB, and HUDSON RIVER FISHERMEN'S ASSOCIATION, NEW JERSEY CHAPTER, INC.,

Petitioners,

For Judgment Pursuant to Article 78 of the Civil Practice Law and Rules,

-against-

JOSEPH MARTENS, COMMISSIONER, NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION,

Respondent,

TRANS CANADA RAVENSWOOD LLC,

Necessary Party.
----------x

Index No. 2949-2014

Hon. Robert J. McDonald

MEMORANDUM OF LAW IN SUPPORT OF RESPONDENT'S VERIFIED ANSWER AND IN OPPOSITION TO THE VERIFIED PETITION

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TABLE OF CONTENTS

PRELIMINARY STATEMENT 1
STATUTORY FRAMEWORK 3
A. The Water Resources Law 3
1. Initial Permits for Existing Water Withdrawals 4
2. New Permits 5
B. The National and State Pollutant Discharge Elimination Systems 6
C. The State Environmental Quality Review Act 7
D. The Waterfront Revitalization of Coastal Areas and Inland Waterways Act 8
STATEMENT OF FACTS 9
A. The Ravenswood SPDES Permit 9
B. Ravenswood's Water Withdrawal Reporting 11
C. The Ravenswood Initial Water Withdrawal Permit 12
ARGUMENT 16
DEC'S ISSUANCE OF THE RAVENSWOOD INITIAL PERMIT WAS IN FULL COMPLIANCE WITH APPLICABLE STATUTORY REQUIREMENTS 16
A. The State Environmental Quality Review Act Does Not Apply to the Issuance of the Ravenswood Initial Permit 16
1. The Issuance of the Ravenswood Initial Permit Was a Ministerial Act 16
2. The Issuance of the Ravenswood Initial Permit is Not Considered an "Action" Under SEQRA 21
B. The Waterfront Act Does Not Apply to the Issuance of the Ravenswood Initial Permit 21
C. The Ravenswood Initial Permit Contains Appropriate Terms and Conditions as Required By the Water Resources Law 22
D. DEC Did Not Violate the Public Trust Doctrine 23
CONCLUSION 25

ABBREVIATIONS

DEC	New York State Department of Environmental Conservation
ECL	Environmental Conservation Law
MGD	Million gallons per day
NPDES	National Pollutant Discharge Elimination System
SEQRA	State Environmental Quality Review Act (ECL Article 8; 6 NYCRR 617)
SPDES	State Pollutant Discharge Elimination System
Waterfront Act	Waterfront Revitalization and Coastal Resources Act (Article 42 of Executive Law; 19 NYCRR 600)

Respondent Joseph Martens, Commissioner of the Department of Environmental Conservation ("DEC"), submits this memorandum of law in opposition to the verified petition and in support of Respondent's verified answer.

PRELIMINARY STATEMENT

In 2011, the New York State Legislature amended the Water Resources Law, codified in Environmental Conservation Law ("ECL") Article 15, to require DEC-issued permits to operate certain large-quantity water withdrawal systems. The Legislature directed DEC to issue Initial permits to preexisting water withdrawal systems that reported their maximum withdrawal capacity to DEC by February 15, 2012.

The Ravenswood Generating Station, in Long Island City, has operated a water withdrawal system since 1963 and timely reported its maximum water withdrawal capacity to DEC. Ravenswood has also been subject for decades to permits issued pursuant to the federal Clean Water Act and the State Pollutant Discharge Elimination System ("SPDES"), requiring it to conduct studies and take measures to protect the aquatic life affected by its withdrawal of water from the East River. On November 15, 2013, DEC, in keeping with the statutory directive of the Water Resources Law, issued Ravenswood an Initial water withdrawal permit.

In this Article 78 proceeding, Petitioners Sierra Club and Hudson River Fishermen's Association, New Jersey Chapter, Inc., challenge the Ravenswood Initial permit, which authorizes Ravenswood to continue withdrawing water from the East River for cooling and other processes related to electrical generation. Petitioners challenge the Ravenswood Initial permit on four grounds. First, they assert that DEC violated the State Environmental Quality Review Act ("SEQRA") by determining that the issuance of the Initial permit is exempt from environmental impact analysis under SEQRA. Second, they allege that DEC violated the

Waterfront Revitalization and Coastal Resources Act ("Waterfront Act") by failing to conduct a coastal consistency review of Ravenswood's Initial permit application. Third, they allege that DEC violated the Water Resources Law by failing to apply appropriate terms and conditions to the Ravenswood Initial permit. Fourth, they assert that DEC violated the public trust doctrine by failing to consider the impact that the Ravenswood water withdrawal will have on water users and the environment.

Petitioners' challenge to the Initial permit is without merit. In essence, Petitioners seek to impose measures for the protection of aquatic life in Ravenwood's Initial permit that would be above and beyond the measures already imposed by its SPDES permit, but an Initial permit is not an appropriate vehicle for those measures. Because DEC was required to issue an Initial permit authorizing Ravenswood to continue to withdraw water at its prior reported level, the issuance is a ministerial act that is exempt from environmental impact analysis under SEQRA and coastal consistency review under the Waterfront Act. Moreover, an environmental impact analysis would not have informed the narrow discretion that DEC has to impose conditions on the Initial permit, and therefore, was unnecessary. The Ravenswood Initial permit also satisfies the requirements of the Water Resources Law, and thereby the Public Trust Doctrine, by mandating that Ravenswood take steps to monitor water use and conserve water. Accordingly, the Court should deny all claims in the verified petition against the DEC Commissioner and uphold the Ravenswood Initial permit.

STATUTORY FRAMEWORK

A. The Water Resources Law

The Water Resources Law, ECL Article 15, declares that it is the State's sovereign power to regulate and control New York's water resources. ECL § 15-0103(1). It acknowledges that adequate and suitable water for agricultural, commercial, and industrial uses, including the production of power, is essential to the economic growth and prosperity of the State. *Id*. § 15-0103(3).

Prior to 2009, the Water Resources Law regulated only public water supplies, leaving agricultural, commercial, and industrial water withdrawals largely unregulated. In 2009, Title 33 was added to the Water Resources Law, requiring entities, such as Ravenswood, that withdraw more than 100,000 gallons of water per day to file Annual Water Withdrawal Reports with DEC. In 2011, Title 15 of the Water Resources Law was amended to authorize DEC to implement a comprehensive permitting system for most large water withdrawals across the State.

The Water Resources Law now requires a permit to operate certain high-volume water withdrawal systems. ECL § 15-1501(1). A water withdrawal system is defined as any equipment or infrastructure used to remove water from the waters of the State, including collection, pumping, treatment, transportation, transmission, storage, and distribution. *Id.* §§ 15-1502(15), (16). Water withdrawal systems with a withdrawal capacity equal to or greater than a specified "threshold volume" must receive permits. *Id.* § 15-1501(1). The threshold volume for non-agricultural water withdrawal systems is 100,000 gallons per day.[1] *Id.* § 15-1502(14).

[1] Several types of water withdrawals are exempted from the permit requirements including withdrawals for public emergency purposes and existing withdrawals for agricultural purposes that were registered with DEC by February 15, 2012. ECL § 15-1501(7).

The Water Resources Law distinguishes between "existing" and "new" water withdrawals, *id.* § 15-1501(1), and the type of permit that is issued to authorize those withdrawals. DEC may issue two types of permits for water withdrawal systems that did not need permits before the 2011 amendments: "Initial permits" for most systems that were in existence as of February 2012 and reported their maximum capacity to DEC under the 2009 amendments, and new "permits" for all other systems.

1. Initial Permits for Existing Water Withdrawals

The 2011 amendments to the Water Resources Law mandate that DEC "shall issue" an Initial permit to operators of water withdrawal systems that reported the systems' maximum water withdrawal capacity to DEC by February 15, 2012, as required by the 2009 amendments to the Law. ECL § 15-1501(9). The legislative history of the 2011 amendments makes it clear that operators of existing water withdrawal systems, such as Ravenswood, that met this reporting requirement are "*entitled* to an Initial permit." New York State Assembly Memorandum in Support of Legislation, Petitioners' Ex. E at 000007 (emphasis added); DEC Memorandum Regarding A5318-A/S.3798, Petitioners' Ex. E at 000016. Accordingly, DEC has no authority or discretion to deny Initial permits when this criterion is met. *See* ECL § 15-1501(9).

ECL § 15-1501(9) provides that an Initial permit shall be "subject to appropriate terms and conditions as required under" Article 15. The terms and conditions appropriate for Initial permits are listed in § 15-1501(6), which requires that every permit issued under § 15-1501 shall report information requested by DEC, including information related to water usage and conservation. ECL § 15-1501(4) also authorizes DEC to promulgate regulations that provide for monitoring and reporting, protection of potable water supply, and maintenance of stream flows.

To implement the Initial permit requirements, DEC promulgated 6 NYCRR § 601.7. The dates by which existing water withdrawal systems must apply for an Initial permit, based either

on their withdrawal capacity or SPDES permit status, are set forth in 6 NYCRR § 601.7(b). Since it has a SPDES permit, Ravenswood was required to apply for an Initial permit by June 1, 2013. 6 NYCRR § 601.7(b)(3).

An Initial permit will be issued for the withdrawal volume equal to the maximum withdrawal capacity reported to DEC by February 15, 2012. *Id.* § 601.7(d). An Initial permit is for a fixed term not to exceed ten years, and may be modified by DEC to correct technical mistakes. *Id.* §§ 601.7(e), 601.15(b)(4). In addition to generic conditions, an Initial permit may contain conditions to ensure that the water withdrawal system employs "environmentally sound and economically feasible water conservation measures to promote the efficient use of supplies." *Id.* § 601.7(e). Those conditions include installing meters or other measuring devices on all sources of water supply (*Id*. § 601.19), calibrating those meters or other devices annually to ensure accuracy (*Id*. § 601.20(a)(2)), and filing an annual Water Withdrawal Reporting Form with DEC (*Id.* § 601.5).

Finally, 6 NYCRR § 601.7(f) provides that, when a water withdrawal system is subject to a State Pollution Discharge Elimination System ("SPDES") permit, as is Ravenswood, the Department will review the Initial permit application in coordination with the SPDES permit.

2. New Permits

Operators of water withdrawal systems that, unlike Ravenswood, did not report the systems' water withdrawal capacity to DEC by February 15, 2012 are ineligible for an Initial permit. These operators must apply for a new permit under ECL § 15-1503, and have no automatic entitlement to that permit.

Unlike an Initial permit granted under ECL § 15-1501(9), DEC may grant, deny, or impose conditions on a new permit based on the factors listed in ECL § 15-1503(2) including, for example, whether "the proposed water withdrawal takes proper consideration of other

sources of supply that are or may become available," and "the need for all or part of the proposed water withdrawal cannot be reasonably avoided through the efficient use and conservation of existing water supplies." These factors give DEC broad discretion, including the discretion to issue a new permit limiting the quantity of the water proposed to be withdrawn—a discretion that DEC does not have with respect to Initial permits.

To implement the requirements for new permits, DEC promulgated 6 NYCRR § 601.11. That regulation gives DEC the same broad discretion granted it by ECL § 15-1503(2).

B. The National and State Pollutant Discharge Elimination Systems

Authorized by the federal Clean Water Act, the National Pollutant Discharge Elimination System ("NPDES") permit program controls water pollution by regulating industrial and other sources that discharge pollutants into waters of the United States. Under the Clean Water Act, states have the option to supersede the federal program by developing and administering their own permitting programs, as long as the U.S. Environmental Protection Agency ("EPA"), finds those state programs to be at least as stringent as the federal program. *See* 33 U.S.C. §§ 1342(b), (c).

New York's program, the State Pollutant Discharge Elimination System ("SPDES"), was approved by EPA in 1975. *See* ECL §17-0701 *et seq.*; 6 NYCRR Parts 700-706 and 750 (implementing regulations). Like the Clean Water Act, New York's SPDES program requires a permit in order to discharge pollutants into the waters of the state. Since "pollutant" is defined under federal and state law to include "heat" (33 U.S.C. § 1362(6); ECL § 17-0105(17)), thermal discharges from a plant like Ravenswood are regulated under SPDES. *See* 6 NYCRR Part 704. In connection with thermal discharges, a facility's cooling water intake structures "shall reflect

the best technology available for minimizing the adverse environmental impacts." 6 NYCRR § 704.5; *see* 33 U.S.C. § 1326(b).

C. The State Environmental Quality Review Act

SEQRA, codified at Article 8 of the ECL, requires an environmental impact statement for any "action" proposed or approved by a government agency that may have a significant effect on the environment. ECL § 8-0109(2). The definition of "action" expressly *excludes* "official acts of a ministerial nature, involving no exercise of discretion." *Id.* § 8-0105(5)(ii). DEC's regulations implementing SEQRA define a "ministerial act" as "an action performed upon a given state of facts in a prescribed manner imposed by law without the exercise of any judgment or discretion as to the propriety of the act, such as the granting of a hunting or fishing license." 6 NYCRR § 617.2(w).

There are three types of actions under SEQRA—Type I, Type II or unlisted. If the action is classified as Type I or unlisted, further environmental review is conducted by the "lead agency," which is the agency "principally responsible for undertaking, funding or approving an action." *Id.* §§ 617.2(u), 617.6(a)(2),(3) & (b); *see also* ECL § 8-0111(6). There are two categories of Type II actions. The first category includes actions that do not require an EIS because they are precluded from environmental review under the ECL. 6 NYCRR § 617.5(a). The second category includes actions that are declared to be Type II actions by regulation because they have been determined not to have a significant impact on the environment. *Id.* § 617.5(b). Ministerial acts are categorized as Type II actions because they have been precluded from environmental review under SEQRA, which excludes ministerial acts from the definition of an "action". *Id.* § 617.5(c)(19).

D. The Waterfront Revitalization of Coastal Areas and Inland Waterways Act

The state Waterfront Revitalization of Coastal Areas and Inland Waterways Act ("Waterfront Act") was enacted pursuant to the federal Coastal Zone Management Act. *See* 16 U.S.C.A. § 1455(d)(2)(D). Under the Waterfront Act, codified at Executive Law Article 42, coastal municipalities in New York State can adopt and implement their own coastal policies through Local Waterfront Revitalization Plans. Executive Law § 915. Once a municipality adopts such a plan, State agencies must review proposed "actions" to determine if they are consistent with the plan. *Id.* § 916(1)(b). This process is known as a "coastal consistency review."

The New York State Department of State has promulgated regulations that implement the Waterfront Act. 19 NYCRR Part 600. These regulations require State agencies undertaking an "action" within a "Coastal Management area" to complete a coastal assessment form to assist in determining whether the "action" is consistent with local waterfront revitalization plans and whether it has a significant adverse environmental impact under SEQRA. 19 NYCRR § 600.4.

The Waterfront Act regulations adopt the SEQRA categorization of actions, defining "actions" as

> either type I or unlisted actions as defined in SEQR (6 NYCRR 617.2), which are undertaken by State agencies; the term shall not include excluded actions as defined in SEQR (6 NYCRR 617.2) or actions not subject to SEQR pursuant to other provisions of law.

19 NYCRR § 600.2(b). Therefore, an action that is not subject to review under SEQRA, including a ministerial act, is also not subject to coastal consistency review under the Waterfront Act.

STATEMENT OF FACTS

The Ravenswood Generating Station is a 2,480 megawatt power plant located in Long Island City, Queens. Exhibit A, attached to Affidavit of Kent P. Sanders ("Sanders Aff."), at 1; Administrative Record ("AR") at 53; Sanders Aff. ¶ 7. It consists of multiple units employing steam turbine, combined cycle, and combustion turbine technology, fueled by natural gas, fuel oil, and kerosene. Exhibit A at 1; AR 3, 93; Sanders Aff. ¶ 7. Ravenswood has the capacity to serve approximately 21 percent of New York City's peak load. Exhibit A at 1; Sanders Aff. ¶ 7. It has been in operation since 1963 and is currently owned by TC Ravenswood LLC. AR 1, 93; Sanders Aff. ¶ 7.

A. The Ravenswood SPDES Permit

Thermoelectric plants, such as Ravenswood, boil water to create steam, which then spins turbines to generate electricity. Affidavit of Roy A. Jacobson, Jr. ("Jacobson Aff.") ¶ 6. Once steam has passed through a turbine, it must be cooled back into water before it can be reused to produce more electricity. *Id.* Once-through cooling systems, as at Ravenswood, withdraw cooling water from nearby waterways, circulate it through pipes to absorb heat from the steam in systems called condensers, and then discharge the now warmer cooling water back to the waterway. *Id.* As a consequence of withdrawing water for cooling, fish and other aquatic life may be drawn into the facility and killed when larger fish become impinged on the intake screens (designed to keep debris in the water from entering the plant), or when early life stages of fish such as eggs and larvae and other small aquatic life pass through the screen mesh and into the facility (a process called entrainment). *Id.*

Since Ravenswood's cooling water system discharges pollutants, including heat, into State waters, it is regulated under SPDES[2] and its cooling water intake structures "shall reflect the best technology available for minimizing adverse environmental impacts." 6 NYCRR § 704.5; Jacobson Aff. ¶¶ 7, 8. The adverse environmental impacts of the Ravenswood cooling water intake system have been studied since at least 1974 when DEC required Ravenswood to submit reports containing a tabulation of all fish impingement and entrainment data collected to date. Exhibit 1, attached to Jacobson Aff., at 3; Jacobson Aff. ¶ 8. Ravenswood was also required to submit to DEC a "detailed biological study program designed to determine effects of facility operation on aquatic organisms" and based on that study, to "implement reasonable methods and procedures to reduce to the fullest extent possible the effects of facility operation on aquatic organisms." Exhibit 1 at 3.

Under a 1992 consent order with DEC concerning its SPDES permit, the previous owner of Ravenswood, Consolidated Edison Company of New York, conducted a series of studies to assess the plant's impact on aquatic resources in the East River and determine the best technology available for the cooling water intake system, as required by both the federal Clean Water Act and the SPDES program. AR 62, 104; Jacobson Aff. ¶ 9. Studies measuring the impingement and entrainment of aquatic life in the plant's cooling water intake structures were conducted between 1991 and 1994. *Id*. An additional study was then conducted to determine suitable locations to safely return impinged fish to the East River, and in 2005, three fish return pipes were constructed. AR 63, 104; Jacobson Aff. ¶ 11. More impingement and entrainment studies were conducted between March 2005 and February 2006. AR 63, 105; Jacobson Aff. ¶ 12.

[2] Since Ravenswood predates the state SPDES program, it was first regulated under the federal NPDES program. Jacobson Aff. ¶ 7.

In 2006, in order to determine the best technology available to minimize adverse environmental impacts from operation of the cooling water intake system, as required by the Clean Water Act and DEC regulations, DEC evaluated feasible technological and operational alternatives, including the use of closed-cycle cooling. AR 64-65, 105-106; Jacobson Aff. ¶ 12. DEC determined that the following actions, when conducted in combination, represent the best available technology: (1) installing variable speed pumps to reduce cooling water use during periods of low electrical generation; (2) scheduling of outages to shut down the cooling water pumps to reduce impingement and entrainment; (3) upgrading the existing traveling intake screens so they operate continuously; and (4) continuing use of the low stress fish returns, to increase fish impingement survival. *Id*. Implementation of these alternatives was required in the 2007 Ravenswood SPDES permit. AR 76-79; Jacobson Aff. ¶ 13; *see* AR 87-92. The permit's Performance Standards require that these alternatives must produce a ninety percent reduction in impingement mortality and a sixty-five percent reduction in entrainment. AR 77; Jacobson Aff. ¶ 13. These requirements are continued in the Biological Monitoring Requirements Section of the current Ravenswood SPDES permit, issued in November 2012. AR 125-127; Jacobson Aff. ¶ 13.

B. Ravenswood's Water Withdrawal Reporting

Since Ravenswood's water withdrawal system has the capacity to withdraw over 100,000 gallons of water per day, since 2010, it was required to file Annual Water Withdrawal Reports with DEC pursuant to Title 33 of the Water Resources Law.[3] Sanders Aff. ¶ 8. Ravenswood filed these reports with DEC by the February 1st deadline in 2010, 2011, and 2012. *Id*. Each report includes the facility's maximum water withdrawal capacity for the previous year. *Id*.

[3] Title 33 of the Water Resources Law was repealed in 2011 by the amendments to Title 15 of the Water Resources Law. Annual water withdrawal reporting is now required under ECL § 15-1501(6).

C. The Ravenswood Initial Water Withdrawal Permit

On May 31, 2013, Ravenswood submitted an application to DEC seeking an Initial water withdrawal permit under the Water Resources Act. AR 1-35; Sanders Aff. ¶ 9. The application requested an Initial permit to withdraw up to 1,534.752 million gallons per day ("MGD") of water from the East River and contained exhibits applicable to its withdrawal including a general map, engineer's report, water conservation program, annual reporting form, and transmittal letter.[4] *Id.*; *see* 6 NYCRR § 601.10. The application included Ravenswood's 2012 Water Withdrawal Report, which showed that substantially all of the water withdrawn from the East River by the plant is returned to the East River (AR 21), and thus that the plant had no consumptive loss (Sanders Aff. ¶ 19). On August 1, 2013, DEC issued a notice of complete application to Ravenswood. AR 36; Sanders Aff. ¶ 11. The notice stated that the "[p]roject is not subject to SEQR because it is a Type II action." *Id.*

On August 7, 2013, DEC issued a notice in its Environmental Notice Bulletin stating that DEC had made a tentative determination to issue an Initial water withdrawal permit to Ravenswood authorizing a water withdrawal of approximately 1.5 billion gallons per day from the East River. AR 41-42; Sanders Aff. ¶ 12. The notice stated that the "[p]roject is not subject to SEQR because it is a Type II action" and therefore, no SEQR lead agency had been designated. *Id*. It also reported that the project is not located in a Coastal Management area and thus is not subject to the Waterfront Act. AR 42. The notice informed the public that comments on the Ravenswood Initial permit must be submitted by August 22, 2013. *Id.*; Sanders Aff. ¶ 12.

[4] The Ravenswood Initial permit application also included a project justification. AR 3; Sanders Aff. ¶ 9. However, project justifications are not applicable to Initial permits because those permits are for preexisting water withdrawal systems that are entitled to continue their withdrawals. Sanders Aff. ¶ 10. As Ravenswood was one of the first water withdrawal systems to submit an Initial permit application, it was not aware that a project justification was inapplicable to its application. *Id.* A watershed map is also inapplicable and unnecessary to the Ravenswood Initial permit application because the facility is located on the East River, which drains directly into the Atlantic Ocean. *Id.*

On August 28, 2013, DEC issued a second notice in the Environmental Notice Bulletin, extending the public comment period for the Ravenswood Initial permit until September 11, 2013. AR 47; Sanders Aff. ¶ 13. The notice stated that "DEC has determined that the issuance of 'Initial permits' under ECL section 15-501.9 as implemented by 6 NYCRR 601.7 is a ministerial action and therefore subject to the Type II exemption set out in 6 NYCRR 617.5(c)(19)." AR 48. In addition, the notice corrected DEC's earlier statement concerning the applicability of the Act, noting that the "project is located in a Coastal Management area" and therefore, subject to the Waterfront Act. *Id.*; Sanders Aff. ¶ 13. However, DEC later determined that the issuance of the Initial permit is exempt from a coastal consistency review under the Waterfront Act because it is a Type II action. Sanders Aff. ¶ 13.

On November 15, 2013, DEC issued an Initial permit for Ravenswood. AR 51, 53; Sanders Aff. ¶ 14. Although Ravenswood had requested authorization to withdraw 1,534.752 MGD, its annual report to DEC as of February 15, 2012 reported a maximum withdrawal capacity of 1,390 MGD. AR 1, 51. Accordingly, the Initial permit issued by DEC limited Ravenswood's water withdrawal to its reported capacity of 1,390 MGD, as required by ECL § 15-1501(9) and 6 NYCRR § 601.7(d). AR 51, 53; Sanders Aff. ¶ 14. The Initial permit runs concurrently with the Ravenswood SPDES permit, which is scheduled to expire on October 31, 2017, unless timely renewed. *Id.*; *see* 6 NYCRR § 601.7(f).

The Ravenswood Initial permit incorporates by reference the required measures for water conservation and fish protection contained in the Biological Monitoring Requirements Section of the Ravenswood SPDES permit. AR 54; Sanders Aff. ¶16. As reflected in the Ravenswood Initial permit application, these measures have decreased Ravenswood's water withdrawals by approximately twenty-six percent between July 2012 to April 2013. AR 9; Sanders Aff. ¶16.

DEC's regulatory reporting and measuring requirements are also incorporated into the Initial permit. *See* AR 54; Sanders Aff. ¶ 17. It requires Ravenswood to submit an annual Water Withdrawal Reporting Form to DEC, which contains information regarding approved sources of water supply, source capacities, average and maximum day water use data, and water conservation and efficiencies employed. *Id.*; *see* 6 NYCRR § 601.5. The Initial Permit also includes the regulatory requirement that all source meters or other water measuring devices be calibrated annually to ensure accuracy. AR 54; Sanders Aff. ¶ 17; *see* 6 NYCRR § 601.20(a)(2). And it requires Ravenswood to install and maintain meters or other appropriate measuring devices on all sources of water supply used in the water withdrawal system. AR 54; Sanders Aff. ¶ 17; *see* 6 NYCRR § 601.19. Ravenswood must read and record the meters or other measuring devices on a weekly basis, and must maintain records of the water withdrawn and used each year. *Id*. Ravenswood's permit application contained its 2012 Water Withdrawal Report, which showed that substantially all of the water withdrawn from the East River by the plant is returned to the East River. AR 21. DEC therefore concluded that the conditions it imposed ensure that the facility employs "environmentally sound and economically feasible water conservation measures to promote the efficient use of supplies." 6 NYCRR 601.7(e); Sanders Aff. ¶17.

Although not statutorily required, DEC responded to public comments regarding the Ravenswood Initial permit when it issued the permit. AR 57-61; Sanders Aff. ¶ 21. DEC's response explained that neither a SEQRA review nor a coastal consistency review is required for the issuance of the Ravenswood Initial permit because it is a ministerial action. AR 58; Sanders Aff. ¶ 21. It also explained that measures to conserve water and reduce fish impacts have been considered and incorporated into the Ravenswood Initial permit by reference to the Biological

Monitoring Requirements Section of the Ravenswood SPDES permit. AR 59-61; Sanders Aff. ¶ 21.

On December 18, 2013, Ravenswood submitted a letter to DEC concerning its reported maximum water withdrawal capacity. AR 137-138; Sanders Aff. ¶ 22. It stated that its Annual Water Withdrawal Reports for the years 2009-2011 inadvertently omitted the water withdrawals for the plant's low pressure saltwater cooling system. *Id*. Taking these withdrawals into account raises the plant's maximum water withdrawal capacity to 1,527.840 MGD. *Id*. Ravenswood explained that this maximum capacity is necessary to maintain the reliability of the electrical grid and to provide critical electric generation during natural disasters or other emergencies. *Id*. For example, during and in the aftermath of Superstorm Sandy, Ravenswood provided approximately fifty percent of New York City's electric load, requiring all units to generate at maximum capacity. *Id*. Ravenswood also submitted revised Annual Water Withdrawal Reports for 2009-2011, and an engineer's certification stating that the low pressure saltwater cooling system dates back to 1962. AR 139-151; Sanders Aff. ¶ 22.

On February 19, 2014, DEC sent Ravenswood a letter stating that based on the corrected Annual Water Withdrawal Reports, DEC determined that it is necessary to modify the Initial permit to increase the maximum water withdrawal capacity from 1,390 MGD to 1,527.84 MGD. AR 152-153; Sanders Aff. ¶ 23. On March 7, 2014, DEC issued a corrected Initial permit to Ravenswood, allowing it to withdraw 1,527.84 MGD. AR 154; Sanders Aff. ¶ 24. The corrected Initial permit has the same expiration date of October 31, 2017 and contains the same conditions as the original Initial permit. AR 155-158; Sanders Aff. ¶24.

ARGUMENT

DEC'S ISSUANCE OF THE RAVENSWOOD INITIAL PERMIT WAS IN FULL COMPLIANCE WITH APPLICABLE STATUTORY REQUIREMENTS

A. The State Environmental Quality Review Act Does Not Apply to the Issuance of the Ravenswood Initial Permit

1. The Issuance of the Ravenswood Initial Permit Was a Ministerial Act

Under SEQRA, the purpose of an environmental review is to provide information about the effect a proposed action will have on the environment, in order to form the basis for a decision whether or not to approve the action. *Filmways Commc'ns of Syracuse, Inc. v. Douglas*, 106 A.D.2d 185, 187 (4th Dep't 1985), *aff'd* 65 N.Y.2d 878 (1985). When, as here, an agency is under a statutory mandate to approve an action, information about the effect the action will have on the environment serves no purpose because the agency may not disapprove the action based on the information. *Id.* For that reason, "official acts of a ministerial nature, involving no exercise of discretion" are excluded from the requirements of SEQRA. ECL § 8-0105(5)(ii).

Following from that reasoning, the Court of Appeals has stated that "the pivotal inquiry" in determining whether an agency decision is ministerial and thus outside SEQRA's purview "is whether the information contained in an EIS may 'form the basis for a decision whether or not to undertake or approve such action.'" *Inc. Vill. of Atlantic Beach v. Gavalas*, 81 N.Y.2d 322, 326 (1993) (quoting *Filmways*, 106 A.D.2d at 187). When an agency vested with discretion in only a limited area cannot "deny a permit on the basis of SEQRA's broader environmental concerns," "preparation of an EIS would be a meaningless and futile act." *Id*. at 327.

Here, an environmental review could not have formed the basis for DEC to deny Ravenswood its Initial permit because DEC was required to issue the Initial permit. In amending the Water Resources Law, the Legislature determined that preexisting water users are "entitled" to Initial permits to continue withdrawing water up to the maximum capacity they reported to

DEC under existing law. New York State Assembly Memorandum in Support of the Legislation, Petitioners' Ex. E at 000007 (stating that "ECL 15-1501 would be amended to . . . provide that existing water withdrawals would be entitled to an Initial permit."). Thus, ECL § 15-1501(9) states that the "department *shall issue* an Initial permit . . . for the maximum water withdrawal capacity reported to the department." (emphasis added). Accordingly, the Legislature gave DEC no discretion to deny an Initial permit to an applicant that reported its maximum water withdrawal capacity to DEC by February 15, 2012. As Ravenswood met this requirement, DEC could not deny it an Initial permit on the basis of a SEQRA review. *See Gavalas*, 81 N.Y.2d at 327.

Even when an agency has some discretion with respect to the conditions that it imposes when it takes ministerial actions, courts have found that its decisions will not be considered "actions" for purposes of SEQRA if "that discretion is circumscribed by a narrow set of criteria which do not bear any relationship to the environmental concerns that may be raised in an EIS." *Gavalas*, 81 NY2d at 326. Again, this is because in such situations an environmental review would not inform an agency's decision. For example, the granting of a building demolition permit is a ministerial matter, despite the fact that the Director of the Bureau of Code Enforcement has discretion in determining whether the demolition plan ensures safety and protection of the area surrounding the building and may require the applicant to modify the demolition plan prior to granting the permit. *Ziemba et al. v. City of Troy et al.*, 37 A.D.3d 68, 75 (3d Dep't 2006). Similarly, an order requiring the closing of a private rail crossing is a ministerial matter, despite the fact that the Commissioner of the Department of Transportation has discretion to consider the safety issues presented by a particular crossing and to determine whether to require alterations or the closure of such a crossing. *Matter of Island Park v. New*

York State Dep't of Transp., 61 A.D.3d 1023, 1028 (3d Dep't 2009). In both cases, the court found that the agencies' discretion did not relate to the type of information contained in an environmental review, and therefore such a review would not inform their discretionary determinations.

Here, DEC had limited discretion to place conditions on the Ravenswood Initial permit concerning "environmentally sound and economically feasible water conservation measures to promote the efficient use of supplies," 6 NYCRR § 601.7(e), but those conditions would not have been informed by an environmental review. Most of the conditions were required by the implementing regulations of the Water Resources Law—filing Annual Water Withdrawal Reports, installing measuring devices on all sources of water supply, and calibrating those devices once a year—and thus not discretionary. 6 NYCRR §§ 601.5, 601.19, 601.20(a)(2). Those same conditions are also generic for this type of facility and are based solely on information that Ravenswood provided in its Initial permit application, including that the water the plant withdraws from the East River is discharged back to the River with no consumptive loss. As a result, an environmental review would not have informed DEC's decision to impose them.

The Initial permit also incorporated the water conservation and fish protection measures in Ravenswood's SPDES permit, but DEC exercised its discretion with respect to those conditions—and reviewed them under SEQRA—when the SPDES permit was issued, not when the Initial permit was issued. The measures were incorporated into the Ravenswood Initial permit to ensure that the two permits would be viewed in conjunction, as required by 6 NYCRR § 601.7(f).

Petitioners mistakenly argue that DEC has "broad discretion in specifying the terms and conditions of all water withdrawal permits, including 'initial' permits." Petitioners' Memorandum of Law ("Pet. Mem.") at 16. That argument is based on their assertion that ECL § 15-1503(2) and 6 NYCRR § 601.11(c) apply to the issuance of Initial permits, and that "[t]here is no exemption from the requirements of Section 15-1503.2 for 'initial' permits." *Id*. at 16, 20. But the provisions of ECL § 15-1503(2) and 6 NYCRR § 601.11(c) apply only to the issuance of *new* permits, not to the issuance of *Initial* permits.

ECL § 15-1503(2) provides that, in deciding whether "to grant or deny a permit or to grant a permit with conditions," DEC is required to consider a number of factors that concern the quantity of water to be withdrawn by the permit applicant, including whether: (1) the quantity of the water supply will be adequate for the proposed use; (2) the project is just and equitable to all affected municipalities and their inhabitants with regard to their present and future needs for sources of portable water supply; (3) the need for all or part of the proposed water withdrawal cannot be reasonably avoided through the efficient use and conservation of existing water supplies; and (4) the proposed water withdrawal is limited to quantities that are considered reasonable for the purposes for which the water use is proposed. Those factors are irrelevant to an application for an Initial permit, and it would be futile for DEC to consider them in that context, because ECL §15-1501(9) mandates that DEC issue an Initial permit for the maximum water withdrawal capacity reported to DEC by the applicant and thus DEC can neither deny an Initial permit nor limit its withdrawal capacity on the basis of them. ECL § 15-1503(2) also refers primarily to "proposed water withdrawal[s]," not the existing water withdrawals for which an Initial permit is issued. Thus, ECL § 15-1503(2) applies only to new permits for which DEC has broad discretion to deny or limit withdrawal capacity.

DEC regulations also contain different requirements for Initial permits and new permits. The requirements for Initial permits are set forth in 6 NYCRR § 601.7, which is titled "Initial permits." As discussed above, DEC issued Ravenswood's Initial permit pursuant to that regulation and exercised only the limited discretion granted to it by 6 NRCRR § 601.7(e) to impose water conservation conditions on the permit.

The requirements for new permits are set forth in 6 NYCRR § 601.11, which echoes ECL § 15-1503(2), and directs DEC to make determinations that implicate the quantity of water to be withdrawn and thus have no relevance to Initial permits. Petitioners go so far as to argue that 6 NYCRR § 601.11(a) gives DEC the discretion to *deny* an Initial permit, Pet. Mem. at 20, but that would be entirely contrary to ECL §15-1501(9), which requires DEC to issue Initial permits. Indeed, 6 NYCRR § 601.11(a), which provides that "[t]he Department may grant or deny a permit, or grant a permit with conditions," shows that § 601.11 does not apply to Initial permits because DEC clearly may *not* deny an application for an Initial permit.

That 6 NYCRR §§ 601.7 and 601.11 apply to different types of permits is also evidenced by the duplication of certain provisions contained in those sections. For example, both sections call for the use of "environmentally sound and economically feasible water conservation measures." *Compare* 6 NYCRR § 601.7(e) *with* 6 NYCRR § 601.11(c)(7). Also, both sections state that the Initial permit or permit is valid "for a fixed term not to exceed ten years." *Compare* 6 NYCRR § 601.7(e) *with* 6 NYCRR § 601.11(b). Finally, both sections specify that DEC will review the Initial permit or permit application in coordination with the SPDES or other permit program. *Compare* 6 NYCRR § 601.7(f) *with* 6 NYCRR § 601.11(h). Such duplication would be unnecessary if 6 NYCRR § 601.11 applied to Initial permits as well as new permits.

In short, DEC was not required to conduct a SEQRA review before it issued an Initial permit to Ravenswood because the issuance of that Initial permit was a ministerial act and the limited discretion that DEC exercised in imposing conditions in the Initial permit would not have been informed by an environmental review.

2. The Issuance of the Ravenswood Initial Permit is Not Considered an "Action" Under SEQRA

Additionally, Petitioners assert that the issuance of the Ravenswood Initial permit cannot be categorized as a Type II action because, under DEC's SEQRA regulations "a project or action that would use ground or surface water in excess of 2,000,000 gallons per day" is a Type I action requiring SEQRA review, and a Type I action cannot also be Type II action. Pet. Mem. at 27. Petitioners' argument fails to recognize that a ministerial act, such as the issuance of the Initial permit, is not an "action" under SEQRA and therefore cannot be a Type I action.

Petitioners' argument that a Type I action cannot also be a Type II action disregards the fact that there are two categories of Type II actions: (1) actions that "are otherwise precluded from environmental review under Environmental Conservation Law, article 8," which include ministerial acts (6 NYCRR § 617.5(a)); and (2) actions that are declared to be Type II actions by regulation (6 NYCRR § 617.5(b)). An action that is declared a Type II action by regulation may not also be a Type I action but that is not what occurred here. The issuance of Ravenswood's Initial permit is in the first category and is a Type II action because it is a ministerial act that is excluded from the definition of "action" under ECL § 8-0105(5)(ii).

B. The Waterfront Act Does Not Apply to the Issuance of the Ravenswood Initial Permit

The regulations issued under the Waterfront Act, provide that an action is not subject to review under the Act if it is not subject to review under SEQRA. 19 NYCRR § 600.2(b). Since Initial permits are ministerial acts excluded from SEQRA review, they are also excluded from a

coastal consistency review under the Waterfront Act.

C. The Ravenswood Initial Permit Contains Appropriate Terms and Conditions as Required By the Water Resources Law

Petitioners contended in their Article 78 petition that DEC failed to apply appropriate terms and conditions in the Ravenswood Initial permit as required by the Water Resources Law (Petition at 19) but do not make that argument in their memorandum of law and thus appear to have abandoned it. In any event, the Court should reject it.

As explained in section A1 above, the water conservation measures imposed in the Initial permit are the conditions required by DEC's regulations and the additional measures that are required by Ravenswood's SPDES permit. Consistent with DEC best practices on water metering, Ravenswood is required to meter or measure all sources of its water supply and calibrate those meters or other measuring devices annually. AR 14, 156; Sanders Aff. ¶ 17. Consistent with DEC best practices on water auditing, Ravenswood must submit annual water withdrawal reports, measure source master meters on a weekly basis, and maintain records of water withdrawn and consumptive use for each calendar year. AR 15, 156; Sanders Aff. ¶ 17. The Ravenswood water conservation program also complies with standards for leak detection and repair by using personnel and water usage data to detect leaks and address those leaks as soon as possible. AR 16; Sanders Aff. ¶ 18.

The Initial permit also incorporates the requirement in Ravenswood's SPDES permit that the plant use variable frequency drives, which have led to a twenty-six percent reduction in Ravenswood's water withdrawals over an eight month period from July 2012 to April 2013. AR 17; s*ee* AR 9; Sanders Aff. ¶ 16. Petitioners take issue with the fact that the Initial permit does not require Ravenswood to employ a closed-cycle cooling system, but an Initial permit could not set a new requirement for closed-cycle cooling because Initial permit holders are entitled to

continue withdrawing water at the maximum capacity reported to DEC by February 15, 2012.[5] *See* ECL § 15-1501(9), 6 NYCRR § 601.7(d).

The Initial Permit does not require Ravenswood to do an annual water audit because the facility has no consumptive loss, meaning that substantially all of the water that is withdrawn from the East River is returned to the East River. *See* AR 21; Sanders Aff. 19. As the vast majority of pipes carrying cooling water at the Ravenswood facility are above ground, there is no need to survey underground piping for leakage. Sanders Aff. ¶ 18. Although the volume of cooling water needed by Ravenswood makes it unfeasible to use rain or stormwater in lieu of water from the East River as a recycling measure, substantially all of the water used in the Ravenswood once-through-cooling system is recycled because it is continuously returned to its water source, the East River.

D. DEC Did Not Violate the Public Trust Doctrine

Petitioners make the novel argument that, in addition to violating SEQRA, the Waterfront Act, and the Water Resources Law, DEC violated the public trust doctrine by not conducting the reviews and imposing the additional measures required by those statutes. Pet. Mem. at 37. Petitioners cite no authority for the proposition that the public trust doctrine, a common law doctrine, is somehow incorporated into the statutes at issue here and thereby imposes requirements on DEC above and beyond the statutory requirements. Petitioners also explicitly recognize that the responsibility to protect resources for public use is a legislative function and the Legislature exercised that responsibility when it enacted SEQRA, the Waterfront Act and the Water Resources Law. *Id.* at 34-37. Thus, so long as DEC complied with those statutes—as it did here—it is in compliance with the public trust doctrine.

[5] An Initial permit may, however, incorporate requirements set forth in a SPDES permit. If a SPDES permit mandated closed-cycle cooling, such a requirement could be incorporated by reference into an Initial permit.

The public trust doctrine is the principle that certain resources are preserved for the public use, and that the State is responsible for protecting the public's right to that use. As relevant here, it is "the duty of the State to control and conserve its water resources for the benefit of all the inhabitants of the State. The public right to the benefit of such resources is an incident of sovereignty." *Syracuse v. Gibbs*, 283 N.Y. 275, 283 (1940). "In the exercise of this power, the State acts through the Legislature, as the conservation or diversion of waters is a legislative function." *Suffolk County v. Water Power & Control Comm'n.*, 245 A.D. 62, 64 (3d Dep't 1935), *modified and aff'd*, 269 N.Y. 158 (1935). The Legislature may, at will, grant the privilege of taking water from a public source. *See Gibbs*, 283 N.Y. at 283.

As discussed above, the Legislature has decided that water withdrawal systems are a publicly beneficial use of the State's water resources and has mandated that existing systems be issued an Initial permit if they met statutory reporting requirements. This is clearly within the Legislature's public trust authority. As also discussed above, DEC complied with the Legislature's mandate by issuing Ravenswood an Initial permit that included the conditions required by the Water Resources Act and incorporating the terms of Ravenswood's SPDES permit.

Petitioners criticize DEC for failing to mandate closed cycle cooling for the Ravenswood plant (*see* Petition ¶¶ 20-22), yet they fail to acknowledge that DEC has already considered and rejected this alternative as part of the SPDES Biological Monitoring Requirements. AR 105; Jacobson Aff. ¶ 12. As this argument represents a challenge to the Ravenswood SPDES permit, issued in 2012, it is time barred. *See* CPLR 217(1).

In any event, petitioners' claim that closed-cycle cooling is justified because the plant kills "hundreds of millions of eggs, larvae and young fish each year" as well as injuring or killing

"millions of larger fish" is also based on outdated impingement and entrainment studies. Those studies were conducted before Ravenswood implemented its SPDES permit measures to reduce impingement and entrainment by ninety percent and sixty-five percent, respectively. By including these SPDES measures in the Initial permit, DEC complied with its public trust obligations.

CONCLUSION

For the foregoing reasons, the Commission's decision to grant an Initial water withdrawal permit to Ravenswood should be upheld, and the verified petition should be denied in its entirety.

Dated: New York, New York
April 24, 2014

ERIC T. SCHNEIDERMAN
Attorney General of the State of New York
Attorney for Respondent

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440

AFFIDAVIT OF ROY A. JACOBSON, JR., IN SUPPORT OF RESPONDENT JOSEPH MARTEN'S VERIFIED ANSWER AND IN OPPOSITION TO VERIFIED PETITION, SWORN TO APRIL 24, 2014 [440- 445]

SUPREME COURT OF THE STATE OF NEW YORK
COUNTY OF QUEENS
----------x
In the Matter of the Application of

SIERRA CLUB, and HUDSON RIVER FISHERMEN'S ASSOCIATION, NEW JERSEY CHAPTER, INC.,

Index No. 2949-2014

Hon. Robert J. McDonald

Petitioners,

For Judgment Pursuant to Article 78 of the Civil Practice Law and Rules,

-against-

JOSEPH MARTENS, COMMISSIONER, NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION,

Respondent,

TC RAVENSWOOD LLC,

Necessary Party.
----------x

AFFIDAVIT OF ROY A. JACOBSON, JR. IN SUPPORT OF RESPONDENT'S VERIFIED ANSWER AND IN OPPOSITION TO THE VERIFIED PETITION

STATE OF NEW YORK }
} SS:
COUNTY OF ALBANY }

ROY A. JACOBSON, JR., being duly sworn deposes and says:

1. I am the Head of the Habitat Protection Section, within the Division of Fish, Wildlife, and Marine Resources at the central office of the New York State Department of Environmental Conservation ("DEC") in Albany, NY. I submit this affidavit in support of the Respondent, DEC Commissioner's verified answer and in opposition to the verified petition.

2. I have been employed at DEC for approximately twenty-two years. I have been the Head of the Habitat Protection Section since 2007. Prior to that, I held the positions of Steam Electric Unit Leader (2003-2007), Regional Biologist – New Paltz Office (1998-2003), and Regional Biologist – Stony Brook Office (1993-1998).

3. As Head of the Habitat Protection Section, my current responsibilities include overseeing the work of the Steam Electric Unit Leader. Together with technical program staff in the Steam Electric Unit and other DEC staff, I regularly review applications for permits under the State Pollutant Discharge Elimination System ("SPDES") program.

4. Between 2003 and 2007, I was the Steam Electric Unit Leader and was responsible for DEC's review of the biological impacts caused by the cooling water intake structure at the Ravenswood Power Generating Station. In consultation with other members of the Steam Electric Unit, I personally reviewed and evaluated the biological aspects of the Ravenswood SPDES permit application and supporting material that lead to the issuance of the SPDES permit on May 1, 2007. That permit contained several conditions aimed at reducing biological impacts caused by Ravenswood's cooling water intake structure.

5. I am familiar with the facts and circumstances regarding the Ravenswood SPDES permit. This affidavit is based on my personal knowledge, my review of DEC records and files, and discussions with DEC permit staff and technical staff from: the Division of Water; the Division of Permits; and the Division of Fish, Wildlife, and Marine Resources; as well as natural resources staff in DEC's Region 2 office in New York City.

THE RAVENSWOOD SPDES PERMIT

6. Thermoelectric plants, such as Ravenswood, create electricity by boiling water to create steam which then spins turbines. After steam passes through a turbine, it is cooled so that it can be reused to produce more electricity. Plants such as Ravenswood utilize a once-through cooling system to cool the steam back into water. The cooling system withdraws water from a waterway, circulates it through pipes to absorb heat from the steam in systems called condensers, and then discharges the water, which has been warmed by the steam, back to the waterway. The steam, which has been cooled back into water, is reheated to create more electricity. As a consequence of withdrawing water for cooling, fish and other aquatic life may be drawn into the facility and killed. Fish may become impinged on the intake screens, which are designed to keep debris in the water from entering the plant. Fish eggs and larvae and other small aquatic life may pass through the screen mesh and into the facility (a process called entrainment).

7. Ravenswood has utilized a once through cooling system since it began operating in 1963. AR 2. Because its cooling water system discharges pollutants, including heat, into the East River, the plant became regulated under the federal National Pollutant Discharge Elimination System ("NPDES") program in the 1970's. After New York State received approval from the U.S. Environmental Protection Agency to administer its own water permitting program in 1975, Ravenswood was regulated under the state SPDES permit program.

8. Pursuant to the Clean Water Act and SPDES regulations, the location, design, construction, and capacity of Ravenswood's cooling water intake structures must reflect the best technology available ("BTA") for minimizing adverse environmental impacts, including impingement and entrainment. *See* 33 USC § 1326(b); 6 NYCRR § 704.5. For that reason, the

effects of impingement and entrainment in the plant's cooling water intake system have been studied since at least 1974. *See* 1974 Letter from DEC to Con Ed, attached hereto as Exhibit A.

9. Under a 1992 Order on Consent with DEC concerning its SPDES permit, a previous owner of Ravenswood, Consolidated Edison Company of New York, conducted a series of diagnostic studies on impingement and entrainment in Ravenswood's cooling water intake structures. AR 62, 104. These studies, conducted between 1991 and 1994, assessed the plant's impact on aquatic resources in the East River and provided information to support a determination regarding the BTA for minimizing environmental impacts from the plant's cooling water intake structures. AR 62, 104.

10. In 2000, an Order on Consent with DEC required another previous owner of Ravenswood, KeySpan Corporation, to produce, for DEC review and approval, a Final Action Plan detailing proposed measures and a proposed implementation schedule for BTA at Ravenswood. Additional impingement and entrainment studies were conducted between 2000 and 2001 in support of the Final Action Plan, which was approved by DEC in 2005.

11. Contemporaneous with work associated with the 1992 and 2000 Orders on Consent, Consolidated Edison and KeySpan conducted investigations of ways to more safely return impinged fish to the East River. *See* AR 63, 104. This investigation culminated in the DEC-approved construction of three fish return pipes specifically designed and fabricated for use at Ravenswood. *See Id.* Construction of this improved fish return system was completed in 2005. *Id.*

12. In 2006, the survival of impinged fish was studied at Ravenswood following the installation of the improved fish return system. AR 63, 105. In 2007, based on preliminary results from this survival study, data from previous diagnostic studies of impingement and

entrainment, information contained in the approved Final Action Plan, and numerous correspondence between DEC and the various facility owners, DEC determined the BTA to minimize adverse environmental impacts from operation of the cooling water intake structures at Ravenswood. As part of this site-specific determination, DEC evaluated many technological and operational alternatives, including the use of closed-cycle cooling. AR 105. DEC determined that the following actions, when conducted in combination, represent the best technology available for Ravenswood: (1) installation of variable speed pumps on all three units to reduce cooling water use; (2) scheduling of outages to shut down the cooling water pumps to reduce impingement and entrainment; (3) upgrading the existing traveling intake screens so they operate continuously; and (4) continued use of the low stress fish returns constructed in 2005, to increase fish impingement survival. AR 64-65, 105-106. Closed-cycle cooling was not selected as BTA because DEC determined that it was not feasible at Ravenswood due to the limited space available for cooling towers on the site.

13. Implementation of these alternatives was required in the 2007 Ravenswood SPDES permit. AR 76-79; *see* AR 87-92. The permit's Performance Standards require that these alternatives must produce a ninety percent reduction in impingement mortality and a sixty-five percent reduction in entrainment from the full flow calculation baseline. AR 77. These requirements were continued in the Biological Monitoring Requirements Section of the current Ravenswood SPDES permit, issued in November 2012. AR 125-127.

14. I swear under penalty of perjury that the foregoing is true and accurate to the best of my knowledge.

Roy A. Jacobson, Jr.

Sworn to before me this 24th day of April, 2014.

Notary:

MICHAEL P. NAUGHTON
Notary Public – State of New York
Registration No. 02NA6002587
Qualified in Saratoga County
Commission Expires Feb. 9, 2018

EXHIBIT 1 TO JACOBSON AFFIDAVIT — DEC LETTER TO CONSOLIDATED EDISON, DATED OCTOBER 17, 1974 [446-451]

New York State Department of Environmental Conservation
Albany, N. Y. 12201

James L. Biggane
Commissioner

October 17, 1974

Mr. Carl L. Newman
Vice President
Consolidated Edison Company of New York, Inc.
4 Irving Place
New York, New York 10003

Re: NY 000 5193
(2SD OXW 2 000191)

Dear Sir:

We have reviewed your application for a federal permit to discharge under Section 402, National Pollutant Discharge Elimination System, of the Federal Water Pollution Control Act Amendments of 1972, "the Act". We have also reviewed draft permit conditions developed by the Federal Environmental Protection Agency for the subject discharge(s), and have been requested by the Environmental Protection Agency to act on the application pursuant to Section 401 of the Act.

Based on the foregoing, and that public notice was duly given, the Department of Environmental Conservation hereby certifies that the activity which Consolidated Edison Company of New York, Inc., 4 Irving Place, New York, New York 10003, proposes to conduct, namely, to discharge according to the conditions and limitations of their NPDES permit into the East River from the Ravenswood Generating Station located at 3854 Vernon Boulevard, Long Island City, Queens County, New York , will comply with the applicable provisions of the Effluent Guidelines and Standards for the Steam Electric Power Generating Point Source Category as formally established under Sections 301, 302, 306 and 307 of the Act and which became effective upon publication in the Federal Register (40CFR, Part 423), October 8, 1974, Part III.

However, the classifications and standards governing the quality and purity of waters of New York State have been determined to remain applicable for the purposes of the Act, and to assure compliance of the subject discharge(s) with these effective water quality standards and the appropriate requirements of State Law, (Article 17, Title 3 of the Environmental Conservation Law, Chapter 664, Laws of New York 1972 and Title 6 of the Official Compilation of Codes, Rules and Regulations of the State of New York), the following effluent limitations and other limitations are hereby set forth as part of this certification as provided under Section 401 (d) of the Act and shall become conditions on any federal permit or license subject to the provisions of this section, thereby limiting the subject discharge(s) to assure achievement of such:

1. Within three (3) months of this date, the company shall file for approval with the Department at its offices in Stony Brook and in Albany a report on all water treatment, corrosion inhibitor, anti-fouling, slimicide, bio-cide and boiler cleaning chemicals or compounds. Such report shall identify each product by chemical formula and/or composition, annual consumption, frequency of use, maximum use per incident, effluent concentration, available bioassay and toxicity limits, and procedures for use. Approval shall only be granted for uses which do not contravene New York State Water Quality Standards. Except for emergency measures to maintain equipment which shall be reported to the Department within twenty-four hours, no substitutions will be allowed without prior approval. As determined by the Department, wastewaters containing chemicals and/or oil shall be collected and treated prior to dilution with non-contact cooling water on a schedule, to meet effluent limitations, and in facilities which shall be approved by the Department, provided that the company shall then have sixty days after receipt of the Department determination to propose for consideration alternative limits, facilities, controls, and measures.

2. Within three (3) months of this date, the company shall file for approval with the Department at its offices in Stony Brook and in Albany a report on chlorine use and chlorination practice. Such report will include practices which minimize the impact of chlorine on water resources and shall provide, as practicable, that there shall not be simultaneous chlorination of separable condensers or groups of condensers in a single unit, or of more than one unit in a multi-unit site. A maximum effluent concentration of 0.5 mg/l residual chlorine is imposed upon any discharge, and where this limit is not now achieved, a compliance schedule will be imposed.

3. Within three (3) months of this date, the company shall file for approval with the Department at its offices in Stony Brook and in Albany a report containing a tabulation of all fish impingement data collected to date. Previously submitted reports need not be duplicated, but data location must be completely identified. Reported data shall specify cooling water flow, dates, times, available operating and meteorological conditions, and species, numbers and other available biological information.

4. Within five (5) months of this date, the company shall file for approval with the Department at its offices in Stony Brook and in Albany a report containing a tabulation of all entrainment data collected to date. Previously submitted reports need not be duplicated, but data location must be completely identified. Reported data shall specify cooling water flow, dates, times, available operating and meteorological conditions, and species, numbers and other available biological information.

5. Within seven (7) months of this date, the company shall file for approval with the Department at its offices in Stony Brook and in Albany a detailed biological study program designed to determine effects of facility operation on aquatic organisms. As a result of such study program, as determined necessary by the Department, the company shall implement reasonable methods and procedures to reduce to the fullest extent possible the effects of facility operation on aquatic organisms. Segments of such study program shall be implemented as approved by the Department. Appropriate periodic reports shall be made as required. Such study program may be modified from time to time by the Department as necessary.

6. Starting the next calendar quarter, the company shall submit to the Department at its offices in Stony Brook and in Albany a quarterly report of daily operating data by the 15th of the month next following close of the quarter.

   a. Daily minimum, maximum, and average station electrical output shall be determined and logged.

   b. Daily minimum, maximum and average water use shall be directly or indirectly measured or calculated and logged.

   c. Daily minimum, maximum and average intake and discharge temperatures shall be logged.

   d. At least hourly measurements or readings shall form the basis for data collection in a., b., and c.

7. The company shall file with the Department at its offices in Stony Brook and in Albany a report of tri-axial isothermal measurements in the waters receiving the discharge. The study shall provide for temperature measurements in increments of 1°F down to a level of 1°F temperature excess above that which would have existed prior to addition of heat of artificial origin.

   The survey shall be conducted during July and August, 1976 ~~1975~~ and repeated in 1978. At least two complete tidal cycles shall be surveyed.

   On February 1 of the years following the surveys, the company shall file a report on the previous years intensive isothermal survey. Such report shall include a complete evaluation of the observed data in respect to predictive models, and/or estimates of temperature distributions, and assumptions used for their construction, as may have been previously filed with the Department.

Meteorological conditions, hydrological conditions, heat transfer coefficients, dispersion coefficients, salinity, tidal data and any other appropriate data necessary to supplement and assist interpretation of the thermal plume mapping program shall be presented. Such data shall be correlated and integrated to predictive models and/or estimates of temperature distribution previously presented to the Department, with full justification made for adjustments in previous assumptions and predictions. A revision of expected temperature distributions as appropriate from the data gathered shall be presented and justified.

Dissolved oxygen profiles of the river cross-section shall be determined and reported during the plume mapping program. Five transects, (at the point of discharge, at the up-and down-stream mid-points, and at the extremes of the plume) shall be run each tidal cycle.

Subject to the biological study program required and to Department biological investigations and/or studies on its own initiative, the intensive isothermal mapping may be extended, delayed, or postponed indefinitely as the Department shall determine. Based on the data obtained from these studies and/or the biological study program, the Department shall determine whether and/or what reductions, alterations, discharge modes or discharge management shall be necessary to achieve, protect, or maintain water quality standards for thermal discharges.

8. The company shall file with the Department at its offices in Stony Brook and in Albany, concurrent with filing with the U.S. Environmental Protection Agency, copies of any applications, reports and supporting data filed pursuant to Sections 316(a) and 316(b) of the Act.

9. Should any limitation or condition of this certification or any permit issued require construction in or on waters of the state or the banks or bed thereof, such construction and associated excavation, fill or disturbance shall require prior approval of the Department under stream protection and tidal wetlands regulations.

10. Garbage, cinders, ashes, oils, sludge or other refuse - None in any waters of the marine district as defined by Environmental Conservation Law (§ 17-0105).

11. Toxic wastes, oil, deleterious substances, colored or other wastes, or thermal discharges - None alone or in combination with other substances or wastes in sufficient amounts to be injurious to edible fish and shellfish, or the culture or propagation thereof, or which shall in any manner affect the flavor, color, odor or sanitary condition or such fish or shellfish so as to injuriously affect the sale thereof, or which shall cause any injury to the public and private shellfisheries of this State.

12. All thermal discharges to the waters of the State shall assure the protection and propagation of a balanced, indigenous population of shellfish, fish, and wildlife in and on the body of water.

13. The location, design, construction, and capacity of cooling water intake structures, in connection with point source thermal discharges, shall reflect the best technology available for minimizing adverse environmental impact.

14. The company may at any time request modification of any condition upon presentation of an alternative program. The original condition shall remain in effect unless and until expressly modified by the Department.

A copy of this certification is being forwarded to the U.S. Environmental Protection Agency Region II.

Very truly yours,

William L. Garvey, P.E.
Chief, P.D.E.S. Permit Section
Division of Pure Waters

cc: Mr. John Hanna (General Counsel Office)
Mr. Thomas Quinn (Industrial Programs)
Mr. Richard Newman (DEC Region 2)
EPA Region II

452

AFFIDAVIT OF KENT P. SANDERS, IN SUPPORT OF RESPONDENT JOSEPH MARTEN'S VERIFIED ANSWER AND IN OPPOSITION TO VERIFIED PETITION, SWORN TO APRIL 24, 2014 [452- 461]

SUPREME COURT OF THE STATE OF NEW YORK
COUNTY OF QUEENS
----------x
In the Matter of the Application of

SIERRA CLUB, and HUDSON RIVER FISHERMEN'S ASSOCIATION, NEW JERSEY CHAPTER, INC.,

Index No. 2949-2014

Hon. Robert J. McDonald

Petitioners,

For Judgment Pursuant to Article 78 of the Civil Practice Law and Rules,

-against-

JOSEPH MARTENS, COMMISSIONER, NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION,

Respondent,

TC RAVENSWOOD LLC,

Necessary Party.
----------x

AFFIDAVIT OF KENT P. SANDERS IN SUPPORT OF RESPONDENT'S VERIFIED ANSWER AND IN OPPOSITION TO THE VERIFIED PETITION

STATE OF NEW YORK }
} SS:
COUNTY OF ALBANY }

KENT P. SANDERS, being duly sworn deposes and says:

1. I am the Deputy Chief Permit Administrator in the Division of Environmental Permits at the central office of the New York State Department of Environmental Conservation ("DEC") in Albany, NY. I submit this affidavit in support of the Respondent, DEC Commissioner's verified answer and in opposition to the verified petition.

2. I have been employed at DEC for thirty-two years. I have been the Deputy Chief Permit Administrator since 2010. From 2003 to 2010, I held the position of Deputy Regional Permit Administrator. I have also held the positions of Environmental Analyst (1999-2003), Environmental Specialist Trainee (1999), Senior Fish and Wildlife Technician (1985-1999), and Fish and Wildlife Technician (1982-1984).

3. As the Deputy Chief Permit Administrator, I supervise a unit of environmental analysts within the Division of Environmental Permits who review and process permit applications received by DEC's central office to ensure that the applicable statutory and regulatory requirements are met. These requirements include, for example, the processing of an application within certain timelines, the completeness of an application, compliance with state environmental regulatory laws and regulations including the State Environmental Quality Review Act ("SEQRA") and the Waterfront Revitalization and Coastal Resources Act ("Waterfront Act"), public notice of the proposed project, and rendering a final decision.

4. In its processing of permit applications, the Division of Environmental Permits is assisted by DEC regulatory program staff, depending on which programmatic area an application touches upon. Regulatory program staff assist in the technical review of a permit application and in determining whether an application meets the applicable regulatory standards for issuance of a permit. Division of Environmental Permits staff coordinate review of permit applications, to ensure the concerns of program staff are met and that, among other things, proper reviews are conducted under SEQRA and the Waterfront Act.

5. I was responsible for coordinating review of the application submitted by the Ravenswood Generating Station for an Initial permit to continue withdrawing water from the East River for cooling and other processes related to electrical generation. The application was

submitted pursuant to Environmental Conservation Law ("ECL") Article 15, Title 15 (the "Water Resources Law"). Together with my permit staff and technical program staff, I regularly review applications for permits under the Water Resources Law. I personally reviewed and evaluated the Ravenswood Initial permit application and supporting material for the application, in consultation with DEC technical program staff.

6. I am familiar with the facts and circumstances regarding this application and the Ravenswood facility. This affidavit is based on my personal knowledge, my review of DEC records and files, and discussions with DEC permit staff and technical staff from the DEC Bureau of Water Resource Management within the Division of Water.

THE RAVENSWOOD GENERATING STATION INITIAL PERMIT

7. The Ravenswood Generating Station is a 2,480 megawatt power plant located at 38-54 Vernon Blvd., in Long Island City, Queens, New York. Ravenswood Generating Station Fact Sheet, dated June 2012, at page 1, attached hereto as Exhibit A; Administrative Record ("AR") at 53. It is situated along the east bank of the upper East River, directly across from Roosevelt Island. AR 3. The facility is comprised of three conventional steam generating units, a combined cycle unit, and eleven simple cycle gas turbine units, which run on natural gas, fuel oil, and kerosene. Exhibit A at 1; AR 3, 93. Ravenswood has the capacity to serve approximately 21 percent of New York City's peak load. Exhibit A at 1. The plant has been in operation since 1963 and is currently owned by TC Ravenswood LLC. AR 1, 93.

8. Since Ravenswood's water withdrawal system has the capacity to withdraw over 100,000 gallons of water per day, it was required to file Annual Water Withdrawal Reports with DEC pursuant to Title 33 of the Water Resources Law. Ravenswood filed these reports with DEC by the February 1st deadline in 2010, 2011, and 2012. Each report includes the facility's maximum water withdrawal capacity for the previous year.

9. On May 31, 2013, Ravenswood submitted an application to DEC for an Initial water withdrawal permit to withdraw up to 1,534.752 million gallons per day ("MGD") of water from the East River for once through cooling and other processes related to electrical generation at the plant. AR 1-3. The application contained the following exhibits: a general map; engineer's report; water conservation program; annual reporting form; project justification; and transmittal letter. AR 2-35.

10. DEC determined that a project justification is not applicable to Initial permits because those permits are for preexisting water withdrawal systems that are entitled to continue their withdrawals. As Ravenswood was one of the first water withdrawal systems to submit an Initial permit application, it was not aware that a project justification is not required for its application. DEC also determined that a watershed map is not applicable or necessary to the Ravenswood Initial permit application because the facility is located on the East River, which drains directly into the Atlantic Ocean.

11. On August 1, 2013, DEC issued Ravenswood a Notice of Complete Application, signaling that enough information had been submitted for DEC to commence review of the Initial permit application. AR 36. The Notice stated that the project is not subject to SEQRA because it is a Type II action. DEC staff determined that the ministerial exemption under SEQRA and SEQRA regulations applies to the issuance of Initial permits because the Legislature has mandated that DEC issue Initial permits to those applicants that properly reported their maximum water withdrawal capacity to DEC by February 15, 2012. Since Initial permits cannot be approved or denied on the basis of SEQRA review, DEC determined that their issuance is a ministerial act.

12. On August 7, 2013, DEC issued a notice in its Environmental Notice Bulletin stating that DEC had made a tentative determination to issue an Initial water withdrawal permit to Ravenswood and informing the public that DEC would accept comments on the Initial permit through August 22, 2013. AR 41-42. The notice repeated that the project is not subject to SEQRA because it is a Type II action. AR 42. As the issuance of the Ravenswood Initial permit was exempt from SEQRA, no SEQRA lead agency was designated. AR 42.

13. On August 28, 2013, DEC issued a second notice in the Environmental Notice Bulletin to inform the public that the comment period for the Ravenswood Initial permit was extended until September 11, 2013. AR 47. The notice stated that the issuance of Initial permits is a ministerial action, which is exempt from SEQRA. AR 48. It also corrected an earlier statement made by DEC concerning the Waterfront Act. The August 7 notice had mistakenly stated that Ravenswood is not located in a Coastal Management area and is not subject to the Waterfront Act. AR 42. The August 28 notice acknowledged that Ravenswood is in fact in a Coastal Management area, and therefore, is subject to the Act. AR 48. However, DEC determined that the issuance of the Initial permit is exempt from the requirements of the Waterfront Act, including coastal consistency review, because it is a Type II action. AR 58-59.

14. DEC issued an Initial permit for Ravenswood on November 15, 2013. AR 51, 53. The Initial permit allowed Ravenswood to withdraw a maximum capacity of 1,390 MGD, not 1,534.752 MGD as requested by Ravenswood, because 1,390 MGD was the amount listed in its annual report to DEC as of February 15, 2012. AR 51, 53; *see* ECL § 15-1501(9). DEC set the expiration date of the Initial permit as October 31, 2017 because that is the date that the Ravenswood State Pollutant Discharge Elimination System ("SPDES") permit expires, and DEC

regulations direct DEC to review water withdrawal permit applications in coordination with SPDES permits. 6 NYCRR § 601.7(f); AR 51.

15. The Water Resources Law and DEC's implementing regulations give DEC limited discretion to place conditions on an Initial permit to ensure that it employs "environmentally sound and economically feasible water conservation measures to promote the efficient use of supplies." 6 NYCRR § 601.7(e); *see* ECL § 15-1501. This discretion is limited by the Legislature's mandate that the Initial permit be issued for the full withdrawal capacity reported by the facility to DEC in 2012. ECL § 15-1501(9). The Water Conservation Program Form submitted with Ravenswood's Initial permit application provided DEC with information on the water conservation measures being employed by the facility. *See* AR 13-18.

16. In addition, the Engineer's Report, also submitted with Ravenswood's Initial permit application, shows that the variable frequency drives that have been retrofitted on the plant's circulating water pumps led to a twenty-six percent reduction in water withdrawals during a ten-month period between July 2012 and April 2013. AR 8-9. The variable frequency drives allow for decreased surface water withdrawal during periods of reduced electric generation and when water temperatures are colder. AR 8. These drives were installed pursuant to the Biological Monitoring Requirements Section of the Ravenswood's SPDES permit, which mandates the use of the best technology available for minimizing adverse environmental impacts. *See* AR 76-78, 87-88, 105, 125-127. As discussed in the accompanying affidavit of Roy A. Jacobson, Jr., the Biological Monitoring Requirements require a reduction in the water withdrawn by Ravenswood in order to reduce impingement and entrainment of aquatic life. *See Id*. Since 6 NYCRR 601.7(f) directs DEC to review Initial permit applications in coordination

with the SPDES permit program, DEC incorporated the SPDES Biological Monitoring Requirements Section by reference in the Ravenswood Initial permit. *See* AR 54.

17. DEC placed three additional conditions on the Ravenswood Initial permit, all of which are required by DEC's regulations implementing the Water Resources Law and are considered best practices by DEC. The first condition is the submission of an Annual Water Withdrawal Report, as required by DEC regulations at 6 NYCRR § 601.5. AR 54. This report includes information regarding approved sources of water supply, source capacities, average and maximum day water use data and water conservation, and efficiencies employed during the past calendar year. AR 54. The second condition is to calibrate all water source meters or other measuring devices for accuracy at least once a year, as required by DEC regulations at 6 NYCRR § 601.20(a)(2). AR 54. The third condition is to install and maintain meters or other measuring devices on all sources of water supply used in the water withdrawal system, as required by DEC regulations at 6 NYCRR § 601.19. AR 54. These three conditions, combined with the SPDES Biological Monitoring Requirements and other water conservation measures described in Ravenswood's Water Conservation Program Form, meet the requirements for an environmentally sound and economically feasible water conservation program. *See* AR 59.

18. Ravenswood answered "no" to several questions on the Water Conservation Program Form and DEC determined that additional conditions were not required on the basis of these answers. *See* AR 15-17. For example, Ravenswood reported that it does not regularly survey its facility or underground piping for leakage. AR 16. DEC determined that Ravenswood's current actions for monitoring leaks meet best practices for this type of facility because Ravenswood uses water entirely on-site, is located next to its water source, and continuously returns substantially all of the withdrawn water to that source. Ravenswood's

current actions for monitoring leaks include continuously monitoring the site, analyzing water usage data monthly, and addressing leaks as soon as possible once they are detected. AR 16. Since the vast majority of pipes carrying cooling water at the Ravenswood facility are above ground, there is no need to survey underground piping for leakage.

19. Ravenswood also reported that it does not conduct a water audit at least once a year. AR 15. DEC determined that a water audit is unnecessary for this type of facility because there is no consumptive loss, meaning that substantially all of the water that is withdrawn from the East River is returned to the East River. Finally, Ravenswood stated that it does not reuse or recycle primary use water, and does not use rainwater, stormwater runoff or wastewater. AR 17. DEC determined that it is not feasible to reuse primary use water or use rain, storm, or waste water in lieu of water from the East River.

20. DEC did not review the Ravenswood Initial permit application to make the determinations listed in ECL §15-1503(2) and 6 NYCRR § 601.11(c) because DEC has determined that those provisions are not applicable to Initial permits.

21. Although not statutorily required, DEC issued a response to public comments on the Ravenswood Initial permit when it issued the Initial permit on November 15, 2013. AR 57-61. In that response, DEC explained why the issuance of the permit is exempt from SEQRA and the Waterfront Act. AR 58-59. It also stated that impacts to aquatic life from the Ravenswood water withdrawal system have been studied and addressed as part of the Ravenswood SPDES permit. AR 59-61. It explained that the SPDES permit measures concerning water conservation and aquatic life protection have been incorporated by reference in the Initial permit because of the requirements of 6 NYCRR § 601.7(f). AR 59-61.

22. On or around December 18, 2013, DEC received a letter from Ravenswood, stating that its Annual Water Withdrawal Reports submitted for the years 2009-2011 inadvertently omitted certain withdrawals from its maximum reported capacity. AR 137-38. Taking the plant's low pressure saltwater cooling system withdrawals into account raises the plant's maximum water withdrawal capacity to 1,527.840 MGD. AR 137-38. The letter explained that this maximum capacity is necessary to maintain the reliability of the electrical grid and to provide critical electric generation during natural disasters or other emergencies. AR 138. For example, during and in the aftermath of Superstorm Sandy, Ravenswood provided approximately fifty percent of New York City's electric load, requiring all units to generate at maximum capacity. AR 138. Ravenswood also submitted revised Annual Water Withdrawal Reports for 2009-2011, and an engineer's certification stating that the low pressure saltwater cooling system dates back to 1962. AR 139-151.

23. On the basis of this submission, DEC determined that, pursuant to ECL § 15-1501(9), it was necessary to correct the Initial permit to increase the maximum water withdrawal capacity from 1,390 MGD to 1,527.84 MGD. DEC sent Ravenswood a letter dated February 19, 2014, informing it of this determination. AR 152-53.

24. On March 7, 2014, DEC issued a corrected Initial permit to Ravenswood, allowing it to withdraw 1,527.84 MGD. AR 154. The corrected Initial permit has the same expiration date of October 31, 2017 and contains the same conditions as the original Initial permit. AR 155-158.

CONCLUSION

25. For the reasons stated above, the Ravenswood Initial permit issued by DEC complied with applicable law, and is in no way arbitrary or capricious, or in contravention of law. For that reason, the Ravenswood Initial permit should be upheld and the verified petition denied.

26. I swear under penalty of perjury that the foregoing is true and accurate to the best of my knowledge.

Kent P. Sanders

Sworn to before me this 24th day of April, 2014.

Notary:

CRAIG L. ELGUT
NOTARY PUBLIC-STATE OF NEW YORK
No. 02EL5051588
Qualified In Suffolk County
My Commission Expires November 06, 2017

EXHIBIT A TO SANDERS AFFIDAVIT — RAVENSWOOD GENERATING STATION FACILITY HIGHLIGHTS [462- 463]

Ravenswood
Generating Station

Ravenswood Generating Station (Ravenswood), located in Queens, NY, is a 2,480 megawatt (MW) power plant that consists of multiple units employing steam turbine, combined cycle and combustion turbine technology.

The plant uses advanced technology and controls to minimize impact on the air and water. To reduce nitrogen oxide (NOx) emissions, Units 10, 20 and 30 have all been retrofitted with Close Coupled Over Air Fired systems. Unit 40 controls aimed at reducing the unit's environmental impact include a dry low NOx combustion system, selective catalytic reduction and a multi-cell air cooled condenser. The 2004 Combined Cycle Journal Award for Power Plant Efficiency and Environmentally Friendly Design was awarded to Unit 40 in recognition of these environmental controls.

Ravenswood has the capacity to serve approximately 21 per cent of New York City's peak load.

Facility Highlights

Configuration:

21 units employing steam turbine, combined cycle and combustion turbine technology:

- Units 10, 20 and 30 Gas/oil-fired boiler
- Unit 40 Dual fuel capable combined cycle unit
- 17 Dual fuel capable combustion turbines

Location:

Long Island City, Queens, New York, USA

In-Service Date:

- Unit 10 February 1963
- Unit 20 May 1963
- Unit 30 June 1965
- Unit 40 May 2004

Capacity:

2,480 MW

Fuel:

Natural gas, fuel oil and kerosene

Owner:

TransCanada

Operator:

TransCanada

Customers:

New York Independent System Operator and ConEdison of New York

TransCanada
In business to deliver

Ravenswood Generating Station

Units 10 and 20 each have a single controlled circulation, dual furnace, balanced draft, Combustion Engineering boiler and a cross-compound General Electric turbine generator. Each unit is rated at 385 MW.

Two identical controlled circulation, balanced draft, divided furnace boilers by Combustion Engineering and an Allis Chalmers/Westinghouse cross-compound turbine generator produce 981 MW of power in Unit 30.

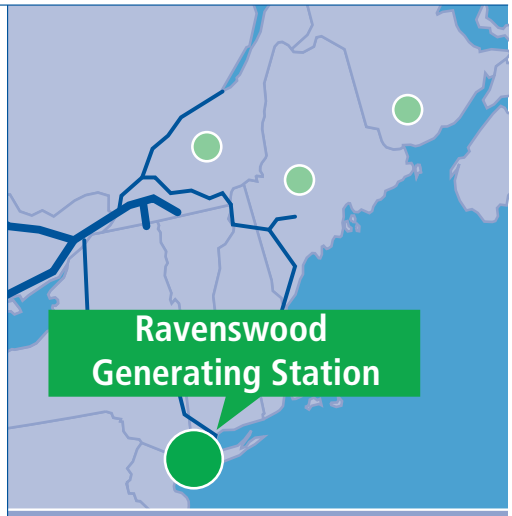
The boilers in Units 10, 20 and 30 are all capable of burning both No. 6

fuel and natural gas, which enables TransCanada to generate electricity with the most economic fuel mix to meet system demands.

Combined cycle technology was added to the Ravenswood station with the installation of Unit 40 in 2004. Unit 40 consists of a General Electric 7FA combustion turbine generator with an ALSTOM steam turbine generator, a Kawasaki heat recovery system generator, and an air-cooled condenser. Unit 40, a 250 MW unit, burns both natural gas and kerosene.

The combined cycle technology used in Unit 40 yields an operating efficiency 50 per cent higher than that of conventional steam technology.

Multiple combustion turbines are utilized in a simple cycle configuration to meet peak system demand.



Power plants owned or controlled by TransCanada

Gas storage

For further information on this facility, contact:

Thomas Quartuccio

Director

US Energy Operations – Ravenswood

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TransCanada
In business to deliver

NOTICE OF MOTION TO DISMISS OF TRANS CANADA RAVENSWOOD LLC, DATED APRIL 24, 2014 [464-465]

SUPREME COURT OF THE STATE OF NEW YORK
COUNTY OF QUEENS

In the Matter of the Application of

SIERRA CLUB, and HUDSON RIVER FISHERMEN'S ASSOCIATION, NEW JERSEY CHAPTER, INC.,

Petitioners,

For a Judgment Pursuant to Article 78 of the Civil Practice Law and Rules

-against-

JOSEPH MARTENS, COMMISSIONER, NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION,

Respondent,

TRANSCANADA RAVENSWOOD LLC,

Necessary Party.

NOTICE OF MOTION TO DISMISS

Index No. 002949/2014

Hon. Robert J. McDonald

PLEASE TAKE NOTICE:

Motion By:	Necessary Party, TC Ravenswood, L.L.C.
Date, Time, and Place of Motion:	Queens County Supreme Court Special Term – Article 78 Calendar Queens County Courthouse 88-11 Sutphin Blvd Jamaica, New York. May 2, 2014 at 11:00 a.m., or as soon as thereafter as Counsel may be heard.
Supporting Papers:	Affidavit of Daniel O'Donnell, with exhibits thereto, Affirmation of Yvonne E. Hennessey, Esq., with exhibits thereto; and accompanying Memorandum of Law.
Relief Sought:	Dismissal of the Verified Petition, pursuant to CLPR §§ 404, 406, 7804(f) and 3211(a).
Date of Notice of Motion:	April 24, 2014

Notice of Motion Served By:

HISCOCK & BARCLAY, LLP
Attorneys for TC Ravenswood, L.L.C.

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SUPREME COURT OF THE STATE OF NEW YORK

COUNTY OF QUEENS

In the Matter of the Application of

SIERRA CLUB, and HUDSON RIVER FISHERMEN'S ASSOCIATION, NEW JERSEY CHAPTER, INC.,

Petitioners,

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-against-

JOSEPH MARTENS, COMMISSIONER, NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION,

Respondent,

TRANS CANADA RAVENSWOOD LLC,

Necessary Party.

Index No. 002949/2014

Hon. Robert J. McDonald

MEMORANDUM OF LAW
IN SUPPORT OF TC RAVENSWOOD'S MOTION TO DISMISS

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TABLE OF CONTENTS

PRELIMINARY STATEMENT 1

STATEMENT OF FACTS 2

A. The Ravenswood Facility Long-Standing Operations 2

B. Water Withdrawal Permit 4

ARGUMENT 6

POINT I SIERRA CLUB AND HRFA LACK ORGANIZATIONAL STANDING 6

A. Petitioners Are Required To Prove Organizational Standing 6

B. Sierra Club Has Failed To Establish An Individual Member's Injury in Fact 8

C. The HFRA Has Failed To Establish An Individual Member's Injury in Fact 10

POINT II PETITIONERS' FAILURE TO JOIN AN INDIVIDUAL MEMBER IS FATAL. 12

POINT III PETITIONERS' CLAIMS ARE IN FACT IMPROPER COLLATERAL ATTACKS THAT ARE UNTIMELY 13

POINT IV ISSUANCE OF THE INITIAL WATER WITHDRAWAL PERMIT WAS A MINISTERIAL TYPE II ACTION NOT SUBJECT TO SEQRA REQUIREMENTS 15

A. Existing Users were Entitled to an Initial Permit Pursuant to Predetermined Regulatory Criteria 17

B. Exceedance of a Type I Threshold Does Not Reclassify a Ministerial Type II Action as Type I 20

C. Limitations on Type II Actions Should Not Be Read Into Other Provisions Where It Has Been Omitted From The Regulation 20

D. Petitioners' Inaccurate Citation of the Law Distorts the Plain Meaning of the Regulation and Should Not be Followed. 21

POINT V THERE HAS BEEN NO VIOLATION OF NEW YORK WATER RESOURCES LAW 23

POINT VI NYSDEC IS ENTITLED TO SUBSTANTIAL DEFERENCE 23

POINT VII PETITIONERS' REMAINING CLAIMS FAIL 25

CONCLUSION 26

TABLE OF AUTHORITIES

CASES

Atlantic Beach v. Gavalas, 81 N.Y.2d 322 (1993) 16

Calenzo v. Shah, 112 A.D.3d 709 (2d Dep't 2013) 21

Carver v. State of New York, 87 A.D.3d 25 (2d Dep't 2011) 24

Chevron, U.S.A. v. NRDC, 467 U.S. 837 (1984) 23-24

Citizens Organized to Protect the Env't v. Town of Irondequoit, 50 A.D.3d 1460 (4th Dep't 2008) 12

City Council v. Town Bd., 3 N.Y.3d 508 (N.Y. 2004) 24

Colella v. Bd. of Assessors, 95 N.Y.2d 401 (2000) 7

Dental Soc. of State v. Carey, 61 N.Y.2d 330 (1984) 7

Dujmich v. New York State Freshwater Wetlands Appeals Bd., 240 A.D.2d 743 (2d Dep't 1997) 16

INS v. Cardoza-Fonseca, 480 U.S. 421 (1987) 21

Lane Constr. v. Cahill, 270 A.D.2d 609 (3d Dep't 2000) 24

Lighthouse Hill Civic Ass'n v. City of New York, 275 A.D.2d 322 (2d Dep't 2000) 16

Long Island Pine Barrens Soc'y v. Planning Bd., 213 A.D.2d 484 (2d Dep't 1995) 8

New York Pub. Interest Research Group v. Dinkins, 83 N.Y.2d 377 (1994) 17

New York State Ass'n of Nurse Anesthetists v. Novello, 2 N.Y.3d 207 (2004) 6, 7

New York Youth Club v New York City Envtl. Control Bd., 39 Misc. 3d 1204(A) (N.Y. Sup. Ct. Queens County 2013) 24

Piela v. Van Voris, 229 A.D.2d 94 (3d Dep't 1997) 6

Riverkeeper, Inc. v. Town of Southeast, 9 N.Y.3d 219 (2007) 24

Santos v. ACA Waste Servs., 103 A.D.3d 788 (2d Dep't 2013) 11

Save the Pine Bush, Inc. v. City of Albany, 13 N.Y.3d 297 (2009) 6, 7

Save the Pine Bush, Inc. v. Town of Clifton Park, 50 A.D.3d 1296 (3d Dep't 2008) 6

Soc'y of Plastics Indus. v. Cnty. of Suffolk, 77 N.Y.2d 761 (1991) 7

Stephentown Concerned Citizens v. Herrick, 280 A.D.2d 801 (3d Dep't 2001) 24

Sun-Brite Car Wash v. Bd. of Zoning & Appeals, 69 N.Y.2d 406 (1987) 9

Town of Eastchester v. New York State Bd. of Real Prop. Servs., 23 A.D.3d 484 (2d Dep't 2005) 21

Village of Chestnut Ridge v. Town of Ramapo, 99 A.D.3d 918 (2d Dep't 2012) 24

Westwater v. New York City Bd. of Standards & Appeals, No. 100059-13, 2013 N.Y. Misc. LEXIS 4707 (N.Y. Sup. Ct. Oct. 15, 2013) 20, 24

Wind Power Ethics Group v. Town of Cape Vincent, No. 2010-2882, slip op. (N.Y. Sup. Ct., Jan. 26, 2011) 12

Ziemba v. City of Troy, 37 A.D.3d 68 (3d Dep't 2006) 16

STATUTES

N.Y. C.P.L.R. 217 (2014) 13

N.Y. ENVTL. CONSERV. LAW § 15-1501 (2014) 17

N.Y. ENVTL. CONSERV. LAW § 8-0105 (2014) 16

OTHER AUTHORITIES

BILL SPONSOR'S MEMORANDUM IN SUPPORT OF LEGISLATION, A.B. A5318 (S3798), L. 2011, ch. 401 (2011) 14, 18

McKinney's Consol. Laws of N.Y., Book 1, Statutes § 74 21

XXXIII NY Reg. (Nov. 23, 2011) 15, 18

XXXIV NY Reg. (Nov. 28, 2012) 15, 17, 18

REGULATIONS

N.Y. COMP. CODES R. & REGS. tit. 19 § 600 (2014) 25

N.Y. COMP. CODES R. & REGS. tit. 6 § 601 (2014) 17

N.Y. COMP. CODES R. & REGS. tit. 6 § 617 ..... passim

PRELIMINARY STATEMENT

Respondent TC Ravenswood, LLC ("TC Ravenswood")[1] respectfully submits this Memorandum of Law and accompanying papers in support of its motion to dismiss the Petition, dated February 18, 2014.

At the outset, Sierra Club and Hudson River Fisherman's Association, New Jersey Chapter, Inc. ("HRFA") (collectively referred to as "Petitioners") lack standing to challenge the water withdrawal permit ("WWP") issued by Respondent New York State Department of Environmental Conservation ("NYSDEC") to TC Ravenswood for the Ravenswood Generating Station ("Ravenswood Facility"). Petitioners have each failed to establish that at least one member of their organization has suffered an injury in fact sufficient to confer standing to sue individually. Indeed, they could not – the Ravenswood Facility has withdrawn water from the East River since the 1960s such that the challenged WWP did not authorize any new activity that could cause an injury in fact. Moreover, Petitioners' attempts at establishing a sufficient injury in fact are vague, conclusory, too generalized and riddled with hearsay. They are also no different in kind than that of the public at large. Further, Petitioners' claim of "informational injury" is, at best, misplaced. Finally, even assuming arguendo that Petitioners could establish standing of an individual member of each organization, Petitioners' failure to join any such member, let alone even identify them by name, is fatal.

Petitioners fare no better with respect to the substance of their claims. The Ravenswood Facility has been in operation for decades, during which time it has been authorized to withdraw water from the East River. The WWP for the Ravenswood

[1] The caption contained in the Petition inaccurately identifies "TC Ravenswood, LLC" as "TRANSCANADA RAVENSWOOD LLC."

Facility, which Petitioners are challenging in this proceeding, did not authorize any activity that was not already authorized by the NYSDEC. Moreover, despite Petitioners' claims, the Ravenswood Facility's water withdrawals have been thoroughly reviewed by the NYSDEC. In particular, TC Ravenswood's State Pollution Discharge Elimination System ("SPDES") permit for the Ravenswood Facility requires Best Technology Available ("BTA") in order to minimize to the maximum extent practicable the environmental impacts associated with the Ravenswood Facility's cooling water intake structures and associated water withdrawals.

Given the foregoing, there is no merit to Petitioners' claims that the NYSDEC improperly processed the initial WWP for the Ravenswood Facility. Indeed, the newly enacted Water Resources Protection Act ("Act"), the implementing regulations promulgated by the NYSDEC, and the legislative history all confirm that the NYSDEC lacked discretion in issuing TC Ravenswood an initial WWP for the Ravenswood Facility such that its action was properly classified as a ministerial Type II action under the State Environmental Quality Review Act ("SEQRA"). Moreover, the NYSDEC's decision making was rationally based and entitled to substantial deference. Because Petitioners' other claims flow from the Type II classification, they also lack merit and should be dismissed as a matter of law.

STATEMENT OF FACTS

A. The Ravenswood Facility Long-Standing Operations

TC Ravenswood owns and operates the Ravenswood Facility, an electric generating facility located in Long Island City, Queens, New York. *See* Affidavit of Daniel O'Donnell, dated April 23, 2014 ("O'Donnell Aff."), ¶ 7. The Ravenswood

Facility produces electricity for use throughout New York City. O'Donnell Aff. ¶ 8. With a combined capacity of 2,480 megawatts ("MW"), the Ravenswood Facility has the ability to, and has, produced up to 21% of the total electricity used by New York City. *Id.* ¶¶ 10-11.

The Ravenswood Facility consists of three (3) steam boiler turbine/generators, known as Units 10, 20 and 30; a combined cycle unit, known as Unit 40 and; several simple cycle combustion turbines. *Id.* ¶ 9; A.R.[2] at 3, 93. Units 10, 20 and 30 were constructed in the early to mid-1960s, while Unit 40 went into service in 2004. O'Donnell Aff. ¶¶ 7, 12.

For approximately 50 years, the Ravenswood Facility has used a once-through cooling water system, which withdraws water from the East River that is circulated through the cooling system to cool the Unit 10, 20 and 30 boiler equipment, turbines, and auxiliary equipment, and then discharged back into the East River. O'Donnell Aff. ¶ 13; A.R. at 7.

Cooling water from the East River is a critical component of the production of electricity at the Ravenswood Facility, as it is necessary for proper operation, and to prevent overheating. O'Donnell Aff. ¶ 15; A.R. at 8. The maximum capacity of the Ravenswood Facility's cooling water system, which has not changed since the facility was initially installed in the 1960s, is 1527.84 million gallons per day ("MGD"). O'Donnell Aff. ¶ 16. This ensures that there is sufficient water to keep the units properly cooled and to prevent overheating. *Id.* ¶ 17. The actual amount of cooling water needed per day to keep the boilers and equipment at the Ravenswood Facility from overheating

[2] "A.R." refers to the Administrative Record, dated March 13, 2014.

varies based on which units are operating and the amount of time that the units are operating (i.e. load). *Id.* ¶ 18.

Until enactment of the Act in 2011 and the implementing regulations in 2012, the Ravenswood Facility's cooling water intake system, including the associated water withdrawals from the East River, were regulated solely under the Clean Water Act ("CWA"). *Id.* ¶¶ 22, 34. Under the CWA, the Ravenswood Facility is subject to the BTA for cooling water intake structure requirements contained in section 316(b) of the CWA and 6 N.Y.C.R.R. Part 704.5. *Id.* ¶ 23. The purpose of BTA is to minimize environmental impacts associated with cooling water intake structures. *Id.* ¶ 24.

The §316(b) and §704.5 requirements applicable to the Ravenswood Facility are contained in its SPDES permit issued by the NYSDEC in 2007, and renewed on November 1, 2012.[3] *Id.* ¶ 25; A.R. at 66-86, 116-36. TC Ravenswood's SPDES permit underwent SEQRA review when it was originally issued in 2007. O'Donnell Aff. ¶ 26; A.R. at 62-65.

Petitioners failed to comment on the draft 2012 SPDES Permit, or the BTA requirements applicable to the Ravenswood Facility's cooling water intake contained therein, during the public comment period or otherwise challenge TC Ravenswood's 2012 SPDES Permit. O'Donnell Aff. ¶ 31.

B. Water Withdrawal Permit

Despite its long-standing water withdrawals from the East River and the existence of its SPDES permit, which contained appropriate conditions to mitigate the

[3] The only parties that commented on the draft 2012 SPDES permit during the public comment period were TC Ravenswood and the United States Environmental Protection Agency. *See* NYSDEC Response to Comments attached to the O'Donnell Affidavit as Exhibit D.

environmental impacts associated with the Ravenswood Facility's cooling water intake system, following promulgation of the NYSDEC's regulations implementing the Act, TC Ravenswood submitted an application for an initial WWP to the NYSDEC on May 31, 2013 ("WWP Application"). O'Donnell Aff. ¶ 39; A.R. at 1-35. The WWP Application did not seek authorization to withdraw water in an amount or kind different than what had been previously authorized at the Ravenswood Facility for approximately 50 years. *See* O'Donnell Aff. ¶ 13, 39; A.R. at 1-35.

NYSDEC issued notice of its tentative determination to issue an initial WWP to TC Ravenswood in the Environmental Notice Bulletin ("ENB") on August 7, 2013 and again on August 28, 2013. A.R. at 37-45, 46-50. The August 28, 2013 notice made clear that the water withdrawal that would be authorized by the initial WWP for TC Ravenswood was not new. A.R. at 48. (stating that "[t]he applicant has applied for an initial permit for the *continued* withdrawal of 1.5 billion GPD of water for operation of the Ravenswood Generating Station.") (emphasis added). NYSDEC issued the initial WWP for the Ravenswood Facility on November 15, 2013 and, due to corrections made to the annual water withdrawal reports previously submitted by TC Ravenswood, NYSDEC issued a revised initial WWP for the Ravenswood Facility on March 7, 2014. A.R. at 53-56, 155-58.

ARGUMENT

POINT I

SIERRA CLUB AND HRFA LACK ORGANIZATIONAL STANDING

A. Petitioners Bear The Burden of Proving Organizational Standing

"Standing requirements 'are not mere pleading requirements but rather an indispensable part of the plaintiffs case' and therefore 'each element must be supported in the same way as any other matter on which the plaintiff bears the burden of proof.'" *Save the Pine Bush, Inc. v. City of Albany*, 13 N.Y.3d 297, 306 (2009) (citing *Lujan v. Defenders of Wildlife*, 504 U.S. 555, 561 (1992)). Standing is a threshold requirement for any party seeking to challenge governmental action. *New York State Ass'n of Nurse Anesthetists v. Novello*, 2 N.Y.3d 207, 2011 (2004). Standing in environmental cases is not automatic, nor can it be met by conclusory allegations of harm. *Id.* at 214-15; *See also Piela v. Van Voris*, 229 A.D.2d 94, 96 (3d Dep't 1997) (upholding dismissal based on lack of standing where the plaintiffs' conclusory allegations that they were "affected by [respondents'] actions" were sufficient to state a claim, but lacked probative value to establish it) (alteration in original).

In order for an organization to establish that it has standing to sue, it must (1) demonstrate that at least one of its members would have standing to sue individually; (2) that the interests it asserts are germane to its purpose; and (3) that the resolution of the claim does not require the participation of its individual members. *Save the Pine Bush, Inc. v. Town of Clifton Park*, 50 A.D.3d 1296, 1297 (3d Dep't 2008), *lv. denied*, 10 N.Y.3d 716 (2008) (quoting *Saratoga Lake Protection & Improvement Dist. v. Dep't of Pub. Works of City of Saratoga Springs*, 46 A.D.3d 979, 982 (2007), *lv. denied*, 10

N.Y.3d 706 (2008)); *see e.g. Dental Soc. of State v. Carey*, 61 N.Y.2d 330, 333 (1984) (stating that "[t]he standing of an organization such as respondent to maintain an action on behalf of its members requires that some or all of the members themselves have standing to sue, for standing which does not otherwise exist cannot be supplied by the mere multiplication of potential plaintiffs").

The requisite test for an individual member to establish standing to sue is comprised of two-prongs. First, the party must show "injury in fact." *New York State Ass'n of Nurse Anesthetists*, 2 N.Y.3d at 211. To do so, the party must demonstrate that it "will actually be harmed by the challenged administrative action." *Id.* The requirement of injury in fact is intended to balance the public's interest in efficient governmental actions with an interest in adequate judicial review. *Soc'y of Plastics Indus. v. Cnty. of Suffolk*, 77 N.Y.2d 761, 779 (1991). Petitioners maintain the burden to show direct harm in some way different from that of the public at large. *Save the Pine Bush, Inc.*, 13 N.Y.3d at 304 (quoting *Soc'y of Plastics Indus.*, 77 N.Y.2d at 774).

Second, the alleged injury must fall within the "'zone of interests, or concerns, sought to be promoted or protected by the statutory provision under which the agency has acted.'" *Id.* at 308 (quoting *Soc'y of Plastics Indus.*, 77 N.Y.2d at 773); *see also Colella v. Bd. of Assessors*, 95 N.Y.2d 401, 409-10 (2000).

As detailed above, each Petitioner bears the burden of establishing that it has standing to bring this proceeding and challenge the Ravenswood Facility's WWP. *See Soc'y of Plastics Indus*, 77 N.Y.2d at 769. In doing so, Petitioners must offer probative evidence, as allegations without evidentiary support are patently insufficient. *See id.* at 778.

B. Sierra Club Has Failed To Establish An Individual Member's Injury in Fact

A review of the Petition suggests that Sierra Club is a national non-profit organization with over 600,000 members, that its work includes the protection of water resources, and that some unidentified members "are injured by the environmental damage caused to the East River, the Hudson River, Long Island Sound, the New York Harbor and the New York Bight by Ravenswood's water usage for its cooling water intake structures." Petition ¶ 2. The Petition also alleges that Sierra Club and its members "suffer informational injury and injury to [their] public participation rights as a result of DEC's failure to conduct a full environmental assessment of Ravenswood's water withdrawals." *Id.* at 2-3.

The Affidavit of Roger Downs adds only that the Sierra Club has focused on fish kills by power plants in New York, that he has personal experience in fish entrainment and impingement issues, and that he lobbied on behalf of the Sierra Club for passage of the Act. *See, generally,* Affidavit of Roger Downs, dated March 21, 2014 ("Downs Aff.").

Taken as a whole, the Petition and Downs Affidavit fail to establish the Sierra Club's standing in this proceeding. The Sierra Club has not identified one member that lives near, uses, or has even visited the East River. Indeed, not even Mr. Downs makes such an allegation. Rather, the entire crux of Sierra Club's basis for standing are generalized concerns about cooling water intake structures that are not specific in any way to the Ravenswood Facility. *See Long Island Pine Barrens Soc'y v. Planning Bd.*, 213 A.D.2d 484, 485-86 (2d Dep't 1995) (noting that generalized allegations that a project will have a deleterious impact upon the petitioner or its members are insufficient

to establish standing; further stating that where an allegation of injury does not demonstrate that the individual petitioners will suffer an environmental injury which is in any way "different in kind and degree from the community generally," such allegations fail to satisfy the petitioner's burden of establishing an injury in fact); *see also Sun-Brite Car Wash v. Bd. of Zoning & Appeals,* 69 N.Y.2d 406, 413 (1987).

Moreover, Sierra Club's allegations and stated concerns are not even tied to the specific location of the Ravenswood Facility in the East River but rather focused on a much larger geographic area. *Compare* Downs Aff. ¶¶ 4-6 (noting concerns with power plants "in New York[,]" explaining report regarding how power plant intake structures harm "the Hudson River, Long Island Sound and New York Harbor[,]" and efforts regarding the Hudson River), *with* O'Donnell Aff. ¶¶ 45-48 (explaining location of the facility on the over 16 mile East River). The Sierra Club, therefore, fails to provide any bases upon which to establish that any individual member has suffered an injury in fact sufficient to confer standing.

Moreover, there can be no injury in fact here. As detailed above, the Ravenswood Facility has been in operation for approximately 50 years. During this time, it has withdrawn water from the East River for its cooling water intake structures. It was merely a change in law that required TC Ravenswood to secure a WWP, not a change in environmental impacts. Indeed, the water withdrawals permitted by the challenged WWP are no different in kind or amount than those previously authorized by the NYSDEC for this facility.

Finally, the Sierra Club's claim to have suffered an "informational injury" does not confer standing. Petitioners have not provided, and TC Ravenswood has been unable

to find, a single case in New York recognizing "informational injury." The legal viability of informational injury in New York is questionable at best. More to the point, to confer standing based solely on informational injury would effectively eradicate long-standing Court of Appeals' precedent and vitiate any need to establish standing in the context of SEQRA and related environmental cases. Indeed, under Sierra Club's premise, an organizational plaintiff would be able to undermine established principles of standing by simply requesting that an agency prepare an environmental impact statement ("EIS").

In short, the Sierra Club has failed to meet a key requirement of organizational standing. It therefore lacks standing to bring this proceeding and its claims, therefore, must be dismissed.

C. The HFRA Has Failed To Establish An Individual Member's Injury in Fact

The HRFA fares no better than the Sierra Club. In the Petition, HFRA indicates that it is a regional non-profit organization with members that are recreational fisherman who purportedly fish in the Hudson-Raritan Estuary every day and that, similar to the Sierra Club, some unidentified members "are injured by the environmental damage caused to the East River, the Hudson River, Long Island Sound, the New York Harbor and the New York Bight by Ravenswood's water usage for its cooling water intake structures." Petition ¶ 3. The Petition also alleges that HFRA and its members "suffer informational injury and injury to [their] public participation rights as a result of DEC's failure to conduct a full environmental assessment of Ravenswood's water withdrawals." *Id.* at 3.

The Affidavit of Gilbert Hawkins adds only that the HFRA holds meetings wherein members report on the fishing conditions in the New York Harbor and give tips

on fishing in various waterways, including the East River; unnamed members fish in the Harbor; he fishes whenever he can; and power plant fish kills is a concern of HFRA. *See, generally,* Affidavit of Gilbert Hawkins, dated March 21, 2014 ("Hawkins Aff.").

Taken as a whole, the Petition and Hawkins Affidavit fail to establish the HFRA's standing in this proceeding. The HFRA has not identified one specific member that lives near, uses, or has even visited the East River. According to Mr. Hawkins Affidavit, the only connection he has with the East River is that he attends HRFA meetings where reports are given by other fishermen that "often relate to fishing on the East River." Hawkins Aff. ¶ 3. And while he claims to fish whenever he can, he does not indicate where in fact he fishes. This interest is wholly insufficient to establish an injury in fact. Indeed, the claims of environmental harm contained in the Hawkins Affidavit are nothing more than generalized allegations about the environmental damage caused by cooling water intake structures, and the allegations of an unsubstantiated, indirect effect on the Hudson River of cooling water intake structures located on the East River. These claims may be applicable to whether the HRFA's interest in the subject is germane to its purpose, but do not establish the requisite injury in fact that is necessary for Mr. Hawkins, or any other HFRA member, to have individual standing.[4]

Further, as with the Sierra Club, there can be no injury in fact by an HFRA member because the water withdrawals permitted by the challenged WWP are no different in kind or amount than those previously authorized by the NYSDEC for this

[4] As for allegations concerning other members, Mr. Hawkins' affidavit cannot serve to establish whether or not these unnamed members might have standing as he fails to identify any member specifically and his allegations are complete hearsay and, therefore, inadmissible. *Santos v. ACA Waste Servs.*, 103 A.D.3d 788, 789 (2d Dep't 2013) (finding statements in an affidavit were inadmissible hearsay because they did not show that the affiant had personal knowledge of the facts).

facility. Finally, the HFRA's claim to have suffered an "informational injury" does not confer standing for the reasons set forth above relative to the Sierra Club.

In sum, HFRA also has failed to meet a key requirement of organizational standing. It therefore lacks standing to bring this proceeding and its claims, therefore, must be dismissed.

POINT II

PETITIONERS' FAILURE TO JOIN AN INDIVIDUAL MEMBER IS FATAL

Separate and apart from each Petitioner's failure to establish that one of its members has standing, petitioners' failure to join at least one of their members as a petitioner warrants dismissal. Courts have held that to have standing, the organization must join those member(s) that it claims would be harmed by the respondent's actions as petitioners to the proceeding. *Citizens Organized to Protect the Env't v. Town of Irondequoit*, 50 A.D.3d 1460, 1461 (4th Dep't 2008) (finding that non-participation by the individual members was fatal and that, for the organization to have standing, it should have joined as petitioners those member(s) that it claimed would be harmed by the respondent's actions) *see also Wind Power Ethics Group v. Town of Cape Vincent*, No. 2010-2882, slip op. at *5 (N.Y. Sup. Ct., Jan. 26, 2011) (dismissing Article 78 petition on grounds that petitioner failed to establish organizational standing due to its failure to name or join individual members in petition).[5]

Here, a similar outcome is warranted. Like in *Citizens Organized*, the only Petitioners named in the instant proceeding are the organizations, HRFA and Sierra Club,

[5] A copy of the *Wind Power* case can be found as Exhibit E to the Affirmation of Yvonne E. Hennessey, dated April 24, 2014.

and the conclusory and speculatively alleged "injury" is to all of the members' conservation, aesthetic, and recreational interests. *See* Petition ¶¶ 2, 3. While Sierra Club and HRFA each filed an affidavit of an individual member, which as discussed above are insufficient to establish individual standing of these members, no individual members were named or joined as petitioners. Petitioners' failure to join at least one member as a petitioner, therefore, warrants dismissal.

POINT III

PETITIONERS' CLAIMS ARE IN FACT IMPROPER COLLATERAL ATTACKS THAT ARE UNTIMELY

A review of the Petition in this matter suggests that Petitioners' real concerns are threefold. First, the Petition is nothing but a collateral attack on the Ravenswood Facility's SPDES permit as initially issued in 2007 and more recently renewed in 2012. Indeed, Petitioners' allegations, when read as a whole, appear to take issue with the Ravenswood Facility's cooling water intake structures and whether the associated environmental impacts were appropriately mitigated by the NYSDEC. Petition ¶¶ 14-16, 63; Petitioners' Brief at 6-9, 26; Downs Aff. ¶¶ 6, 9. Such impacts (e.g., fish impingement) were squarely addressed by the NYSDEC as part of its consideration and issuance of the Ravenswood Facility's SPDES Permit.

The applicable statute of limitations is four months from the time the final decision is made. *See* N.Y. C.P.L.R. 217(1) (2014). Because NYSDEC issued the 2012 SPDES Permit for the Ravenswood Facility on November 1, 2012,[6] the statute of limitations to challenge the 2012 SPDES Permit has long since past. Thus, to the extent

[6] The Ravenswood 2012 SPDES Permit was issued to TC Ravenswood on November 1, 2012 – not November 1, 2013 as alleged by Petitioners. *See* Petitioners' Brief at 9.

that the Petitioners' arguments are a collateral attack on Ravenswood's SPDES permit, and the BTA requirements contained therein, they are untimely.

Moreover, Petitioners failed to submit comments on the Ravenswood Facility's 2012 SPDES Permit, which is when issues associated with cooling water intake BTA would have appropriately been raised and considered by the NYSDEC. Petitioners also incorrectly state that a SEQRA review was not conducted by NYSDEC for the Ravenswood 2007 or 2012 SPDES permit. The NYSDEC did complete an environmental review under SEQRA at the time the Ravenswood Facility's 2007 SPDES permit was issued, wherein the BTA requirements for Ravenswood were established. A.R. at 77.[7]

Because the statute of limitations has expired, to the extent that Petitioners are collaterally attacking the 2012 SPDES Permit, or the BTA provisions contained therein, their challenge is untimely and must be dismissed as time-barred.

Further, a review of the Petition as a whole establishes that Petitioners' real challenge is to the Legislature's determination when crafting the Act to exempt existing water withdrawals from environmental review by explicitly removing any discretion from NYSDEC regarding whether to issue a permit to facilities with existing water withdrawals. *See* BILL SPONSOR'S MEMORANDUM IN SUPPORT OF LEGISLATION, A.B. A5318 (S3798), L. 2011, ch. 401 at 7 (2011) (expressly noted that "existing water withdrawals would be *entitled* to an initial permit based on their maximum water withdrawal capacity reported to DEC on or before February 15, 2012 pursuant to existing

[7] The 2012 SPDES Permit was a permit renewal such that additional SEQRA review was not required. *See* 6 N.Y.C.R.R. § 617.5(c)(26); *see also Stephentown Concerned Citizens v. Herrick*, 280 A.D.2d 801, 804 (3d Dep't 2001) ("a renewal application ordinarily is considered a type II action under SEQRA").

law.") (emphasis added). Importantly, the Act was signed into law on August 15, 2011 and became effective on February 15, 2012. Not only did Petitioners fail to convince the Legislature and Governor to require existing water withdrawals to undergo environmental review anew, Petitioners failed to directly challenge the Act in Court. Their back-handed attempt to do so here is, therefore, inappropriate and untimely.

Petitioners' other concern is directed at the NYSDEC regulations implementing the Act, which became effective on April 1, 2013. Once again, Petitioners failed to directly challenge the regulations, which explicitly confirmed that facilities such as the Ravenswood Facility would be entitled to a permit without undergoing repetitive environmental review. *See* XXXIII NY Reg. 9 (Nov. 23, 2011); XXXIV NY Reg. 3 (Nov. 28, 2012) (both the NYSDEC's proposed rulemaking in November 2011 and its final rulemaking in November 2012 explaining that "existing water withdrawals above the size threshold are *entitled* to an initial permit.") (emphasis added).

In sum, Petitioners' real claims are untimely. They cannot, therefore, be heard now to challenge that which they had multiple and redundant opportunities to challenge and failed to do so in a timely manner.

POINT IV

ISSUANCE OF THE INITIAL WATER WITHDRAWAL PERMIT WAS A MINISTERIAL TYPE II ACTION NOT SUBJECT TO SEQRA REQUIREMENTS

The crux of Petitioners' challenge is that the NYSDEC improperly classified issuance of the Ravenswood Facility's WWP under SEQRA to avoid environmental review. Specifically, they assert that the NYSDEC's action under SEQRA was a Type I action and not a Type II action.

SEQRA expressly exempts from environmental review "official acts of a ministerial nature, involving no exercise of discretion." N.Y. ENVTL. CONSERV. LAW § 8-0105 (5)(ii) (2014) [hereinafter "ECL"]; N.Y. COMP. CODES R. & REGS. tit. 6 § 617.5(c)(19) (2014) [hereinafter "N.Y.C.R.R."]. Whether a particular action is ministerial depends on the underlying regulation or code authorizing the action. *Atlantic Beach v. Gavalas*, 81 N.Y.2d 322, 325 (1993); *Ziemba v. City of Troy*, 37 A.D.3d 68, 73 (3d Dep't 2006); *see also Lighthouse Hill Civic Ass'n v. City of New York*, 275 A.D.2d 322, 323 (2d Dep't 2000); *Dujmich v. New York State Freshwater Wetlands Appeals Bd.*, 240 A.D.2d 743, 743 (2d Dep't 1997) (holding that landowners were entitled to their permit as a matter of right and not subject to SEQRA because the proposed septic system satisfied all applicable conditions imposed by the Department of Health). The pivotal inquiry is whether the underlying regulatory scheme invests the agency with the authority to act or refuse to act based on the type of information contained in an EIS. *Atlantic Beach*, 81 N.Y.2d at 326; *Ziemba*, 37 A.D.3d at 73-74.

If an agency has some limited discretion to grant or deny a permit, "but that discretion is circumscribed by a narrow set of criteria which do not bear any relationship to the environmental concerns that may be raised in an EIS, its decisions will not be considered 'actions' for purposes of SEQRA's EIS requirements." *Atlantic Beach*, 81 N.Y.2d at 326; *Ziemba*, 37 A.D.3d at 74. The reasoning is that where an agency is only empowered to act based on compliance with predetermined statutory criteria, it makes little sense to require preparation of an EIS. *Atlantic Beach*, 81 N.Y.2d at 327 (finding "preparation of an EIS would be a meaningless and futile act, since an agency vested with

discretion in only a limited area could not deny a permit on the basis of SEQRA's broader environmental concerns.").

A. Existing Users were Entitled to an Initial Permit Pursuant to Predetermined Regulatory Criteria

A plain reading of the Act shows that existing water withdrawals were *entitled* to a permit. The statute clearly states in no uncertain terms that, "[t]he Department *shall* issue an initial permit, subject to appropriate terms and conditions as required under this article, to any person not exempt from the permitting requirements of this section . . . ." ECL § 15-1501 (9) (2014) (emphasis added); *see also New York Pub. Interest Research Group v. Dinkins*, 83 N.Y.2d 377, 384 (1994) (finding a provision was "cast in mandatory terms, as evidenced by the repeated use of the word 'shall'").

Furthermore, in implementing regulations for the Act, the NYSDEC established Part 601.7 specifically for facilities with existing water withdrawals. 6 N.Y.C.R.R. § 601.7 (2014). Under 6 N.Y.C.R.R. Section 601.7, "initial" permits are granted based on compliance with predetermined criteria. *Id.* More specifically, initial permits must be issued if the water withdrawal: (1) existed as of February 15, 2012; (2) was over the threshold volume of 100,000 gallons per day pursuant to Section 601.2 (p); (3) was properly reported to NYSDEC by February 15, 2012 pursuant to ECL article 15; (4) was not a public water supply; (5) was not otherwise exempt; and (6) application was submitted to the NYSDEC by June 1, 2013 and no later than 180 days before the SPDES permit was scheduled to expire. 6 N.Y.C.R.R. §§ 601.7(a),(b) (2014); *see also* XXXIV N.Y. Reg. 4 (Nov. 28, 2012).

Based upon the foregoing language, there can be no doubt that the NYSDEC's issuance of initial WWPs to existing facilities, like TC Ravenswood, is ministerial.

However, should the court find that the plain reading of the statutes or regulations is ambiguous, the legislative history resolves any doubt.

The pertinent legislative history expressly notes that "existing water withdrawals would be *entitled* to an initial permit based on their maximum water withdrawal capacity reported to DEC on or before February 15, 2012 pursuant to existing law." BILL SPONSOR'S MEMORANDUM IN SUPPORT OF LEGISLATION, A.B. A5318 (S3798), L. 2011, ch. 401 at 7 (emphasis added), Hennessey Affirmation Ex. A, at 7. In addition, both the NYSDEC's proposed rulemaking in November 2011 and its final rulemaking in November 2012 explain that "existing water withdrawals above the size threshold are *entitled* to an initial permit." XXXIII NY Reg. 9 (Nov. 23, 2011); XXXIV NY Reg. 3 (Nov. 28, 2012) (emphasis added). Therefore, existing users were automatically entitled to an initial permit as long as the predetermined regulatory criteria were met.

Here, TC Ravenswood is an existing facility that operated a water withdrawal system with a capacity of 1,527,840,000 gallons per day as of February 15, 2012. A.R. at 155. TC Ravenswood reported its water withdrawals to the NYSDEC prior to the deadline as part of its annual water withdrawal report. A.R. at 137-51. TC Ravenswood is not a public water supply and was not exempt from permit requirements. TC Ravenswood submitted its application for an initial permit on May 31, 2013 before the June 1, 2013 deadline. A.R. at 1-35. The application was submitted more than 180 days before its SPDES permit was to expire on October 31, 2017. A.R. at 116. Therefore, TC Ravenswood met the predetermined regulatory criteria and NYSDEC was required to issue TC Ravenswood an initial WWP.

Because the predetermined criteria for issuance of the WWP bears no relationship to the broader environmental concerns evaluated in an EIS, preparation of an EIS would have been an exercise in futility. This makes sense, however, because contrary to Petitioners' contention that no SEQRA review was conducted for TC Ravenswood's water withdrawals, SEQRA review was indeed conducted as part of the facility's pre-existing SPDES permit.[8] In fact this may be exactly why the Legislature decided to make issuance of a WWP ministerial for existing facilities, like the Ravenswood Facility, that were already authorized by the NYSDEC to withdraw water; the only change in circumstances was the Act that required another permit and annual reporting.

Since the TC Ravenswood facility was entitled to an initial WWP as an existing user and because the NYSDEC's authority was limited to considering only the predetermined statutory and regulatory criteria, it was proper for the NYSDEC to classify issuance of the initial WWP as a ministerial, Type II action. Moreover, water withdrawals at the TC Ravenswood facility were subject to SEQRA review as part of the SPDES permit review. Therefore, no SEQRA review of the initial WWP was required, respondent NYSDEC did not violate SEQRA, and the Petitioners' claims should be dismissed as a matter of law.

[8] In 2006, NYSDEC reviewed TC Ravenswood's SPDES permit pursuant to SEQRA. Since the SPDES permit included the facility's cooling water intake, the SEQRA review necessarily included review of the very same cooling water intake that Petitioners are challenging here. NYSDEC concluded that the SPDES permit, including cooling water intake, would not have a significant impact on the environment and issued a negative declaration on December 11, 2006. Notice of the negative declaration published in the Environmental Notice Bulletin on December 20, 2006. O'Donnell Aff., Ex. C.

B. Exceedance of a Type I Threshold Does Not Reclassify a Ministerial Type II Action as Type I

Petitioners argue that issuance of an initial WWP cannot be a Type II action because the volume of water exceeds the Type I threshold of 2,000,000 gallons per day for projects that use ground or surface water. 6 N.Y.C.R.R. § 617.4(b)(6)(ii).

Whether an action is classified as a Type II action depends on if it is listed in 6 N.Y.C.R.R. § 617.5(c). Ministerial actions are expressly listed as a Type II action and are, therefore, not subject to SEQRA. 6 N.Y.C.R.R. §§ 617.5(a), (c)(19). Type II actions that exceed a Type I threshold are not subject to SEQRA unless a limitation is expressly incorporated into the regulation. *See* 6 N.Y.C.R.R. § 617.5(c)(2); *see also Westwater v. New York City Bd. of Standards & Appeals*, No. 100059-13, 2013 N.Y. Misc. LEXIS 4707, at *16-17 (N.Y. Sup. Ct. Oct. 15, 2013) (finding that the revised construction plans for a building were properly classified as a Type II ministerial action despite contentions that the Type I thresholds were exceeded.).

C. Limitations on Type II Actions Should Not Be Read Into Other Provisions Where It Has Been Omitted From The Regulation.

Only one Type II action, which does not apply here, contains the qualifier that it will be reclassified as a Type I action if the Type I threshold is exceeded. *See* 6 N.Y.C.R.R. § 617.5(c)(2) ("replacement, rehabilitation or reconstruction of a structure or facility, in kind, on the same site, including upgrading buildings to meet building or fire codes, unless such action meets or exceeds any of the thresholds in section 617.4 of this Part"). No other Type II action contains this limitation.

The universal maxim, *expressio unius est exclusio alterius*, is instructive here. This fundamental rule of statutory construction instructs that "where a law expressly

describes a particular act, thing or person to which it shall apply, an irrefutable inference must be drawn that what is omitted or not included was intended to be omitted and excluded." *Calenzo v. Shah*, 112 A.D.3d 709, 711 (2d Dep't 2013) (finding a Department of Health regulation intentionally omitted reference to a "stepparent" pursuant to *expressio unius est exclusio alterius*); *see also Town of Eastchester v. New York State Bd. of Real Prop. Servs.*, 23 A.D.3d 484, 485 (2d Dep't 2005) (quoting McKinney's Cons Laws of N.Y., Book 1, Statutes § 240).

Where particular language in one section of a regulation is omitted in another section of the same regulation, it is generally presumed that the omission was purposeful and intentional. *See INS v. Cardoza-Fonseca*, 480 U.S. 421, 423 (1987); *see also* McKinney's Consol. Laws of N.Y., Book 1, Statutes § 74 ("[a] court cannot by implication supply in a statute a provision which it is reasonable to suppose the Legislature intended intentionally to omit; and the failure of the Legislature to include a matter within the scope of an act may be construed as an indication that its exclusion was intended.").

Accordingly, an irrefutable inference exists that if the NYSDEC had wanted Type II ministerial actions to be limited and reclassified as a Type I action if a Type I threshold was exceeded, the NYSDEC would have explicitly done so. The Court, therefore, should not heed Petitioners' suggestion that exceedance of a Type I threshold overrides classification as a Type II ministerial action.

D. Petitioners' Inaccurate Citation of the Law Distorts the Plain Meaning of the Regulation and Should Not be Followed.

The NYSDEC's SEQRA regulations direct that other agencies may adopt their own lists of Type I actions and provide provisions for those agencies to follow. 6

N.Y.C.R.R. § 617.4(a)(2). Petitioners inaccurately assert that these provisions also guide the determination of whether an action is classified as a Type II action. Petitioners state that "[a]n action categorized as a Type I action, cannot be a Type II action." Petitioners' Brief at 27. However, Petitioners' omission of pertinent parts of the same section distort and misapply the regulations in an attempt to give more meaning to this section than plain reading provides.

The section partially quoted and taken out of context by Petitioners applies only to *other agencies* who wish to adopt their own list of Type II actions. The complete Section 617.5(b) reads:

> *Each agency may adopt its own list of Type II actions to supplement the actions in subdivision (c) of this section. No agency is bound by an action on another agency's Type II list. An agency that identifies an action as not requiring any determination or procedure under this Part is not an involved agency.* Each of the actions on an agency Type II list must:
>
> (1) in no case, have a significant adverse impact on the environment based on the criteria contained in subdivision 617.7(c) of this Part; and
>
> (2) not be a Type I action as defined in section 617.4 of this Part.

6 N.Y.C.R.R. § 617.5(b) (emphasis added). The omitted portions in italics provide the proper context in which the regulation is to be read. From the plain reading of the full section, it is clear that subsections 1 and 2 apply only to *other agencies* adopting and expanding upon the Type II list of actions set forth by the NYSDEC in Section 617.5(c). As such, the Petitioners' interpretation of only a portion of a section which has been taken out of context must be rejected.

Moreover, the NYSDEC provisions in Section 617.4 directed at other agencies state the exact opposite of Petitioners' claim that a Type I action cannot be a Type II

action. 6 N.Y.C.R.R. § 617.4(a)(2) (stating that "[a]n agency may not designate as Type I any action identified as Type II in section 617.5."). In light of these misstatements of the regulations, the Petitioners' claim that reclassification is mandated for a ministerial Type II action if a Type I threshold is exceeded cannot stand as matter of law.

POINT V

THERE HAS BEEN NO VIOLATION OF NEW YORK WATER RESOURCES LAW

Petitioners argue that the NYSDEC violated the Act because it failed to apply terms and conditions as part of the TC Ravenswood WWP. Petition ¶ 80. However, the contents of the TC Ravenswood WWP and SPDES permit completely refute this allegation. TC Ravenswood's WWP expressly includes terms and conditions, such as incorporation of water conservation measures from the SPDES permit as well as metering of water intake sources. A.R. at 155-58. Petitioners may disagree with the propriety and sufficiency of these terms and conditions. However, the NYSDEC appropriately incorporated the terms and conditions required by the Act and its implementing regulations. Petitioners' claim that the water resources law was violated because the NYSDEC failed to include terms and conditions in the WWP, therefore, is wholly without merit and must be dismissed.

POINT VI

NYSDEC IS ENTITLED TO SUBSTANTIAL DEFERENCE

It is well settled that an agency's interpretation of a statute or regulation should be granted substantial deference if that agency is responsible for administering the statutory program and its decision is rationally based. *Chevron, U.S.A. v. NRDC*, 467 U.S. 837

(1984); *City Council v. Town Bd.*, 3 N.Y.3d 508, 518 (N.Y. 2004); *Carver v. State of New York*, 87 A.D.3d 25, 33 (2d Dep't 2011). This includes determinations of whether an action is classified as a Type I or Type II action. *See Stephentown Concerned Citizens v. Herrick*, 280 A.D.2d 801, 804 (3d Dep't 2001) (deferring to the NYSDEC's decision that a renewal application was appropriately classified as a Type II action).

"While judicial review must be meaningful, the courts may not substitute their judgment for that of the agency for it is not their role to 'weigh the desirability of any action or [to] choose among alternatives'" *Riverkeeper, Inc. v. Town of Southeast*, 9 N.Y.3d 219, 232 (2007) citing *Akpan v. Koch*, 75 N.Y.2d 561, 570 (1990); *see also Village of Chestnut Ridge v. Town of Ramapo*, 99 A.D.3d 918, 925 (2d Dep't 2012); *New York Youth Club v New York City Envtl. Control Bd.*, 39 Misc. 3d 1204(A), *3 (N.Y. Sup. Ct. Queens County 2013) ("Upon judicial review, a court is not free to substitute its judgment for that of the agency on substantive matters."). Therefore, even if different conclusions could be reached as a result of conflicting evidence, a court may not substitute its judgment for that of the NYSDEC. *Lane Constr. v. Cahill*, 270 A.D.2d 609, 611 (3d Dep't 2000); *Westwater*, 2013 N.Y. Misc. LEXIS 4707, at *28.

The NYSDEC is the agency responsible for administering statutory programs for the Act and SEQRA. It is also the agency charged with implementing regulations for each. Petitioners have not shown how any of the concerns it cites would negate the NYSDEC's finding that the initial WWP was issued as-of-right or that NYSDEC's decision-making was irrational. Therefore, NYSDEC's interpretation of the Act and its implementing regulations as well as its decision to classify TC Ravenswood's initial WWP as a Type II action should be afforded substantial deference.

POINT VII

PETITIONERS' REMAINING CLAIMS FAIL

Petitioners' remaining claims are based on the argument that issuance of the initial WWP was a Type I action. However, as discussed in Points IV and V *supra*, issuance of the TC Ravenswood WWP was a ministerial, Type II action. Therefore, Petitioner's remaining claims all fail as a matter of law.

Petitioners' coastal zone claims are meritless. Petitioners' concede that the provisions of 19 N.Y.C.R.R. Part 600, which requires a coastal zone consistency review, only apply if the action is a Type I or unlisted action. Petitioners' Brief at 32; *see also* 19 N.Y.C.R.R. § 600.2(b) (2014). Similarly, coastal zone consistency reviews are only required under SEQRA if the action is classified as Type I or unlisted. 6 N.Y.C.R.R. § 617.6(a)(5). Here, as presented in Points IV and V, the NYSDEC's issuance of the initial water withdrawal permit for the Ravenswood facility was a ministerial, Type II action. Issuance of the initial permit was not a Type I or Unlisted action, and no coastal zone consistency review was required. Therefore, Petitioners' claims alleging violations of coastal zone laws and SEQRA are meritless and should be dismissed as a matter of law.

Petitioners' public trust doctrine claim similarly lacks merit. According to Petitioners, the NYSDEC violated its public trust obligation when it issued the initial WWP to TC Ravenswood without conducting an environmental review, conducting a coastal consistency review, or imposing adequate water conservation measures. However, as discussed in Points IV and V, no environmental review or coastal zone consistency review was required because the initial permit was properly classified as a Type II ministerial action. Moreover, water conservation measures were, in fact,

included in the initial WWP issued to TC Ravenswood. Therefore, the argument that the NYSDEC violated its public trust obligation is meritless and should be dismissed as a matter of law. This is especially true, where, as here, the NYSDEC has thoroughly reviewed the Ravenswood Facility, including its cooling water intake structures, under all applicable federal and state environmental laws.

CONCLUSION

For all of the reasons set forth herein, TC Ravenswood respectfully submits that the Petition should be dismissed *in toto*.

Dated: April 24, 2014
Albany, New York

HISCOCK & BARCLAY, LLP

By: _____

Yvonne E. Hennessey, Esq.
Danielle E. Mettler, Esq.
Laura L. Mona, Esq.
Attorneys for TC Ravenswood, L.L.C.
Albany, New York 12207
(518) 429-4200

AFFIDAVIT OF DANIEL O'DONNELL IN SUPPORT OF TRANS CANADA RAVENSWOOD LLC'S MOTION TO DISMISS, SWORN APRIL 23, 2014 [496-504]

SUPREME COURT OF THE STATE OF NEW YORK
COUNTY OF QUEENS

In the Matter of the Application of

SIERRA CLUB, and HUDSON RIVER FISHERMEN'S ASSOCIATION, NEW JERSEY CHAPTER, INC.,

Petitioners,

For a Judgment Pursuant to Article 78 of the Civil Practice Law and Rules

-against-

JOSEPH MARTENS, COMMISSIONER, NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION,

Respondent,

TRANSCANADA RAVENSWOOD LLC,

Necessary Party.

AFFIDAVIT OF DANIEL O'DONNELL

Index No. 002949/2014

Hon. Robert J. McDonald

HISCOCK & BARCLAY, LLP

STATE OF NEW YORK)
) **SS.:**
COUNTY OF QUEENS)

Daniel O'Donnell, being duly sworn, deposes and states as follows under the penalties of perjury:

1. My name is Daniel O'Donnell. I am over 21 years of age, and I am competent in all respects to make this Affidavit.

GENERAL BACKGROUND

2. I graduated from the United States Merchant Marine Academy in June 1990 with a Bachelor of Science degree in Marine Engineering Systems. I received my Masters of Business

Administration, with concentrations in Management and Finance, from Hofstra University in December 2001.

3. Currently, I am employed by TC Ravenswood, LLC ("TC Ravenswood") as the Compliance Manager of the Ravenswood Generating Station ("Ravenswood Facility"), located at 38-54 Vernon Boulevard, Long Island City, New York 11101.

4. I have been employed at Ravenswood in various engineering and management capacities since March 9, 1999. In addition to my current position, during my tenure at Ravenswood, I have also served as Shift Supervisor, and Operations Outage Coordinator.

5. My statements in this Affidavit are based upon my personal knowledge that I have obtained through the various positions I have held at Ravenswood as well as my review of relevant documentation and personal observations.

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PURPOSE OF AFFIDAVIT

6. I make this Affidavit in support of TC Ravenswood's Motion to Dismiss the Verified Petition. Specifically, this Affidavit establishes that:

a) the Ravenswood Facility has been in operation for decades, during which time it has been authorized to withdraw water from the East River;

b) TC Ravenswood's water withdrawal permit, which is being challenged in this proceeding by Petitioners, did not authorize any activity that was not already authorized by the New York State Department of Environmental Conservation ("NYSDEC");

c) despite Petitioners' claims, the Ravenswood Facility's cooling water intake system and associated water withdrawals have been thoroughly reviewed by the NYSDEC; and

d) in accordance with TC Ravenswood's State Pollution Discharge Elimination System ("SPDES") permit issued by the NYSDEC, the Ravenswood Facility utilizes Best Technology Available ("BTA") for its cooling water intake structure requirements, which minimizes to the maximum extent practicable the environmental impacts associated with the Ravenswood Facility's cooling water intake structures and associated water withdrawals.

THE RAVENSWOOD FACILITY

7. Ravenswood is an electric generating facility located in Long Island City, Queens, New York. It was initially constructed in the early to mid-1960s. Two of the electric generating units began operating in 1963 and one unit began operating in 1965.

8. The Ravenswood Facility produces electricity, which is sold via the New York State Independent System Operator ("NYISO"), for use throughout the New York City area.

9. The Ravenswood Facility consists of three (3) steam boiler turbine/generators, known as Units 10, 20 and 30; a combined cycle unit, known as Unit 40 and; several simple cycle combustion turbines. (A.R.[1] at 3, 93).

10. The Ravenswood Facility's combined capacity is 2,480 megawatts ("MW").

11. The Ravenswood Facility has the ability to, and has, produced up to 21% of the total electricity used by New York City.

12. Unit 40, which went into service in May 2004, utilizes a multi-cell air cooled condenser for cooling, not water withdrawn from the East River.

13. For approximately 50 years, the Ravenswood Facility has used a once-through cooling water system, which withdraws water from the East River that is circulated through the cooling system to

[1] "A.R." refers to the Administrative Record, dated March 13, 2014.

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cool the Unit 10, 20 and 30 boiler equipment, turbines, and auxiliary equipment, and then discharges it back into the East River. (A.R. at 3, 7).

14. The Ravenswood Facility's cooling water system consists of two individual circulating water pumps per unit, for a total of six circulating water pumps, to withdraw cooling water. (A.R. at 7). Each unit also has two low pressure salt water pumps that provide cooling water to small equipment associated with the operation of each unit. (A.R. at 7-8). This is the same cooling water system that was originally installed at the Ravenswood Facility back in the 1960s.

15. Cooling water from the East River is a critical component of the production of electricity at the Ravenswood Facility, as it is necessary for proper operation and to prevent overheating. (A.R. at 8).

16. The maximum capacity of the Ravenswood Facility's cooling water system is 1527.84 million gallons per day ("MGD"). (A.R. at 139). This maximum capacity has not increased since the facility was initially installed in the 1960s.

17. A maximum water withdrawal capacity of 1527.84 MGD is required in case Units 10, 20 and 30 are all operating at maximum generating capacity. (A.R. at 139). This ensures that there is sufficient water to keep the units properly cooled and to prevent overheating.

18. The actual amount of cooling water needed per day to keep the boilers and equipment at the Ravenswood Facility from overheating varies based on which units are operating and the amount of time that the units are operating (i.e. load).

19. When only one or two of the Ravenswood Facility's units are operating, or the units are operating at less than full load, the amount of cooling water withdrawn and used is reduced accordingly, through the use of the variable speed pumps on the circulating water pumps of each unit. (A.R. at 6, 7-11).

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20. In 2012, the daily average withdrawal by the Ravenswood Facility was approximately 480 MGD. In 2013, the average withdrawal was 363.1 MGD. According to TC Ravenswood's projections, the average daily withdrawal for 2014 will remain steady, with no increases expected.

21. Despite this, the Ravenswood Facility's maximum capacity of 1527.84 MGD remains necessary. For example, in 2012, during Super Storm Sandy, TC Ravenswood operated all three units at full load to supply needed electricity to New York City.

REGULATION OF THE RAVENSWOOD FACILITY'S COOLING WATER INTAKE SYSTEM

22. The Ravenswood Facility's cooling water system is regulated under the Clean Water Act ("CWA").

23. As such, it is subject to the Best Technology Available ("BTA") for cooling water intake structure requirements contained in section 316(b) of the CWA and 6 NYCRR Part 704.5.

24. The purpose of BTA is to minimize environmental impacts associated with cooling water intake structures.

25. The §316(b) and §704.5 requirements applicable to the Ravenswood Facility are contained in its SPDES permit issued by the NYSDEC. A true and accurate copy of the SPDES permit, effective date May 1, 2007, is attached hereto as **Exhibit A.** (*See also* A.R. at 66-86). A true and accurate copy of the renewed SPDES permit, effective date November 1, 2012, is attached hereto as **Exhibit B.** (*See also* A.R. at 116-36).

26. In 2006, as part of a NYSDEC initiated SPDES modification, the NYSDEC conducted an enviromental review of TC Ravenswood's cooling water intake system under SEQRA. Numerous studies and evaluations of the potential environmental impacts and alternatives were performed. Based on this review, the NYSDEC ultimately imposed certain permit conditions and determined that there was no

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significant environmental impact associated with the Ravenswood Facility's cooling water intake system and issued a negative declaration. (A.R. at 62-65).

27. On December 20, 2006, the NYSDEC's negative declaration for the TC Ravenswood SPDES permit was published in the Environmental Notice Bulletin ("ENB"). A true and accurate copy of the ENB Notice, dated December 20, 2006, is attached hereto as **Exhibit C**.

28. On April 20, 2007, the NYSDEC issued the TC Ravenswood SPDES permit, which had a five year effective period. (A.R. at 66-86).

29. On November 1, 2011, TC Ravenswood submitted its application for renewal of its SPDES permit. A true and accurate copy of the Response to Public Comments, dated September 2012, is attached hereto as **Exhibit D**.

30. On July 18, 2012, the NYSDEC published notice of the draft TC Ravenswood SPDES renewal permit in the ENB. (*See* **Exhibit D**).

31. The only parties that commented on the draft 2012 SPDES permit during the public comment period were TC Ravenswood and the United States Environmental Protection Agency. (*See* **Exhibit D**).

32. The BTA requirements contained in the Ravenswood Facility's SPDES permit, which are binding on TC Ravenswood, (A.R. at 77) include:

(a) the installation of variable speed capability pumps on both of the circulating water pumps associated with each of Units 10, 20 and 30, for a total of six variable speed capable circulating water pumps, which has been completed at a cost of $11,162,477;

(b) upgrades to traveling intake screens to allow for continuous operation and to increase impingement survival; and,

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(c) scheduling of outages that require the cooling water intake pumps to be shut down at certain periods of time to reduce the volume of cooling water used.

33. The Ravenswood Facility's SPDES permit requires that the three BTA measures implemented by TC Ravenswood achieve a reduction of 90% in fish impingement mortality and 65% in entrainment, which is to be measured pursuant to the Verification Monitoring Plan. (A.R. at 77).

WATER WITHDRAWAL PERMIT

34. In August 2011, a new law was enacted in New York requiring all water withdrawal systems with the capability to withdraw 100,000 gallons per day ("gpd") or more obtain a permit from the NYSDEC and file water withdrawal reports annually. Previously, the law applied only to public water supply withdrawals and not TC Ravenswood's cooling water system.

35. The new law was codified at Environmental Conservation Law ("ECL") §15-1501 *et seq.*

36. In November 2012, the NYSDEC promulgated regulations implementing ECL 15-501 *et seq* to be effective April 1, 2103. 6 NYCRR Part 601 *et seq.*

37. Under this new law, permits are now required for any potable and non-potable water withdrawal system having the capacity to withdraw 100,000 gpd or more of surface water, groundwater, or combination thereof.

38. The requirement applies to all facilities with water intake structures that have the capacity to withdraw 100,000 gpd or more water. It applies to new facilities as well as facilities like the Ravenswood Facility with existing, permitted systems.

39. Therefore, on or about May 31, 2013, TC Ravenswood submitted a Water Withdrawal Application to the NYSDEC for an initial water withdrawal permit for the Ravenswood Facility. (A.R. at 1-35).

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40. On or about August 1, 2013, the NYSDEC issued a Notice of Complete Application for an "Initial 601 WW Permit" for the Ravenswood Facility, which was published in the Environmental Notice Bulletin on August 7, 2013. (A.R. at 36, 41-42).

41. Following public notice, on or about November 15, 2013, the NYSDEC issued an Initial 601 WW Permit for water withdrawals from the East River for the Ravenswood Facility that contained a maximum capacity of 1,390 MGD. (A.R. at 53).

42. Because this is less than the maximum capacity of the Ravenswood Facility's cooling water system, TC Ravenswood, therefore, submitted revised water withdrawal reports to the NYSDEC on or about December 18, 2013 setting forth the accurate maximum capacity of the facility's cooling water system of 1527.84 MGD. (A.R. at 137-38, 140-51).

43. Based on these revised reports, on or about March 7, 2014, the NYSDEC issued a revised Initial 601 WW Permit to TC Ravenswood, which contains a maximum capacity of 1527.84 MGD. (A.R. at 154, 155-58).

44. TC Ravenswood's final Initial 601 WW Permit noticed by the NYSDEC includes the conditions requiring BTA in TC Ravenswood's SPDES permit. (A.R. at 156).

THE EAST RIVER

45. The Ravenswood Facility is located on the East River. *See* Map of the East River, attached hereto as **Exhibit E**.

46. The East River is a tidal strait linking Upper New York Bay with Long Island Sound. It separates Manhattan Island from Brooklyn and Queens. It also connects with the Hudson River via the Harlem River and Spuyten Duyvil Creek at the north end of Manhattan Island.

47. The East River is fairly large, spanning approximately 16 miles in length with a width ranging from 600–4,000 feet.

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48. The Ravenswood Facility is located approximately 10 miles south of the connection of the Harlem River with the Hudson River. (*See* **Exhibit E**).

Daniel O'Donnell

Subscribed and sworn to before me

this 23th day of April, 2014.

Notary Public

PETRONA BRENES
NOTARY PUBLIC-STATE OF NEW YORK
No. 01BR6162804
Qualified in Westchester County
My Commission Expires March 19, 2016

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EXHIBIT A TO O'DONNELL AFFIDAVIT — RAVENSWOOD SPDES DISCHARGE PERMIT # NY-0005193, DATED APRIL 20, 2007 AND EFFECTIVE MAY 1, 2007 (REPRODUCED HEREIN AT PP. 117-137)

EXHIBIT B TO O'DONNELL AFFIDAVIT — RAVENSWOOD SPDES DISCHARGE PERMIT # NY-0005193, DATED OCTOBER 1, 2012 AND EFFECTIVE NOVEMBER 1, 2012 (REPRODUCED HEREIN AT PP. 167-187)

Region 2 SEQR and Other Notices Region 2 SPDES Renewals

ENB Region 2 Completed Applications 12/20/2006

Kings County

Applicant: NYC Dept of Environmental Protection
96-05 Horace Harding Expwy
Flushing, NY 11368

Facility: Avenue V Pump Station
76 Ave V
Brooklyn, NY 11223

Application ID: 2-6107-00336/00004

Permit(s) Applied for: Article 15 Title 15 Long Island Well

Project is Located: Brooklyn, Kings County

Project Description:

Applicant proposes to operate a temporary dewatering system to facilitate the construction and upgrade of the Avenue V Pump Station with a maximum withdrawal of 8,640,000 gallons per day. Construction will take place at the job site located 76 Avenue V in Brooklyn, NY. The pumped groundwater discharge is to be treated with appropriately sized settling tanks and oil/water separators and directed to the Coney Island Creek via Outfall OH-021.

Availability of Application Documents:

Filed application documents, and Department draft permits where applicable, are available for inspection under the provisions of the Freedom of Information Law during normal business hours at the address of the contact person.

State Environmental Quality Review (SEQR) Determination:

Project is an Unlisted Action and will not have a significant impact on the environment. A Negative Declaration is on file. A coordinated review was performed.

SEQR Lead Agency:

NYC Dept of Environmental Protection

State Historic Preservation Act (SHPA) Determination:

The proposed activity is not subject to review in accordance with SHPA. The permit type is exempt or the activity is being reviewed in accordance with federal historic preservation regulations.

Coastal Management:

This project is located in a Coastal Management area and is subject to the Waterfront Revitalization and Coastal Resources Act.

Opportunity for Public Comment:

Comments on this project must be submitted in writing to the Contact Person no later than *Jan 10, 2007*.

Contact:

Steve A Watts
NYSDEC Region 2 Headquarters
47-40 21ST St
Long Island City, NY 11101
(718)482-4997
r2dep@gw.dec.state.ny.us

Queens County

Applicant: Keyspan - Ravenswood Services Corp
175 East Old Country Rd
Hicksville, NY 11801

Facility: Ravenswood Generating Station
38-54 Vernon Blvd
Queens, NY 11101

Application ID: 2-6304-00024/00004

Permit(s) Applied for: Article 17 Titles 7 & 8 Industrial SPDES

Project is Located: Queens, Queens County

Project Description:

The New York State Department of Environmental Conservation (Department) proposes to renew and modify the State Pollutant Discharge Elimination System (SPDES) Permit of the Ravenswood Generating Station (Ravenswood). Ravenswood is located in Long Island City, Queens County, on the East River. The facility consists of three units with rated capacities of 400, 400 and 1027 megawatts. The facility has a combined flow of condenser cooling water and service water of 1457 million gallons per day. The draft modified permit requires that the permittee, Keyspan Generation, LLC (Keyspan), reduce entrainment and impingement impacts to aquatic organisms of the East River from the operation of Ravenswood water withdrawal pursuant to 6 NYCRR Part 704.5 and Section 316(b) of the Clean Water Act. Reductions are to be accomplished through:
- Continued use of the low stress fish return lines constructed at each unit in 2005;
- Installation of variable speed pumps and ancillary equipment;
- Scheduling of a planned outage process that will require pumps to be shutdown;

- Upgrades to existing traveling screens to allow for the continuous operation of all traveling intake screens.

The above referenced measures will reduce entrainment mortality by 65% from the full flow baseline. Impingement mortality will be reduced by 79% by the above measures. The use of the continuous screen operation is expected to further reduce impingement mortality to an approximate 85% reduction from the full flow baseline. Keyspan must also propose additional measures to further reduce impingement mortality, achieving a 90% reduction from full flow baseline. These levels of impact reduction meet the federal 316(b) Phase II performance standards.

In addition to the above modifications the draft SPDES permit also requires Keyspan to conduct a thermal study to demonstrate Part 316(a) compliance with 6 NYCRR Part 704.2. The permit provides timelines for completion of a protocol and the thermal study. The draft permit also contains administrative changes and modified effluent limitations. In all cases, the effluent limitations are more stringent than the existing limits.

A copy of the draft permit and the fact sheets are available for review.

Availability of Application Documents:

Filed application documents, and Department draft permits where applicable, are available for inspection under the provisions of the Freedom of Information Law during normal business hours at the address of the contact person.

State Environmental Quality Review (SEQR) Determination:

Project is an Unlisted Action and will not have a significant impact on the environment. A Negative Declaration is on file. A coordinated review was not performed.

SEQR Lead Agency:

None Designated

State Historic Preservation Act (SHPA) Determination:

The proposed activity is not subject to review in accordance with SHPA. The permit type is exempt or the activity is being reviewed in accordance with federal historic preservation regulations.

Coastal Management:

This project is not located in a Coastal Management area and is not subject to the Waterfront Revitalization and Coastal Resources Act.

Opportunity for Public Comment:

Comments on this project must be submitted in writing to the Contact Person no later than *Feb 09, 2007*.

Contact:

Christopher M Hogan
NYSDEC Headquarters
625 Broadway
Albany, NY 12233
(518)402-9167
depprmt@gw.dec.state.ny.us

Region 2 SEQR and Other Notices

Region 2 SPDES Renewals

510

EXHIBIT D TO O'DONNELL AFFIDAVIT — RESPONSE TO PUBLIC COMMENTS ON ADMINISTRATIVE RENEWAL OF RAVENSWOOD SPDES PERMIT, DATED SEPTEMBER 2012 [510-512]

TC Ravenswood, LLC
Ravenswood Generating Station
DEC # 2-6304-00024/00004
SPDES Permit NY 0005193

Response to Public Comments on Administrative Renewal of SPDES Permit
September, 2012

Background: The Department public noticed a draft State Pollutant Discharge Elimination System (SPDES) for the renewal of the above referenced facility in the July 18, 2012 Environmental Notice Bulletin. This renewal was based upon a November 1, 2011 submission of an industrial SPDES permit application form and sampling data to the Department for review. This document provides the Department's response to the comments received during this comment period. Comment letters were received on August 17, 2012 from Kenneth Yager, Compliance Manager for the Ravenswood Generating Station and August 21, 2012 from Karen O'Brien, Acting NPDES Section Chief, Clean Water Regulatory Branch, US Environmental Protection Agency (USEPA). A revised permit was provided to USEPA and accepted on 9/12/2012.

Comments from Kenneth Yager, Compliance Manager for the Ravenswood Generating Station dated August 17, 2012

Comment 1 - The Water Treatment Chemical (WTC) requirements currently included on page 16 of the Draft Permit do not account for the WTCs that Ravenswood uses during different operating and maintenance scenarios. Therefore, as discussed with the Department, TransCanada has submitted revised WTC Usage Notifications to the Department, which more accurately reflect the amount of WTCs that Ravenswood uses in different operating and maintenance scenarios, and more accurately reflect the affected outfalls.

> *DEC Response – The Department will review the revised WTC Usage Notification forms. If the revised dosages are acceptable, revisions to WTCs will require Department approval, but not a formal SPDES permit modification.*

Comment 2 - TransCanada requests that the Schedule of Compliance found on page 18 of the Draft Permit be revised to include additional language contained in Condition B. 4. c. TransCanada requests that the following statement contained in B.4.c be **added** to the Schedule of Compliance:

> If the Verification Monitoring Plan Study does not demonstrate compliance with biological Monitoring Requirement B. 2, TransCanada shall propose additional mitigative measures and a schedule to meet the performance standards of Condition B.2.

> *DEC Response – The Schedule of Compliance language has been revised to: "Submit an approvable report to demonstrate compliance in accordance with permit condition in Biological Monitoring Requirement B.4.c."*

Comment 3 - Outfall No. 011 - As discussed with the Department, Outfall No. 011 footnotes 13 and 14 for pH do not exist in the footnote section found on page 8 of the Draft Permit.

DEC Response – The referenced footnotes have been corrected to 8 and 9 which are intended to address stormwater sampling requirements for Outfall 011.

Comment 4 - Tank Test Water, Xylene Sampling - TransCanada assumes that that the required sampling parameter Xylenes for tank test water found on page 7 implies that o-Xylene and m,p-Xylene are required and would make up Xylene, total.

DEC Response – The sampling parameter listed as xylenes for tank test water monitoring has been corrected to Xylene, total in order to be to be consistent with xylene monitoring at other permitted outfalls in this permit.

Comments from Karen O'Brien, Acting NPDES Section Chief, Clean Water Regulatory Branch, USEPA dated August 21, 2012

Comment 1 – General Conditions. The draft Ravenswood Generating Station permit does not adequately incorporate general permit conditions as required by federal regulations. As specified in 40 CFR § 122.41, all conditions applicable to NPDES permits and corresponding State programs shall be incorporated into permits either expressly or by reference. If incorporated by reference, specific citations to these regulations (or the corresponding approved State regulations) must be given in the permit. The NYSDEC must include in the permits either expressly or by reference all general conditions. In addition to the general conditions specified in 40 CFR § 122.41 that are applicable to all permitees, the EPA notes that additional conditions applicable to certain categories of NPDES permits in 40 CFR § 122.42 may apply.

DEC Response – The last page of the permit includes the most current language specific to the General Conditions that EPA and DEC management have agreed to.

Comment 2 – Mercury. TOGS 1.3.10 Mercury provides that the Multiple Discharger Variance (MDV) for mercury is in effect "for five years from the effective date specified on page 1 of this document". Page 1 indicates that the issue date (assuming this is the effective date as well) is October 2010; therefore, the MDV is only effective until September 2015. As the term of Ravenswood Generating Station permit extends beyond the expiration date of the MDV, the permit must establish a final water quality based effluent limit (WQBEL) of 0.7 ng/l as of September 2015 unless other relief is provided in the permit (i.e., compliance schedule, renewal of the MDV).

DEC Response – While the Department agrees that TOGS 1.3.10 provides that the MDV is in effect "for five years from the effective date specified on page 1 of this document" it also states "After that date, high priority permits may not be renewed or modified unless they incorporate requirements of either a new MDV or an IDV, or include a limit of 0.70 ng/L. It is likely that the water quality goal will not be achieved for many years and that it will be necessary to pursue one or more subsequent MDVs in the future."

Therefore, to clearly state the MDV term as provided in TOGS 1.3.10 the following footnote has been added to page 7 of the permit: "This permit may not be renewed or modified unless it incorporates requirements of either a new MDV or an Individual Discharge Variance (IDV), or include a limit of 0.70 ng/L."

Comment 3 – Metal Cleaning Waste Discharge. The draft Ravenswood Generating Station permit does not contain copper and iron effluent limits for the discharge of metal cleaning wastes as required by the Effluent Limitation Guidelines (ELGs) at 40 CFR Part 423 and the fact sheet does not include a discussion for their absence. Please ensure that the Ravenswood Generating Station permit includes the applicable copper and iron effluent limits for metal cleaning wastes or a provision that prohibits the discharge of metal cleaning wastes.

DEC Response – Condition 1 of the Additional Requirements Section on page 9 has been revised to state, "There shall be no discharge of the following wastes to surface waters or groundwater of the State; fly ash and bottom ash, sluice wastes, evaporator blowdown, or boiler and metal cleaning wastewater."

Comment 4 – Oil and Grease. The draft Ravenswood Generating Station permit establishes WQBELs of 15 mg/l for oil and grease based on a maximum daily and requires monitoring and reporting only based on the average monthly for all internal and external outfalls. The permit does not establish numeric effluent limitations for oil and grease based on the monthly average. However, since the ELGs at 40 CFR 423.12(b)(3) establish monthly average requirements for oil and grease, where a WQBEL based on the monthly average has not been established, the permit must include instead a numeric technology-based effluent limitation (TBEL) for the monthly average based on the ELG. Therefore, where the ELGs apply for the discharges listed in the permit, the permit must establish a TBEL of 15 mg/l for oil and grease to meet the requirements of 40 CFR 423.12(b)(3). In determining final effluent limitations, the Clean Water Act and its implementing regulations require that both technology and water quality standards are met.

DEC Response – A monthly average limit 15 mg/l for Oil & Grease at discharge 0utfalls 01A-01H have been added to the permit to address the monthly average technology-based effluent limitation in 40 CFR 423 for the low volume waste source discharges.

Comment 5 - Whole Effluent Toxicity. The fact sheet does not provide a reasonable potential analysis of whole effluent toxicity (WET) and the draft Ravenswood Generating Station permit does not contain WET monitoring or limits, or a justification for their absence. WET effluent limitations are required based on the determination of whether the effluent is or may be discharged at a level that will cause, have the reasonable potential to cause or contribute to an excursion above any numeric WET criterion or narrative criterion within New York State Water Quality Standards at 6 NYCRR Part 700. See 40 CFR § 132.6, Appendix F, Procedure 6. It is not clear from that fact sheet the basis for not addressing WET at any of the outfalls from the facility and whether WET effluent limitations are required based on reasonable potential analysis. With no discussion of existing WET data, it is not clear how the permit meets the requirements of either 40 CFR § 122.41(d)(ii) or Part 132. Please provide an analysis of WET and, at minimum, establish WET monitoring as a condition of the permit.

DEC Response – The fact sheet has been revised to include a description regarding WET testing and justification for not including WET testing in this permit.

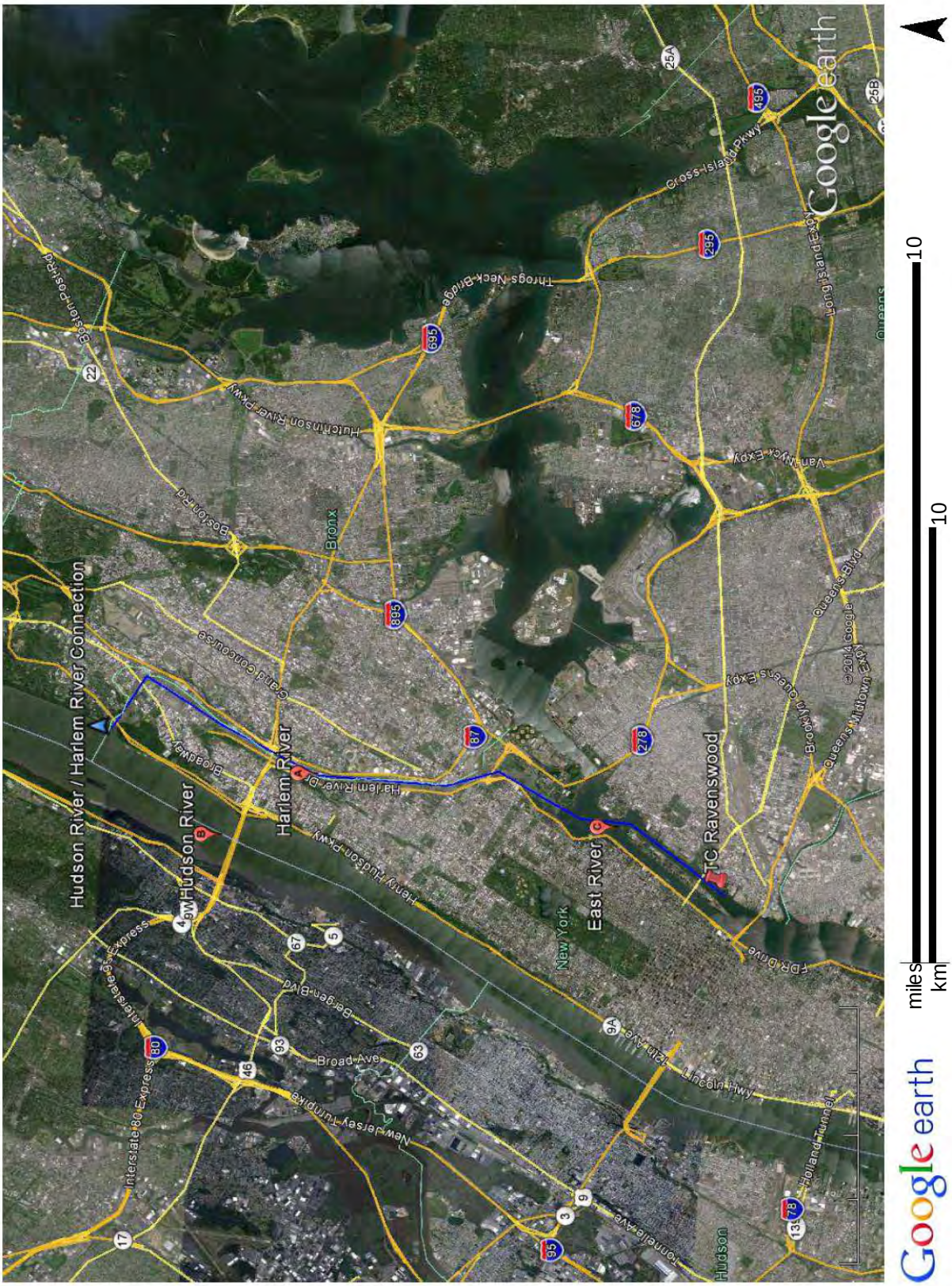
Additional Typos/Corrections

1) The draft permit cover page incorrectly listed the facility to be in Westchester County. This has been corrected to Queens County.

2) The Permit Limits, Levels and Monitoring table on Page 7 for Tank Test Water lists the receiving water to be Long Island Sound. This has been corrected to the East River.

513

EXHIBIT E TO O'DONNELL AFFIDAVIT — AERIAL VIEW SHOWING LOCATION OF RAVENSWOOD FACILITY



514

AFFIRMATION OF YVONNE E. HENNESSEY, ESQ. IN SUPPORT OF TRANS CANADA RAVENSWOOD LLC'S MOTION TO DISMISS, DATED APRIL 24, 2014 [514-516]

SUPREME COURT OF THE STATE OF NEW YORK
COUNTY OF QUEENS

In the Matter of the Application of

SIERRA CLUB, and HUDSON RIVER FISHERMEN'S ASSOCIATION, NEW JERSEY CHAPTER, INC.,

Petitioners,

For a Judgment Pursuant to Article 78 of the Civil Practice Law and Rules

-against-

JOSEPH MARTENS, COMMISSIONER, NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION,

Respondent,

TRANSCANADA RAVENSWOOD LLC,

Necessary Party.

AFFIRMATION OF YVONNE E. HENNESSEY

Index No. 002949/2014

Hon. Robert J. McDonald

HISCOCK & BARCLAY, LLP

STATE OF NEW YORK)
) SS.:
COUNTY OF ALBANY)

Yvonne E. Hennessey, Esq. affirms, under the penalties of perjury pursuant to Rule 2106 of the Civil Practice Law and Rules ("CPLR"):

1. I am an attorney at law duly licensed to practice in the courts of the State of New York and a member of the firm of Hiscock & Barclay, LLP, attorneys for TransCanada Ravenswood, LLC ("TC Ravenswood"). I am fully familiar with the circumstances and proceedings in this action.

2. I make this Affirmation in support of TC Ravenswood's motion to dismiss the Petition.

3. This Affirmation is based upon my review of the Petition and relevant documents, including the enactment of the Water Resources Protection Act of 2011 ("Act") and the New York State Department of Environmental Conservation's ("NYSDEC") promulgation of implementing regulations.

4. On or about February 15, 2011, Assembly Bill 5318-A was introduced to amend the New York State Environmental Conservation Law, in relation to regulating the use of the State's water resources, and to repeal Titles 16 and 33 of Article 15 of such law relating to Great Lakes water conservation and management and water withdrawal reporting. A true and accurate copy of the Bill Jacket is attached hereto as **Exhibit A.**

5. The summary of provisions in the Memorandum in Support of Legislation for Bill A5318A states that "Section 1 of the bill would amend Environmental Conservation Law (ECL) § 15-1501 to . . . provide that existing water withdrawals would be *entitled* to an initial permit based on their maximum water withdrawal capacity reported to DEC on or before February 15, 2012 pursuant to existing law . . . ." *See* **Exhibit A** at 7 (emphasis added).

6. On or about August 2, 2011, the NYSDEC sent a memorandum in support of Assembly Bill A5318-A to Mylan L. Denerstein, Esq., Counsel to the Governor. *See* **Exhibit A** at 14-16.

7. The NYSDEC memorandum confirmed that existing water withdrawals would be "entitled" to an initial permit. *See* **Exhibit A** at 16.

8. The Legislature passed Assembly Bill 5318-A and it was signed into law by Governor Andrew Cuomo on August 15, 2011. L. 2011, ch 401.

9. On August 15, 2011, the Act became effective in New York requiring that all water withdrawal systems with the capacity to withdraw 100,000 gallons per day or more of water obtain a permit from the NYSDEC and file water withdrawal reports annually. Previously, the law applied only to public water supply withdrawals and not TC Ravenswood's cooling water system.

10. The Act was codified at Environmental Conservation Law ("ECL") §15-1501 *et seq.*

11. On or about November 23, 2011, the NYSDEC caused to be published in the New York State Register a Notice of Proposed Rulemaking of the "Water Withdrawal Permit, Reporting and

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Registration Program." *See* 33 N.Y. Reg. 8, dated November 23, 2011. A true and accurate copy of the NYSDEC's November 23, 2011 Notice is attached hereto as **Exhibit B**.

12. On or about November 28, 2012, the NYSDEC caused to be published in the New York State Register a Notice of Adoption of the "Water Withdrawal Permit, Reporting and Registration Program." 34 N.Y. Reg. 4, dated November 28, 2012. A true and accurate copy of the NYSDEC's November 28, 2012 Notice is attached hereto as **Exhibit C**.

13. The new regulation repealed Parts 601 and 675, added a new Part 601, and amended Section 621.4 of Title 6 of the New York Compilation of Codes, Rules & Regulations ("NYCRR"). *See* **Exhibit C** at 4.

14. The effective date for the new regulations implementing the Act was April 1, 2013. *See* **Exhibit C** at 4.

15. A true and accurate copy of the *Wind Power Ethics Group v. Planning Bd. of Town of Cape Vincent*, No. 2010-2882 (Sup. Ct., Jefferson Cnty., Jan. 26, 2011) cited in Point II of the accompanying Memorandum of Law is attached here as **Exhibit D**.

HISCOCK & BARCLAY, LLP

Dated: April 24, 2014
Albany, New York

YVONNE E. HENNESSEY, ESQ.

EXHIBIT A TO HENNESSEY AFFIRMATION — BILL JACKET FOR 2012 ASSEMBLY BILL 5318-A

(REPRODUCED HEREIN AT PP. 330-394)

(b) Local Governments:

1. Effect of the rule:

The proposed amendment affects all school districts and BOCES in the State that wish to hire a teacher for employment that holds a transitional G certificate.

The purpose of the proposed amendment is to establish an expedited pathway for individuals with advanced degrees in science, technology, engineering and mathematics and at least two years of postsecondary teaching experience to become certified in science or mathematics in grades 7-12 to address the demonstrated shortage areas in these subjects and grade levels.

The proposed amendment establishes a transitional G certificate which authorizes a qualified applicant, upon meeting the prescribed requirements, a certification to teach at the 7-12 grade level in science, mathematics, or a closely related field as determined by the Commissioner. School districts and BOCES that wish to employ a teacher with the transitional G certificate must certify to the State Education Department that the district has made a commitment of employment to the transitional G holder, with a plan for mentoring and appropriate instructional support as determined by school leadership and at least 70 hours of professional development targeted toward appropriate pedagogical skills over the two years of employment.

2. Compliance requirements:

The purpose of the proposed amendment is to establish an expedited pathway for individuals with advanced degrees in science, technology, engineering and mathematics and at least two years of postsecondary teaching experience to become certified in science or mathematics in grades 7-12 to address the demonstrated shortage areas in these subjects and grade levels.

The proposed amendment establishes a transitional G certificate which authorizes a qualified applicant, upon meeting the prescribed requirements, a certification to teach at the 7-12 grade level in science, mathematics, or a closely related field as determined by the Commissioner. School districts and BOCES that wish to employ a teacher with the transitional G certificate must certify to the State Education Department that the district has made a commitment of employment to the transitional G holder, with a plan for mentoring and appropriate instructional support as determined by school leadership and at least 70 hours of professional development targeted toward appropriate pedagogical skills over the two years of employment.

3. Professional services:

The proposed amendment does not mandate school districts or BOCES to contract for additional professional services to comply.

4. Compliance costs:

There are no compliance costs for school districts or BOCES that exercise the option of employing a teacher under a transitional G certificate. However, the candidate will be required to pay an application fee of $100 for the transitional G certificate.

5. Economic and technological feasibility:

Meeting the requirements of the proposed amendment is economically and technologically feasible. As stated above in compliance costs, the amendment imposes no costs on school districts or BOCES.

6. Minimizing adverse impact:

The amendment establishes requirements for the issuance of a transitional G certificate. The State Education Department does not believe that establishing different standards for local governments is warranted. A uniform standard ensures the quality of the State's teaching workforce.

7. Local government participation:

Comments on the proposed rule were solicited from the State Professional Standards and Practices Board for Teaching. This is an advisory group to the Board of Regents and the Commissioner of Education on matters pertaining to teacher education, certification, and practice. The Board has representatives of school districts and BOCES.

Rural Area Flexibility Analysis

1. Types and estimated numbers of rural areas:

The proposed amendment will affect candidates, New York State school districts and BOCES in all parts of the State, including the 44 rural counties with fewer than 200,000 inhabitants and the 71 towns and urban counties with a population density of 150 square mile or less.

2. Reporting, recordkeeping, and other compliance requirements and professional services:

The purpose of the proposed amendment is to establish an expedited pathway for individuals with advanced degrees in science, technology, engineering and mathematics and at least two years of postsecondary teaching experience to become certified in science or mathematics in grades 7-12 to address the demonstrated shortage areas in these subjects and grade levels. The proposed amendment also establishes requirements regarding the application for and issuance of the transitional G certification. This certification will authorize a qualified applicant, with an advanced degree in either science, technology, engineering, mathematics or a closely related field as determined by the Commissioner, and two years of teaching experience at the post-secondary level, to teach in the certificate area of their advanced degree or one closely related to it, for the period of two years, at which time the candidate may apply for an initial certificate in that subject area. For individuals who meet the other requirements but do not have an offer of employment by a school district they would still have the option of completing six credits of undergraduate pedagogical core study or four credits of graduate pedagogical study. Certificate areas identified for the transitional G include: Biology, Chemistry, Earth Science, Physics, Mathematics, or a closely related field as determined by the Commissioner, at the 7-12 grade level.

School districts and BOCES that wish to employ a teacher with the transitional G certificate must certify to the State Education Department that the district has made a commitment of employment to the transitional G holder, which shall include a plan for appropriate mentoring and instructional support as determined by school leadership and at least 70 hours of professional development targeted toward appropriate pedagogical skills over the two years of employment.

3. Costs:

There are no compliance costs for school districts or BOCES that exercise the option of employing a teacher under a transitional G certificate. However, the candidate will be required to pay an application fee of $100 for the transitional G certificate.

4. Minimizing adverse impact:

The State Education Department does not believe that establishing different standards for candidates who live or work in rural areas is warranted. A uniform standard ensures the quality of the State's teaching workforce.

5. Rural area participation:

Comments on the proposed rule were solicited from the State Professional Standards and Practices Board for Teaching. This is an advisory group to the Board of Regents and the Commissioner of Education on matters pertaining to teacher education, certification, and practice. The Board has representatives who live and/or work in rural areas, including individuals who are employed as educators in rural school districts and BOCES.

Job Impact Statement

The purpose of the proposed amendment is to establish requirements for an expedited certification pathway for individuals with advanced degrees in science, technology, engineering and mathematics and at least two years of postsecondary teaching experience to become certified in science and mathematics in grades 5-9 and 7-12.

The proposed amendment is needed to facilitate the Department's continuing ability to certify a sufficient number of properly qualified candidates to address shortage areas in the State's public schools and BOCES. This proposal is intended to increase the supply of teachers who are certified in the sciences and mathematics in grades 5-9 and 7-12, all of which are shortage areas.

Because it is evident from the nature of the rule that it could only have a positive impact or no impact on jobs and employment opportunities, no affirmative steps were needed to ascertain that fact and none were taken. Accordingly, a job impact statement is not required, and one has not been prepared.

Assessment of Public Comment

The agency received no public comment

Department of Environmental Conservation

NOTICE OF ADOPTION

Procedures for Issuance of Summary Abatement Orders

I.D. No. ENV-30-11-00002-A

Filing No. 1204

Filing Date: 2011-11-07

Effective Date: 2011-11-23

PURSUANT TO THE PROVISIONS OF THE State Administrative Procedure Act, NOTICE is hereby given of the following action:

Action taken: Amendment of section 620.2(a) of Title 6 NYCRR.

Statutory authority: Environmental Conservation Law, section 71-0301

Subject: Procedures for issuance of summary abatement orders.

Purpose: To correct two typographical errors from the original 1977 rulemaking to conform the regulatory language to the enabling statute.

Text or summary was published in the July 27, 2011 issue of the Register, I.D. No. ENV-30-11-00002-P.

Final rule as compared with last published rule: No changes.

Text of rule and any required statements and analyses may be obtained from: James T. McClymonds, Chief Administrative Law Judge, NYSDEC, Office of Hearings and Mediation Services, 625 Broadway, 1st Floor, Albany, New York 12233-1550, (518) 402-9003, email: jtmcclym@gw.dec.state.ny.us

Assessment of Public Comment

The agency received no public comment.

PROPOSED RULE MAKING
NO HEARING(S) SCHEDULED

Water Withdrawal Permit, Reporting and Registration Program

I.D. No. ENV-47-11-00012-P

PURSUANT TO THE PROVISIONS OF THE State Administrative Procedure Act, NOTICE is hereby given of the following proposed rule:

Proposed Action: Repeal of Parts 601 and 675; addition of new Part 601; and amendment of section 621.4 of Title 6 NYCRR.

Statutory authority: Environmental Conservation Law, sections 3-0301(1)(f), (2)(m), 3-0306(4), 8-0113(2) and 70-0107; art. 15, titles 15, 16 and 33; art. 21, title 10; and art. 70

Subject: Water withdrawal permit, reporting and registration program.

Purpose: Implement amendments to Environmental Conservation Law (ECL) article 15, title 15, key provisions of ECL article 15 title 16, 6 NYCRR 675 and ECL article 15 title 33.

Substance of proposed rule (Full text is posted at the following State website:http://www.dec.ny.gov/65.html): This document summarizes the proposed water withdrawal regulations. Most subparts are condensed. Two provisions are presented verbatim. Subparts 15, 16, 19, 20, 21, 22, and 23 are similar to provisions in the part 750 SPDES regulations and are not summarized here. The Express Terms of proposed Part 601 control should a conflict exist between this summary document and the Express Terms.

§ 601.1 Purpose

The purpose of part 601 is to regulate the use of NY's water resources pursuant to ECL article 15 title 15 by implementing a permitting, registration and reporting program for water withdrawals equaling or exceeding a threshold volume. This Part also implements New York's commitment under the Great Lakes-St. Lawrence River Basin Water Resources (GLSLRBWR) Compact to create a regulatory program for water withdrawals in the Great Lakes Basin.

§ 601.2 Definitions

Subpart § 601.2 provides definitions of terms. One of the numerous definitions is included here. The term threshold volume means "the withdrawal of water of a volume of one hundred thousand gallons or more per day, determined by the limiting maximum capacity of the water withdrawal system; except that for withdrawals for agricultural purposes the threshold volume shall mean the withdrawal of water of a volume in excess of an average of one hundred thousand gpd in any consecutive thirty-day period."

§ 601.3 Applicability

"[Part 601] applies to any person who is engaged in, or proposes to engage in, the construction, operation or maintenance of a water withdrawal system that withdraws water of a volume equal to or greater than the threshold volume; the taking, condemnation or acquisition of land for the development or protection of sources of public water supply; the extension of a water service area associated with a water withdrawal system that withdraws water of a volume equal to or greater than the threshold volume; and the interbasin diversion of water or wastewater. This Part also applies to any person who proposes to transport or carry waters of the state to any location outside the state, or to transport or carry by vessel more than ten thousand gallons in any one day of the waters of the state. All valid public water supply permits and approvals issued by DEC or its predecessors that are in effect as of February 15, 2012 shall remain in effect for the purpose of satisfying the [part 601] permit requirements..., except that DEC may seek modification of such a permit in accordance with this Part."

§ 601.4 Prohibitions

Any water withdrawal is prohibited if it is subject to and not in compliance with the GLSLRBWR Compact, will result in an interbasin diversion prohibited by § 601.18, or is otherwise subject to and not in compliance with this part, a compact basin commission, or any other law.

§ 601.5 Annual Reporting

Submit an annual water withdrawal report if you are subject to the permit requirements of §§ 601.6 or 601.7, the agricultural registration requirements of § 601.17, or the interbasin registration requirements of § 601.18; or you are a hydropower operator under a Federal Energy Regulating Commission license; and are not otherwise exempt under § 601.9.

Complete the annual reports on DEC forms, submit the first one on or before March 31, 2013, and then submit another by March 31 every year thereafter. Annual reports include withdrawals for the previous calendar year and a specific list of elements, including volume withdrawn, the volume, locations and methods of any water returns; volumes and rates of water lost or consumptively used; and water conservation and efficiency measures taken. Exempt withdrawals include those for fire suppression or public emergency, under Long Island water well permits, for non-extractive geothermal heat pumps, and for reuse of reclaimed wastewater.

These annual reports satisfy the registration and annual reporting provisions of ECL article 15 titles 16 and 33 until the effective date of their repeal, December 31, 2013. However, the two-year registration fee of two hundred dollars ($200) or the annual report fee of fifty dollars ($50) pursuant to ECL article 15 title 16 or title 33 remain due until their repeal, except for agricultural withdrawals registered under § 601.17.

§ 601.6 Water Withdrawal Permit

This subpart lists the actions that may not be undertaken without a water withdrawal permit under Part 601. There are eleven listed actions that require a permit. The core actions are the construction, operation or maintenance of a water withdrawal system with a capacity at or above the threshold volume. Additional listed actions include those that extend, alter or change an existing water withdrawal system such that the system capacity increases to meet or exceed the threshold volume, or exceed the threshold volume more than it did previously. The transport of any amount of NY fresh surface or groundwater to any location outside NY through pipes, conduits, ditches or canals requires a permit as does the transport by vessel (floating craft) of more than ten thousand gpd of NY surface water. For a public water supply system with a capacity at or above the threshold volume, no agreement for the bulk sale of water for commercial, industrial, oil and gas well development outside of the public water supply system's approved water service area may be entered into without a permit.

§ 601.7 Initial Permits

A person must apply for an 'initial permit' with respect to a water withdrawal system, other than public water supply, that has a capacity at or above the threshold volume as of February 15, 2012. Such persons must also have properly reported their withdrawals to DEC pursuant to ECL article 15 title 16 or 33 as of February 15, 2012 and must not be exempt under § 601.9. Persons subject to this subpart who failed to report existing withdrawals as of February 15, 2012 must submit a standard permit application under § 601.6 by February 15, 2013.

Persons who qualify for the initial permit process must apply for an initial permit. To do so, complete an initial permit application on DEC forms and submit it to DEC by the following deadlines: February 15, 2013 for systems designed to withdraw 100 million gallons per day (mgd) or more; February 15, 2014 for systems with a capacity of 10 or more but less than 100 mgd; February 15, 2015 for capacities of 2 or more but less than 10 mgd; February 15, 2016 for systems capacities of 0.5 or more but less than 2 mgd; February 15, 2017 for systems capacities of 0.1 or more but less than 0.5 mgd. For withdrawals that are specifically regulated as of February 15, 2012 under a SPDES permit or a permit issued under ECL article 15 (other than title 15), an initial permit application must be submitted within 180 days before the existing permit is scheduled to expire absent renewal.

Initial permits are issued for the capacities previously reported on or before February 15, 2012, are issued for a fixed terms of up to ten years, include the terms of a standard water withdrawal permit, including water conservation measures, and are subject to modification, suspension and revocation under this Part.

§ 601.8 Consolidation of Existing Public Water Supply Permits. 'Please see Express Terms.'

§ 601.9 Permit Exemptions

There are fourteen listed actions that are exempt from the water withdrawal permit requirements. They are quite specific and the reader is referred to the Express Terms. Among the exempt actions are the following: agricultural withdrawals registered or reported pursuant to ECL article 15 title 16 or title 33 by February 15, 2012 (such withdrawals are still subject to § 601.5 and/or § 601.17); withdrawals approved by the DRBC or SRBC; withdrawals of hydropower facilities under a FERC license; withdrawals from the NYS Canal System by the NYS Canal Corporation; non-extractive geothermal systems; Long Island wells with Part 602 permits; on-site water withdrawals for approved inactive hazardous waste remedial site programs; fire suppression or public emergency withdrawals; withdrawals from the Atlantic Ocean or Long Island Sound; water main extensions in an approved water service area, reconstruction

of existing water withdrawal facilities, or construction of filtration or treatment facilities, where there is no change in capacity; ballast water withdrawals necessary for normal and lawful vessel activity; and withdrawals related to routine maintenance and emergency repairs of dams.

§ 601.10 Application for a Permit. Please see Express Terms.

§ 601.11 Action on Permit Applications

DEC may grant or deny a water withdrawal permit, or grant the permit with conditions. Permit terms are up to ten years. In making the permit decisions, DEC will examine whether, for example, other sources were considered, the quantity is adequate and necessary for the proposed use, the project is equitable to affected municipalities, the withdrawal can be avoided or lessened through conservation, there will be significant adverse impacts to the quantity or quality of the source and water dependent natural resources, including aquatic life, and water conservation measures are incorporated. DEC may impose special permit conditions on public water supplies in, adjacent to, or serving an agricultural district.

§ 601.12 General Provisions of a Water Withdrawal Permit

The general provisions in § 601.12 that are fairly standard to DEC permits do not appear in this summary. The permit provisions that are more tailored to water withdrawals are: withdrawal systems must not exceed design capacity without approval; intake structures must sustain any passby flow requirement in the permit; withdrawals in a compact basin commission must comply with those requirements; and if operation pursuant to the permit causes or contributes to a contravention of State water quality standards, or if a permit modification is needed to prevent impairment of the best use of the waters, DEC may require a permit modification, abatement of the contravention or impairment, and may prohibit operation pending the modification.

§ 601.13 Approval of Plans by the Department of Health. "Applies to public water supply systems."

§ 601.14 Approval of Completed Works

Construction must be under the supervision of a professional engineer and cannot be operated until certified that it was completed in accordance with the issued permit. Public water supply permittees may start operation upon submission of an Approval of Completed Works letter issued by the Department of Health.

§ 601.17 Registration of Water Withdrawals for Agricultural Purposes

This subpart applies to persons who operate a water withdrawal system for agricultural purposes above the threshold volume on February 15, 2012 or the effective date of this Part, and who registered or reported, prior to February 15, 2012, their annual water usage pursuant to ECL article 15 title 16 or 33. Such persons must submit a request to register agricultural withdrawals by March 31st of each year. Requests shall include a completed form, a general map showing specified information, and the annual report for the previous year under § 601.5.

§ 601.18 Registration of Interbasin Diversions; Prohibitions

Interbasin diversions of more than an average of 1 mgd must be registered, as must increases in volume that cause such diversions to exceed this threshold. Construction of facilities or use of equipment must await registration. However, interbasin diversions under a part 601 water withdrawal permit need not be registered.

Submit the registration by February 15, 2013 for the subject diversions that exist on February 15, 2012 or the effective date of these regulations. Submit registration renewals annually by March 31 and within 60 days of a transfer. A registration must include: a completed form; a general map with specified information; and the annual report under § 601.5 for the previous calendar year; a professional engineer's report covering specified topics. DEC's receipt of a registration is not an approval. A new or increased interbasin diversion must not cause a significant adverse impact on the source New York major drainage basin quantity. Diversions of any quantity the Great Lakes-St. Lawrence River Basin are prohibited by the GLSLRBWR Compact. Limited exceptions under article 21 for public water supply systems are considered by the GLSLRBWR Council and Regional Body if in compliance with that Compact.

Summary of Part 621

6 NYCRR §§ 621.1(b), 621.4(b), and 621.11(c)(2) are modified to replace the term "supply" with "withdrawals", and establish initial permits under ECL article 15 title 15 as minor projects under 601.7.

Text of proposed rule and any required statements and analyses may be obtained from: Robert Simson, Division of Water, New York State Department of Environmental Conservation, 625 Broadway, 4th Floor, Albany, NY 12233-3500, (518) 402-8271, email: rjsimson@gw.dec.state.ny.us

Data, views or arguments may be submitted to: Same as above.

Public comment will be received until: 45 days after publication of this notice.

This action was not under consideration at the time this agency's regulatory agenda was submitted.

Summary of Regulatory Impact Statement

1. Statutory Authority. Chapter 401, Laws of 2011, amended ECL article 15 titles 15, 16 and 33, and article 71 section 71-1127 to authorize the New York State Department of Environmental Conservation (DEC) to implement an expanded permitting, reporting and registration program for water withdrawals and adopt regulations to implement the expanded program.

2. Legislative Objectives. The statutory amendments have a broad array of legislative objectives, all of which are carried out in the proposed revisions to 6 NYCRR part 601. ECL article 15 title 15 originally required permits solely for public water supplies with five or more service connections, regardless of the volume of water withdrawn. The amendments expand the permit program to include withdrawals for purposes beyond public water supply, such as those for commercial, manufacturing, industrial, oil and gas development, and other purposes. However, the amendments also limit the permit program to only include withdrawals that meet or exceed a threshold volume of 100,000 gallons per day (gpd). The effect is to regulate more of the higher-volume withdrawals across the state while no longer issuing water withdrawal permits for lower-volume public water supplies. Withdrawals below the size threshold must still comply with water pollution control laws (ECL article 17), Department of Health regulations and state environmental quality review (SEQR) requirements, as applicable.

To summarize, the legislative objectives: add water conservation elements and encourage water efficiency and reuse consistent with the Great Lakes-St. Lawrence River Basin Water Resources Compact as set forth in ECL article 21 title 10 (Compact); implement key provisions in ECL article 15 title 16 for the registration of Great Lakes watershed withdrawals and in ECL article 15 title 33 for water withdrawal reporting, both of which are now consolidated into title 15 (ECL article 15 titles 16 and 33 are then repealed effective December 31, 2013); exempt agricultural withdrawals from the permit requirement so long as the withdrawals are registered in accordance with current law, including ECL article 15 titles 16 and/or 33, as of February 15, 2012 under the provisions of ECL § 15-1504 (any person withdrawing water for agricultural purposes that has not registered or reported to DEC by February 15, 2012 shall be required to apply for and obtain a water withdrawal permit); allow a more generous size threshold for agricultural withdrawal registrations (100,000 gpd in any consecutive 30-day period) consistent with title 16; provide additional exemptions to the permit requirement; prohibit new or increased interbasin diversions in excess of one million gpd unless it is registered with DEC; require that existing diversions in excess of one million gpd are registered with DEC by February 15, 2013, subject to limited exemptions; provide that the construction of any water withdrawal system must be supervised by a licensed professional engineer; and increase the maximum civil penalty for violations of ECL article 15 from $500 to $2,500 per violation and from $100 to $500 for each day during which the violation continues.

These legislative objectives are fulfilled (and often statutorily required) by the proposed regulations, which largely mirror the statutory amendments, by: the proposed repeal of 6 NYCRR part 601, Water Withdrawal Regulations, and part 675, Great Lakes Water Withdrawal Registration Regulations; the proposed adoption of a new part 601; and the proposed revision to part 621.4, Uniform Procedures.

3. Needs and Benefits. Pursuant to ECL article 15, DEC has been entrusted with the responsibility to conserve and manage New York State's water resources for the benefit of all the inhabitants of the State. Good policy and sound natural resource management practices are critical to assuring long-term supplies of water to meet these needs. In addition to these benefits, the amendments in Chapter 401 allow DEC to fully comply with commitments under the Compact: regulation of water withdrawals occurring in the New York portion of the Great Lakes Basin. The amendments also direct DEC to establish a water conservation and efficiency program, another key responsibility of New York State under the Compact. The proposed revisions to part 601 carry out this commitment and program.

DEC worked extensively with stakeholders, including agriculture, industry and environmental advocates, to resolve their concerns during development of the legislation. As a result, existing agricultural withdrawals are exempt from the new permit requirement as long as these withdrawals are reported to DEC as of February 15, 2012 as is already required under existing law. In addition, other (non-agricultural) existing water withdrawals above the size threshold are entitled to an initial permit, subject to appropriate terms and conditions, based on the maximum water withdrawal capacity reported to DEC on or before February 15, 2012 pursuant to existing law. Chapter 401 also authorizes DEC to establish quantitative standards that maintain stream flows protective of aquatic life, consistent with the policy objectives of ECL article 15. Further, the criteria that DEC must consider in making its permit decisions are based on the decision-making standard in the Compact. The proposed part 601 reflects and carries out each of these aspects of the legislative amendments.

The proposed regulations implement a comprehensive statewide permitting program for significant water withdrawals, help ensure that water remains available for drinking water supply, agriculture, hydropower,

manufacturing, aquatic habitat, navigation, water-based recreation, wetlands, and other uses, while allowing DEC to regulate withdrawals of water that are unregulated now, like water taken by bottled water companies, or large withdrawals of water anticipated for high-volume hydraulic fracturing. The regulations will help the Department to protect existing water users, especially for drinking water purposes, and help new businesses to know where to locate in New York, especially if the business is heavily water dependent.

Modifications to 6 NYCRR part 621.4, Uniform Procedures, are also included in this rule making for consistent use of terms and to expand the 'minor' project category to include water withdrawal initial permits.

The Repeal of 6 NYCRR part 675 is also included in this rulemaking as the proposed 601 includes the requirements of part 675 as necessary.

4. Costs.

(a) Costs for initially complying and continuing to comply with the proposed regulations: Such costs will vary depending upon the size, capacity and complexity of the water withdrawal system or interbasin diversion. Reporting costs should be minimized because withdrawal systems within the ambit of the proposed rule are already required to report their withdrawals annually under ECL article 15 title 33, and if they are not required to report under this ECL provision, then they are required to report under another program that requires similar reporting. The new one-time costs primarily consist of the Engineer's Report associated with the permit application process for previously-unregulated water withdrawal systems. For new projects, the cost of an Engineer's Report can range from $5,000 to $25,000, depending on the water withdrawal system. It bears mentioning that most persons who construct new or expanded water withdrawal systems of a size that meet or exceed the size threshold in these regulations still typically need to retain a professional engineer, regardless of the new regulations.

Other elements of the permit application process will typically include either a 72-hour pump test and analysis of groundwater withdrawals, or a safe yield analysis for surface water withdrawals. Either of these tests can cost between $10,000 and $30,000, with the cost of a safe yield analysis typically occupying the lower end of this range. Again, these tests are routinely pursued, regardless of these regulations, by most water withdrawal system proposals that are above the size threshold.

The preparation and submission of a Water Conservation Program is also required by the permitting provisions of these regulations as well as the preparation and analysis necessary to present the Project Justification. A Water Conservation Program does not need to be prepared by a Professional Engineer, and may typically cost between $500 and $5,000, depending on the size of the withdrawal.

The availability of an 'initial permit' for pre-existing water withdrawals will reduce the costs the permit application process for existing withdrawals through the avoidance of the time and costs associated with a public hearings while maintaining the public involvement through the written public comment process.

New, smaller public water supply systems - those that do not exceed the size threshold- are now spared of the costs of the permit application process; however it is expected that many such smaller systems will complete the same or similar elements as a means of good design, less costly asset management, and efficient business practices.

(b) Costs to DEC, the state, and local governments for the implementation and continued compliance with the rule: The greatest direct cost to DEC will occur in the Division of Water, and to a lesser extent, other units needed to support the program's work. DEC may conduct outreach and training, develop additional guidance documents, prepare notifications, develop a compliance database to track receipt of required reports, prepare case referrals to DEC's attorneys for enforcement, and face an increase in water withdrawal permit applications.

There are no significant costs anticipated for state or local governments except with respect to their roles as owners or operators of water withdrawal systems above the size threshold. Many local governments have previously-permitted public water supplies; there should be no significant additional costs for these local governments. Various state agencies may operate water withdrawal systems over the size threshold and unless exempt will be subject to the same costs as provided above for other owners of operators of water withdrawal systems. The regulations and Chapter 401 define "person" to include state agencies.

5. Local Government Mandates. There are no programs, services, duties, or responsibilities imposed by the rule upon any county, city, town, village, school district, fire district or other special district except with respect to their role as owners or operators of water withdrawal systems over the size threshold (unless exempt). New smaller public water supply systems are spared of the costs of the permit application process if the systems do not reach the size threshold.

6. Paperwork. The proposed regulations require water withdrawal permittees to prepare and maintain documents about the water withdrawal system. Annual Reports or Registrations are periodic submissions but the predominant obligation to prepare and submit documents occurs once during the permit application process.

7. Duplication. For most water withdrawal systems, there are no relevant rules or other legal requirements of the state and federal governments that duplicate, overlap or conflict with the rule. The full text of the RIS provides additional clarification and answers frequent questions concerning potential duplication.

8. Alternatives. The Department considered proposing regulations without the monitoring, recording and recordkeeping provisions (§§ 601.19 and 601.20), the permit denial, suspension and revocation provisions (§ 601.16), the inspection and entry provisions (§ 601.21), the signature of forms provision (§ 601.22), and the references provision (§ 601.24), respectively. However, it was determined that the legislative objectives of the Chapter 401 amendments and the Compact cannot be met without the monitoring, recording and recordkeeping provisions. The Department adapted the proposed regulations in §§ 601.19 and 601.20 from existing SPDES regulations because they are already well-known to and implemented by those who use withdrawn water for purposes that generate waste water discharges. The permit denial, suspension and revocation provision in proposed § 601.16 appears in substantially similar form in the SPDES regulations, and is necessary to put permittees on notice of the circumstances that can lead to rejection of a water withdrawal proposal or suspension or revocation of a permit. The same is true for proposed § 601.22 and 601.24.

9. Federal Standards. The state's water withdrawal law does not derive its authority from federal laws or regulations. The regulations exempt withdrawals that are regulated by FERC from the permit requirements.

10. Compliance Schedule. The proposed regulations provide time to enable regulated persons to achieve compliance with the rule. A table summarizing the applicable time frames is provided in the full text of the Regulatory Impact Statement; however, the proposed regulations should be consulted for a fuller understanding of the time frames.

Summary of Regulatory Flexibility Analysis

1. Effect of Rule. Recent statutory amendments to Environmental Conservation Law (ECL) article 15, title 15 (Chapter 401 of the 2011 Laws of New York) both expand and limit this water withdrawal permit program. The amendments expand the permit program to include withdrawals for purposes beyond public water supply, such as those for commercial, manufacturing, industrial, oil and gas development, and other purposes. The amendments generally limit the permit program to withdrawals that meet or exceed a threshold volume (of 100,000 gallons per day (gpd)). The effect is to regulate far more of the higher-volume withdrawals across the state while exempting from permitting requirements withdrawals associated with lower-volume public water supply systems (PWSS). The proposed amendments to 6 NYCRR part 601 and subpart 621.4, and the consolidation of part 675 (Great Lakes water withdrawal registration) into part 601, implement this permitting program. The types of water withdrawal systems that are subject to the permit program are located in all areas of the state; so small businesses and local governments that undertake water withdrawals for purposes other than PWSS will be impacted by the proposed regulations, although the impact will be offset by the 100,000 gpd threshold, other exemptions, the availability of an 'initial permit,' and the staggered or delayed implementation schedule.

2. Compliance Requirements. The proposed regulations do not distinguish between water withdrawal systems operated by small businesses and those operated by local governments. Existing agricultural withdrawals of any volume are exempt from the permit requirement altogether so long as these existing withdrawals are registered in accordance with current law (including ECL article 15 titles 16 and/or 33) as of February 15, 2012. Moreover, the registration requirement for agricultural withdrawals is subject to an even more generous size threshold of an average of 100,000 gpd in any consecutive 30-day period. New agricultural withdrawals above the size threshold will require permits. The proposed new part 601 implements other statutory exemptions to the water withdrawal permit requirement, including fire suppression withdrawals and withdrawals approved by the Delaware River Basin Commission or Susquehanna River Basin Commission. Small businesses and local governments may benefit from these provisions.

Initial Permits. An 'initial permit' includes all of the terms and conditions of a water withdrawal permit, but is a 'minor action' under the proposed revision to subpart 621.4 that results in a slightly abbreviated permitting process. A water withdrawal system qualifies for an initial permit under the following circumstances: the withdrawal exists as of February 12, 2012; it is over the size threshold; it is properly reported to DEC by February 15, 2012 under existing law; it is not a public water supply; and the withdrawal is not otherwise exempt. The slightly simpler administrative process for initial permits eases the compliance requirements for existing and previously-unregulated water withdrawals that are not exempt.

In addition, the 'initial permit' application deadline for existing water

withdrawals above the size threshold depends on the amount of water withdrawn. Specifically, applications for initial permits are not due until: February 15, 2017 for withdrawals equal to or greater than 0.1 but less than 0.5 million gallons per day (mgd); February 15, 2016 for withdrawals equal to or greater than 0.5 mgd but less than 2 mgd; February 15, 2015 for withdrawals equal to or greater than 2 mgd but less than 10 mgd; February 15, 2014 for withdrawals equal to or greater than 10 mgd but less than 100 mgd; and February 15, 2013 for withdrawals equal to or greater than 100 mgd. These rolling deadlines will benefit small businesses and local governments that withdraw lesser amounts of water.

3. Professional Services. Small business owners and local governments that own or operate water withdrawal systems are subject to the same requirements as other owners of water withdrawal systems, and would be required to retain the same level of professional services to comply with the regulations. The requirements are described in the 'Costs' section of the Regulatory Impact Statement (RIS). A small business or local government who has a professional engineer with relevant experience on staff may use its engineer to produce the documents required in the proposed regulations.

4. Compliance Costs. Small business owners and local governments that operate water withdrawal systems are subject to the same requirements as others, and will likely incur similar costs as other withdrawal operators. The requirements are summarized in the 'Costs' section in the RIS.

5. Economic and Technological Feasibility. Small businesses and local governments who operate existing, currently-unregulated water withdrawal systems above the size threshold will need to meet the 'initial permit' requirements of the proposed regulations, unless exempt. Applying for an 'initial permit' is quicker and less costly because it usually avoids the need for a permit hearing (as described in the RIS). While public notice and comment on the 'initial permit' application must occur, a permit hearing on top of that would generally not be necessary.

It is important to understand that the economic burden related to the 'initial permit' process would be greater if the applicant has not or does not report or register their withdrawals under ECL article 15 titles 16 or 33 by February 12, 2012, as is discussed in the RIS. The water withdrawal reporting requirements in ECL article 15 title 33 are statutory and compliance is a pre-condition to eligibility to apply for an 'initial permit'. The same is true for the Great Lakes Basin registrations requirements of ECL article 15 title 16. If such existing withdrawals at or above the size threshold are not reported or registered under titles 16 or 33, as applicable, by February 12, 2012, the small business owner or municipal entity will not be eligible to apply for the quicker and less costly 'initial permit' and will instead be required to apply for and obtain a standard water withdrawal permit under its more time consuming and more costly process. The costs associated with applying for an 'initial permit' for existing water withdrawals should be substantially less as most engineering, testing, environmental and alternative analyses costs would have already been incurred when the project was initially constructed.

In addition to creating a more flexible permit application process for existing withdrawals above the size threshold, through the 'initial permit,' the proposed regulations also afford flexibility and enhance the feasibility by providing additional time, up to five years depending on the capacity of the water withdrawal system, to submit the 'initial permit' application to the Department.

6. Minimizing Adverse Impacts. In terms of additional measures taken to minimize potential adverse impacts of complying with the proposed regulations, we note that water hydropower withdrawals that are federally regulated through a FERC (Federal Energy Regulating Commission) license are exempt from the water withdrawal permit requirement. To avoid potential duplication in the annual reporting obligation, and as is further discussed in the RIS, annual reports or registrations of water withdrawals that are submitted under ECL article 15 titles 16 or 33are deemed sufficient under the proposed regulations until those statutory provisions sunset on December 31, 2013.

As stated above, under the amended statute and these proposed regulations, new public water supply systems below the volume threshold, regardless of the number of service connections, are no longer required to apply for water withdrawal permits. Similarly, existing agricultural withdrawals that are registered or reported to DEC under ECL article 15 titles 16 or 33 on or before February 15, 2012 are exempt altogether from the water withdrawal permit requirement and the registration requirement for agricultural withdrawals is subject to a more generous size threshold.

For water withdrawal systems that are not exempt and that are above the size threshold as of February 15, 2012, the 'initial permit' process is somewhat less costly and time consuming than the standard permit process and provides additional time to comply depending on the capacity of the water withdrawal system.

7. Small Business and Local Government Participation. The public outreach that occurred during the development of the statutory amendments was of significant and material assistance in drafting these proposed regulations. DEC played a role in drafting the legislation underlying this rulemaking. In that process, DEC sought and received input from many stakeholders, including representatives of small businesses and local governments. The discussions were about how regulated entities would be subject to the law, and the discussions resulted in legislative changes to address concerns that are now also carried out in these proposed regulations.

In response to discussions with the New York Farm Bureau, DEC modified the statutory definition of threshold volume for agricultural withdrawals, and made other changes applicable to agricultural withdrawals. During the legislative process, DEC also met with the Business Council and the New York State Chemical Alliance to address concerns of New York's businesses. These groups explained that it would be burdensome for such groups to apply for permits for withdrawals that have already existed. To address this concern, the amended legislation includes provisions allowing existing systems to utilize the more efficient and less costly "initial permit" process. DEC also met with and had discussions with representatives of the New York State Association of Town Superintendents of Highways, Inc.; Ski Areas of New York, Inc. and representatives of the state's ski areas; persons representing the interests of golf courses and installers of irrigation systems; and several local governments. These, either individually or collectively, resulted in changes to the draft statutory amendments prior to their passage and thereby also to these proposed regulations. The regulatory provisions that reflect a direct response to the public outreach include, without limitation, the following: the definitions in § 601.2 ('environmentally sound and economically feasible,' establishment of the 'threshold volume' at a level as high as 100,000 gallons per day, with a more generous interpretation for farm withdrawals, and 'vessel' is defined such that it does not include tanker trucks); the annual reporting in § 601.5 (potential duplication with reporting under ECL article 15 titles 16 and 33 eliminated, the list of over seven exemptions from annual reporting); the 'initial permit' provisions in § 601.7, in their entirety; the provision of fourteen separate water withdrawal permit exemptions in § 601.9, which includes eight more than are in the amended statute, particularly the permit exemption for all withdrawals for agricultural purposes that are properly registered or reported by February 15, 2012; inclusion of "economically feasible" in the water conservation program that is required under the permit application provisions in § 601.10; and the allowance for the water conservation programs to be developed without the services of a professional engineer.

DEC has also undertaken outreach in an effort to ensure that all affected entities were made aware of the water withdrawal reporting requirements of ECL article 15, title 33 that became effective April 1, 2009. DEC posted information about the new reporting requirement on its webpage at http://www.dec.ny.gov/lands/55509.html. In 2009, DEC sent letters to thousands of persons potentially subject to the new reporting requirement as well as to organizations representing those persons, including the Association of Towns of the State of New York, public water suppliers, State Pollutant Discharge Elimination System permittees, and Concentrated Animal Feeding Operations. In 2010, DEC contacted the same list of persons via e-mail. In August 2011, DEC met with the New York Farm Bureau to discuss further outreach to alert farmers to the benefits to them of registering or reporting prior to February 15, 2012.

Rural Area Flexibility Analysis

1. Types and Estimated Numbers of Rural Areas. Environmental Conservation Law (ECL) article 15 title 15 originally required permits solely for public water supplies with five or more service connections, regardless of the volume of water withdrawn. Recent statutory amendments (Chapter 401 of the 2011 Laws of New York) both expand and limit this water withdrawal permit program. The amendments expand the permit program to include withdrawals for purposes beyond public water supply, such as those for commercial, manufacturing, industrial, oil and gas development, and other purposes. The amendments generally limit the permit program to withdrawals that meet or exceed a threshold volume (of 100,000 gallons per day (gpd)). The effect is to regulate far more of the higher-volume withdrawals across the state while no longer issuing water withdrawal permits for lower-volume public water system withdrawals. Withdrawals below the size threshold must still comply with water pollution control laws (ECL article 17), Department of Health regulations, as applicable, and state environmental quality review (SEQR) requirements. The amended law also authorizes the Department of Environmental Conservation (DEC) to establish quantitative standards to maintain stream flows protective of aquatic life, consistent with the policy objectives in ECL article 15 of assuring drinking water supplies, aquatic habitat, and recreational uses. The proposed amendments to 6 NYCRR part 601 and subpart 621.4, and the consolidation of part 675 (Great Lakes water withdrawal registration) into part 601, implement this expanded permitting program and the authorized exemptions thereto. The types of water withdrawal systems that are subject to the expanded permit program are lo-

cated in all areas of the state, including rural areas. Therefore, all rural areas may be impacted by the proposed regulation.

2. Reporting, Recordkeeping and Other Compliance Requirements, and Professional Services. The proposed regulations are the same for water withdrawal systems located in rural areas. However, to the extent that water withdrawal systems in rural areas are less likely to exceed the above-stated size threshold, they are less likely to be subject to the water withdrawal permit requirement. Agricultural withdrawals of any volume are exempt from the permit requirement altogether so long as the withdrawals are registered in accordance with current law (including ECL article 15 titles 16 and/or 33) as of February 15, 2012. Moreover, the registration requirement for agricultural withdrawals is subject to an even more generous size threshold of an average of 100,000 gpd in any consecutive 30-day period. The new part 601 implements other statutory exemptions to the water withdrawal permit requirement, such as those for fire suppression withdrawals and withdrawals approved by the Delaware River Basin Commission or Susquehanna River Basin Commission.

Initial Permits. An "initial permit" includes all of the terms and conditions of a standard water withdrawal permit, but is a 'minor action' under the proposed modification to subpart 621.4 4 that results in a slightly abbreviated permitting process. In the absence of a timely application for an initial permit, a standard water withdrawal permit must be applied for and approved under the full permit process. A water withdrawal system qualifies for an initial permit under the following circumstances: the withdrawal exists as of February 12, 2012; it is over the size threshold; it is properly reported to DEC by February 15, 2012 under existing law; it is not a public water supply; and the withdrawal is not otherwise exempt. Existing public water supplies with water supply permits need do nothing different. The slightly simpler administrative process for initial permits eases the compliance requirements for existing and previously-unregulated water withdrawals that are not exempt.

In addition, among water withdrawal systems above the size threshold that qualify for initial permits, the proposed regulations in part 601 provide more time for operators of smaller water withdrawal systems to apply for initial permits. This is more likely to be a benefit in rural areas. Specifically, under the provisions of proposed part 601.7, initial permit applications are not due until February 15, 2017 for withdrawals equal to or greater than 0.1 but less than 0.5 million gallons per day (mgd); February 15, 2016 for withdrawals equal to or greater than 0.5 mgd but less than 2 mgd; February 15, 2015 for withdrawals equal to or greater than 2 mgd but less than 10 mgd; February 15, 2014 for withdrawals equal to or greater than 10 mgd but less than 100 mgd; and February 15, 2013 for withdrawals equal to or greater than 100 mgd.

3. Costs. The cost to comply with the proposed regulations will depend on the size, purpose and complexity of the water withdrawal system. Other than the factors mentioned above, it is not expected that there will be any variation in the compliance costs based upon rural area status.

4. Minimizing Adverse Impacts. Please see Items 1 and 2, above. As stated, public water supply systems below the size threshold, which are more likely to be located in rural areas, are no longer required to have water withdrawal permits. As further stated above, existing agricultural withdrawals that are registered or reported to DEC under ECL article 15 titles 16 or 33 on or before February 15, 2012 are exempt from the water withdrawal permit requirement under the amended law and the proposed part 601 amendments (although such withdrawals must continue to be registered). The registration requirement for agricultural withdrawals is subject to a more generous size threshold.

For water withdrawal systems that are not exempt and that are above the size threshold as of February 15, 2012, the initial permit process is somewhat less costly and time consuming than the standard permit process. Initial permit applications are due last for the smallest withdrawal systems above the size threshold. Existing public water supplies with water supply permits need do nothing different.

5. Rural Area Participation. DEC sought and received input from many stakeholders in the development of the amendments enacted in Chapter 401, which included representatives of farmers as well as business interests which may have some facilities located in rural areas. In 2010 DEC had several discussions with the New York Farm Bureau and modified the proposed statutory amendments to add ECL § 15-1504 (specific to agricultural withdrawals), change the definition of threshold volume for agricultural withdrawals, and make other changes applicable to agricultural withdrawals to address concerns of New York's farmers. DEC also met with the Business Council and the New York State Chemical Alliance in 2010 to address concerns of New York's businesses and significant amendments were made to the proposed law to address their concerns, including the addition of the "initial permit" provisions. In March, April and May 2011 DEC had a meeting and several discussions with persons representing the interests of the New York State Association of Town Superintendents of Highways, Inc. to discuss potential permit requirements for water pumping equipment at mines owned and operated by towns. In April 2011, DEC met with Ski Areas of New York, Inc. and representatives of the state's ski areas to address concerns related to the impacts the proposed statutory amendments and implementing regulations might have on New York's ski areas. DEC also discussed the proposed amendments with persons representing the interests of golf courses and installers of irrigation systems. In addition, DEC undertook outreach in an effort to ensure that all affected entities were made aware of the water withdrawal reporting requirements of ECL article 15, title 33 that became effective April 1, 2009. DEC posted information about this reporting requirement on its webpage at http://www.dec.ny.gov/lands/55509.html. In 2009, DEC sent letters to thousands of persons potentially subject to the new reporting requirement as well as to organizations representing those persons, including the Association of Towns of the State of New York, public water suppliers, State Pollutant Discharge Elimination System permittees, and Concentrated Animal Feeding Operations. In 2010, DEC contacted the same list of persons via e-mail. In August 2011, DEC met with the New York Farm Bureau to discuss further outreach to alert farmers to the benefits to them of registering or reporting prior to February 15, 2012.

Job Impact Statement

1. Nature of impact. The proposed revision to the water withdrawal regulations may create high-paying technical jobs in engineering and training.

2. Categories and numbers affected. Under the proposed revisions to 6 NYCRR Part 601, operators of previously-unregulated water withdrawal systems must submit several technical documents, such as annual reports as well as various parts of a permit application, including an engineer's report, pump tests and analyses for groundwater withdrawals, safe yield analyses for surface water withdrawals, water conservation programs, and the analysis of alternatives sufficient to complete a project justification. It is expected that the proposed regulatory revisions will generate high-paying engineering jobs, as well as technical jobs that do not require the services of a professional engineer. The field of water withdrawal planning, monitoring and reporting includes specialized areas of expertise: civil/structural engineering and hydrologic/hydraulic analysis, with some utilizing computer modeling. There will be a need for engineers and other professionals to have additional training in water withdrawal and the proposed water conservation programs. Therefore, there will be an opportunity for companies and colleges to develop training programs and offer specialized training in New York. This would create job opportunities for trainers as well as support staff opportunities. The Department has no way of determining the number of engineering or construction jobs or training opportunities.

3. Regions of adverse impact. There are no adverse job impacts expected.

4. Minimizing adverse impacts. There are no adverse job impacts expected.

5. Self-employment opportunities. The proposed regulations will create an environment favorable for experienced engineers, licensed surveyors, computer modelers, and water conservation planners specializing in hydrology and hydraulic analysis to start their own businesses. Self-employment opportunities also will likely exist for experienced engineers to conduct training and inspections, and to prepare engineering reports, and for experienced individuals in the additional trades indicated above.

Department of Labor

ERRATUM

A Notice of Adoption, I.D. No. LAB-43-10-00003-A, pertaining to Restrictions on the Consecutive Hours of Work for Nurses as Enacted in Section 167 of the Labor Law, published in the October 12, 2011 issue of the *State Register* failed to reference a previously published revised rule making. A Notice of Emergency Adoption and Revised Rule Making for this rule was published in the August 24, 2011 issue of the *State Register* (I.D. No. LAB-43-10-00003-ERP).

EXHIBIT C TO HENNESSEY AFFIRMATION — STATE REGISTER NOTICE OF ADOPTION OF WATER WITHDRAWAL PERMITTING REGULATIONS, DATED NOVEMBER 28, 2012 [524-531]

RULE MAKING ACTIVITIES

Each rule making is identified by an I.D. No., which consists of 13 characters. For example, the I.D. No. AAM-01-96-00001-E indicates the following:

AAM	-the abbreviation to identify the adopting agency
01	-the *State Register* issue number
96	-the year
00001	-the Department of State number, assigned upon receipt of notice.
E	-Emergency Rule Making—permanent action not intended (This character could also be: A for Adoption; P for Proposed Rule Making; RP for Revised Rule Making; EP for a combined Emergency and Proposed Rule Making; EA for an Emergency Rule Making that is permanent and does not expire 90 days after filing.)

Italics contained in text denote new material. Brackets indicate material to be deleted.

Department of Agriculture and Markets

PROPOSED RULE MAKING NO HEARING(S) SCHEDULED

Farm Brewery and Farm Distillery Exemption

I.D. No. AAM-48-12-00001-P

PURSUANT TO THE PROVISIONS OF THE State Administrative Procedure Act, NOTICE is hereby given of the following proposed rule:

Proposed Action: This is a consensus rule making to amend Part 276.4 of Title 1 NYCRR.

Statutory authority: Agriculture and Markets Law, sections 16, 18, 251-z-4, 251-z-9

Subject: Farm brewery and farm distillery exemption.

Purpose: Provide farm breweries and farm distilleries with AML Article 20-C food processing license exemption.

Text of proposed rule: Subdivision (c) of section 276.4 of 1 NYCRR is amended to read as follows:

(c) Any establishment licensed as a: farm winery, pursuant to section 76-a of the Alcoholic Beverage Control Law[, or as]; a special farm winery, pursuant to section 76-d of said Law[,]; *a farm brewery, pursuant to section 51-a of said Law; or a farm distillery, pursuant to section 61 of said Law,* shall be exempt from licensing requirements of Article 20-C of the Agriculture and Markets Law, provided that:

(1) such establishment is maintained in a sanitary condition and follows the current good manufacturing practices set forth in Part 261 of this Title; and

(2) no other food processing operations for which licensing under Article 20-C of the Agriculture and Markets Law is required are being conducted at the establishment.

Text of proposed rule and any required statements and analyses may be obtained from: Stephen D. Stich, Director, Food Safety and Inspection, New York State Department of Agriculture and Markets, 10B Airline Drive, Albany, NY 12235, (518) 457-4492, email: stephen.stich@agriculture.ny.gov

Data, views or arguments may be submitted to: Same as above.

Public comment will be received until: 45 days after publication of this notice.

This action was not under consideration at the time this agency's regulatory agenda was submitted.

Consensus Rule Making Determination

This rule is proposed as a consensus rule, within the definition of that term in the State Administrative Procedure Act section 102(11) pursuant to the expectation that no person is likely to object to its adoption because it is non-controversial.

Agriculture and Markets Law § 251-z-4 authorizes the Commissioner of Agriculture and Markets to provide by regulation exemptions from licensing for small food processing establishments when he finds that such exemptions would avoid unnecessary regulation and assist in the administration of Article 20-C (Licensing and Food Processing Establishments) without impairing its purposes. Exempting farm breweries and farm distilleries from obtaining an Article 20-C food processing license inplements this directive. Farm wineries are currently exempt from Article 20-C licenses but are still subject to food sanitation inspections by the Department. This amendment would treat farm breweries and farm distilleries consistent with farm wineries. These entities would also be subject to sanitation requirements.

There are approximately twenty-one farm distilleries in the state who are currently licensed by the Department pursuant to Article 20-C. Farm distilleries currently licensed under Article 20-C for the manufacture of distilled spirits will be exempt from having to renew their license at date of expiration. There are currently no farm breweries licensed by the Department. Since the proposed rule will relieve a regulatory burden upon farm breweries and farm distilleries, it is expected that no one is likely to object to the proposed amendment.

Job Impact Statement

The proposed rule will exempt farm breweries and farm distilleries from having to obtain food processing licenses, pursuant to Agriculture and Markets Law Article 20-C. The rule will eliminate a regulatory burden upon establishments already licensed by the State Liquor Authority from obtaining an Article 20-C license from the Department and, furthermore, will benefit New York's beer and spirits industry.

The proposed rule is expected to have a positive impact upon jobs and employment opportunities in the State's beer and spirits industry.

Department of Environmental Conservation

NOTICE OF ADOPTION

Water Withdrawal Permit, Reporting and Registration Program

I.D. No. ENV-47-11-00012-A

Filing No. 1132

Filing Date: 2012-11-13

Effective Date: 2013-04-01

PURSUANT TO THE PROVISIONS OF THE State Administrative Procedure Act, NOTICE is hereby given of the following action:

Action taken: Repeal of Parts 601 and 675; addition of a new Part 601; and amendment of section 621.4 of Title 6 NYCRR.

Statutory authority: Environmental Conservation Law, sections 3-0301(1)(f), (2)(m), 3-0306(4), 8-0113(2), 70-0107; art. 15, titles 15, 16 and 33; art. 21, title 10; art. 70 and SAPA art. 2

Subject: Water withdrawal permit, reporting and registration program.

Purpose: Implement amendments to ECL art. 15 title 15, key provisions of ECL art. 15 title 16, 6 NYCRR 675 and ECL art. 15 title 33.

Substance of final rule: 6 NYCRR Parts 601 and 675 are repealed and a new Part 601 is adopted to read as follows:

Part 601: Water Withdrawal Permitting, Reporting and Registration (Exclusive of Long Island Wells regulated under Part 602)

(Statutory authority: Environmental Conservation Law § 3-0301(2)(m), article 15 titles 15, 16 and 33, title 10 of article 21)

Contents:

Sec.
601.1 Purpose
601.2 Definitions
601.3 Applicability
601.4 Prohibitions
601.5 Annual reporting
601.6 Water withdrawal permits
601.7 Initial permits
601.8 Consolidation of existing public water supply permits
601.9 Permit exemptions
601.10 Application for a permit; Renewal of an Existing Permit
601.11 Action on permit applications
601.12 General provisions of a water withdrawal permit
601.13 Approval of plans by the Department of Health
601.14 Approval of completed works
601.15 Modification of water withdrawal permits
601.16 Denial, suspension or revocation of permits
601.17 Registration of water withdrawals for agricultural purposes
601.18 Registration of interbasin diversions; prohibitions
601.19 Monitoring Requirements
601.20 Routine Monitoring, Recording, and Reporting
601.21 Inspection and Entry
601.22 Signature of forms
601.23 Severability
601.24 References

Chapter 401, Laws of 2011, amended ECL article 15 titles 15, 16 and 33, and article 71 section 71-1127 authorize the New York State Department of Environmental Conservation (DEC) to implement an expanded permitting, reporting and registration program for water withdrawals and to adopt regulations to implement the expanded program. These statutory amendments expanded the permit program to include withdrawals for purposes beyond public water supply, such as commercial, manufacturing, industrial, oil and gas development, and other purposes. However, the amendments also limited the permit program to only address withdrawal systems with a capacity that meets or exceeds a threshold volume of 100,000 gallons per day (gpd). The effect is to regulate more of the higher-volume withdrawals across the state while no longer issuing water withdrawal permits for lower-volume public water supplies.

The adopted rule repeals 6 NYCRR Parts 601 and 675 and adopts a new Part 601 and a revised Part 621. The rule also carries out New York's commitment under the Great Lakes-St. Lawrence River Basin Water Resources Compact to create a regulatory program for water withdrawals in the Great Lakes Basin. The Department is repealing Part 675 because its enabling statute, ECL article 16, was repealed by the legislature and its salient provisions included in ECL article 15 title 15 and Part 601. Lastly, this rule making revises some subparts in the uniform procedures regulations in Part 621 such that applications for "initial permits" (concerns already-existing withdrawals) are "minor" actions.

The rule has been clarified in numerous respects, but the clarifications are non-substantive. For example, due to their substantially similar nature, the rule now explicitly clarifies that agricultural withdrawals and interbasin diversions need not be registered under Part 601 if the withdrawals are already operating pursuant to a Delaware or Susquehanna River Basin Commission approval. The Department also corrected typographical errors, re-ordered certain sub-provisions for the sake of clarity, and specified an effective date of Monday, April 1, 2013. The Department updated the submission deadlines for initial permit applications from February 15, 2013 to June 1, 2013, accordingly. The first submission date for annual reports under the final rule was not changed because it is statutory. It remains Sunday, March 31, 2013.

One new permit exemption appears in the final rule to help resolve some confusion on the part of the regulated community. Temporary withdrawals for construction, dewatering, hydrostatic testing, or aquifer testing purposes, any of which withdrawals is less than an average of 100,000 gallons per day in any thirty day consecutive period (3 million gallons during a 30 day period), are now explicitly exempt. Such short term or one-time withdrawals do not require a permit, however, the outer limits of the definition of "temporary" are left to Staff's best professional judgment as each project, withdrawal and water source is unique. The definition of "threshold volume" has been slightly expanded to simply clarify that for public water supply systems under the threshold volume that are required by the Department of Health to have back-up or "redundant" water supply wells, "threshold volume" is not calculated to include the redundant well capacity so long as actual withdrawals remain under the threshold. Redundant wells may not be operated to withdraw additional water which, in combination with the existing public water supply system, exceeds the size threshold unless the facility first obtains a water withdrawal permit. Lastly, a few phrases have been added to make the water withdrawal permit renewal process easier to understand.

As stated in the Notice of Adoption, non-substantive changes were made to subsections 601.2-601.3, 601.5-601.12, 601.14, 601.17-601.20, and 601.24. The following summarizes changes that were made primarily to reflect the effective date and make the requirements clearer without creating any substantial changes in the meaning.

Subpart § 601.3 (Applicability) clarifies that a permit is required only for systems in excess of the threshold volume with respect to the taking, condemnation or acquisition of land for the development or protection of sources of public water supply. In § 601.5 (Annual Reporting), the due dates in paragraph (c) for annual reports have been clarified during the transition period between the effective date of the statutory amendments on February 15, 2012 and the effective date of re-issued Part 601 on April 1, 2012. In § 601.7 (Initial Permits), the deadline in sub-paragraph (b)(2) for submitting an initial permit application was updated from February 15, 2013 to June 1, 2013, which is 60 days after the effective date of April 1, 2013 for this Part. The deadline for submitting initial permit applications for withdrawals that are also regulated under SPDES permits as of February 15, 2012, in sub-paragraph (b)(3), has been changed from 180 days before the existing SPDES permit is scheduled to expire absent renewal to a deadline that consists of either the same 180-day deadline or June 1, 2013, whichever occurs later. This clarifies the deadline for those with SPDES permits that have expiration dates that fall earlier than June 1, 2013.

In § 601.9 (Permit Exemptions), exemption (o) was added to clarify that temporary water withdrawals for construction or aquifer testing purposes where, the water withdrawn is less than an average of the threshold volume in any consecutive thirty-day period, do not need a permit. In § 601.11 (Action on Permit applications), paragraph (h) was added to reiterate the Department's coordination of water withdrawal application reviews with other Department permit programs, as applicable, including the SPDES program. In § 601.12 (General Provisions of a Water Withdrawal Permit), language was added to the introductory phrase to clarify that § 601.12 applies to both new water withdrawal permits that are issued after the effective date of this Part and to existing public water supply permits.

In § 601.17 (Registration of Water Withdrawals for Agricultural Purposes), paragraph (b) clarifies that the March 31 reporting deadline applies in 2013 because the deadline is statutory and became effective in 2011. Paragraph (f) clarifies that, per the statute, a registration is not required if an agricultural withdrawal is operating pursuant to a DRBC or SRBC Docket (permit). In § 601.18 (Registration of Interbasin Diversions; Prohibitions), Paragraph (a) eliminates the wording, 'of an average' in order to correct an error and Paragraph (b) clarifies that a registration is not required if an interbasin diversion is operating pursuant to a DRBC or SRBC Docket (permit). In § 601.19 (Monitoring Requirements), paragraph (f) replaces "the effective date of this Part" with "April 1, 2013." In § 601.20 (Routine Monitoring, Recording, and Reporting), sub-paragraph (a)(2) further clarifies the reporting requirements for monitoring malfunctions and repairs. In § 601.24 (References), revisions to the HUC codes were included in a map published by the Department, which made incorporation by reference unnecessary.

Final rule as compared with last published rule: Nonsubstantive changes were made in sections 601.2-601.3, 601.5-601.12, 601.14, 601.17-601.20 and 601.24.

Text of rule and any required statements and analyses may be obtained from: Robert Simson, Division of Water, New York State Department of Environmental Conservation, 625 Broadway, 4th Floor, Albany, NY 12233-3500, (518) 402-8271, email: rjsimson@gw.dec.state.ny.us

Summary of Revised Regulatory Impact Statement

1. Chapter 401, Laws of 2011, amended ECL article 15 titles 15, 16 and 33, and article 71 section 71-1127 to authorize the New York State Department of Environmental Conservation (DEC) to implement an expanded permitting, reporting and registration program for water withdrawals and adopt regulations to implement the expanded program.

2. 'Legislative Objectives.' The statutory amendments have a broad array of legislative objectives, all of which are carried out in the revisions to 6 NYCRR part 601. ECL article 15 title 15 originally required permits solely for public water supplies with five or more service connections, regardless of the volume of water withdrawn. The amendments expand the permit program to include withdrawals for purposes beyond public water supply, such as those for commercial, manufacturing, industrial, oil and gas development, and other purposes. However, the amendments also limit the permit program to only include withdrawals that meet or exceed a threshold volume of 100,000 gallons per day (gpd). The effect is to regulate more of the higher-volume withdrawals across the state while no longer issuing water withdrawal permits for lower-volume public water supplies. Withdrawals below the size threshold must still comply with water pollution control laws (ECL article 17), Department of Health regulations and state environmental quality review (SEQR) requirements, as applicable.

To summarize, the legislative objectives: add water conservation elements and encourage water efficiency and reuse consistent with the Great Lakes-St. Lawrence River Basin Water Resources Compact as set forth in ECL article 21 title 10 (Compact); implement key provisions in ECL article 15 title 16 for the registration of Great Lakes watershed withdrawals and in ECL article 15 title 33 for water withdrawal reporting, both of which are now consolidated into title 15 (ECL article 15 titles 16 and 33 are then repealed effective December 31, 2013); exempt agricultural withdrawals from the permit requirement so long as the withdrawals are registered in accordance with current law, including ECL article 15 titles 16 and/or 33, as of February 15, 2012 under the provisions of ECL § 15-1504 (any person withdrawing water for agricultural purposes that has not registered or reported to DEC by February 15, 2012 shall be required to apply for and obtain a water withdrawal permit); allow a more generous size threshold for agricultural withdrawal registrations (100,000 gpd in any consecutive 30-day period) consistent with title 16; provide additional exemptions to the permit requirement; prohibit new or increased interbasin diversions in excess of one million gpd unless it is registered with DEC; require that existing diversions in excess of one million gpd are registered with DEC by February 15, 2013, subject to limited exemptions; provide that the construction of any water withdrawal system must be supervised by a licensed professional engineer; and increase the maximum civil penalty for violations of ECL article 15 from $500 to $2,500 per violation and from $100 to $500 for each day during which the violation continues.

These legislative objectives are fulfilled (and often statutorily required) by the regulations, which largely mirror the statutory amendments, by: the repeal of 6 NYCRR part 601, Water Withdrawal Regulations, and part 675, Great Lakes Water Withdrawal Registration Regulations; the adoption of a new part 601; and the revision to part 621.4, Uniform Procedures.

3. 'Needs and Benefits.'

Pursuant to ECL article 15, DEC has been entrusted with the responsibility to conserve and manage New York State's water resources for the benefit of all the inhabitants of the State. Good policy and sound natural resource management practices are critical to assuring long-term supplies of water to meet these needs. In addition to these benefits, the amendments in Chapter 401 allow DEC to fully comply with commitments under the Compact: regulation of water withdrawals occurring in the New York portion of the Great Lakes Basin. The amendments also direct DEC to establish a water conservation and efficiency program, another key responsibility of New York State under the Compact. The revisions to part 601 carry out this commitment and program.

DEC worked extensively with stakeholders, including agriculture, industry and environmental advocates, to resolve their concerns during development of the legislation. As a result, existing agricultural withdrawals are exempt from the new permit requirement as long as these withdrawals are reported to DEC as of February 15, 2012 as is already required under existing law. In addition, other (non-agricultural) existing water withdrawals above the size threshold are entitled to an initial permit, subject to appropriate terms and conditions, based on the maximum water withdrawal capacity reported to DEC on or before February 15, 2012 pursuant to existing law. Chapter 401 also authorizes DEC to establish quantitative standards that maintain stream flows protective of aquatic life, consistent with the policy objectives of ECL article 15. Further, the criteria that DEC must consider in making its permit decisions are based on the decision-making standard in the Compact. The part 601 reflects and carries out each of these aspects of the legislative amendments.

The regulations implement a comprehensive statewide permitting program for significant water withdrawals, help ensure that water remains available for drinking water supply, agriculture, hydropower, manufacturing, aquatic habitat, navigation, water-based recreation, wetlands, and other uses, while allowing DEC to regulate withdrawals of water that are unregulated now, like water taken by bottled water companies, or large withdrawals of water anticipated for high-volume hydraulic fracturing. The regulations will help the Department to protect existing water users, especially for drinking water purposes, and help new businesses to know where to locate in New York, especially if the business is heavily water dependent.

Modifications to 6 NYCRR part 621.4, Uniform Procedures, are also included in this rule making for consistent use of terms and to expand the 'minor' project category to include water withdrawal initial permits.

The Repeal of 6 NYCRR part 675 is also included in this rulemaking as the 601 includes the requirements of part 675 as necessary.

4. 'Costs.'

'(a) Costs for initially complying and continuing to comply with the regulations:' Such costs will vary depending upon the size, capacity and complexity of the water withdrawal system or interbasin diversion. Reporting costs should be minimized because withdrawal systems within the ambit of the rule are already required to report their withdrawals annually under ECL article 15 title 33, and if they are not required to report under this ECL provision, then they are required to report under another program that requires similar reporting. The new one-time costs primarily consist of the Engineer's Report associated with the permit application process for previously-unregulated water withdrawal systems. For new projects, the cost of an Engineer's Report can range from $5,000 to $25,000, depending on the water withdrawal system. It bears mentioning that most persons who construct new or expanded water withdrawal systems of a size that meet or exceed the size threshold in these regulations still typically need to retain a professional engineer, regardless of the new regulations.

Other elements of the permit application process will typically include either a 72-hour pump test and analysis of groundwater withdrawals, or a safe yield analysis for surface water withdrawals. Either of these tests can cost between $10,000 and $30,000, with the cost of a safe yield analysis typically occupying the lower end of this range. Again, these tests are routinely pursued, regardless of these regulations, by most water withdrawal system proposals that are above the size threshold.

The preparation and submission of a Water Conservation Program is also required by the permitting provisions of these regulations as well as the preparation and analysis necessary to present the Project Justification. A Water Conservation Program does not need to be prepared by a Professional Engineer, and may typically cost between $500 and $5,000, depending on the size of the withdrawal.

The availability of an 'initial permit' for pre-existing water withdrawals will reduce the costs the permit application process for existing withdrawals through the avoidance of the time and costs associated with a public hearings while maintaining the public involvement through the written public comment process.

New, smaller public water supply systems – those that do not exceed the size threshold– are now spared of the costs of the permit application process; however it is expected that many such smaller systems will complete the same or similar elements as a means of good design, less costly asset management, and efficient business practices.

'(b) Costs to DEC, the state, and local governments for the implementation and continued compliance with the rule:' The greatest direct cost to DEC will occur in the Division of Water, and to a lesser extent, other units needed to support the program's work. DEC may conduct outreach and training, develop additional guidance documents, prepare notifications, develop a compliance database to track receipt of required reports, prepare case referrals to DEC's attorneys for enforcement, and face an increase in water withdrawal permit applications.

There are no significant costs anticipated for state or local governments except with respect to their roles as owners or operators of water withdrawal systems above the size threshold. Many local governments have previously-permitted public water supplies; there should be no significant additional costs for these local governments. Various state agencies may operate water withdrawal systems over the size threshold and unless exempt will be subject to the same costs as provided above for other owners of operators of water withdrawal systems. The regulations and Chapter 401 define "person" to include state agencies.

5. 'Local Government Mandates.'

There are no programs, services, duties, or responsibilities imposed by the rule upon any county, city, town, village, school district, fire district or other special district except with respect to their role as owners or operators of water withdrawal systems over the size threshold (unless exempt). New smaller public water supply systems are spared of the costs of the permit application process if the systems do not reach the size threshold.

6. 'Paperwork.'

The regulations require water withdrawal permittees to prepare and maintain documents about the water withdrawal system. Annual Reports or Registrations are periodic submissions but the predominant obligation to prepare and submit documents occurs once during the permit application process.

7. 'Duplication.'

For most water withdrawal systems, there are no relevant rules or other

legal requirements of the state and federal governments that duplicate, overlap or conflict with the rule. The full text of the RIS provides additional clarification and answers frequent questions concerning potential duplication.

8. 'Alternatives.'

The Department considered proposing regulations without the monitoring, recording and recordkeeping provisions (§ § 601.19 and 601.20), the permit denial, suspension and revocation provisions (§ 601.16), the inspection and entry provisions (§ 601.21), the signature of forms provision (§ 601.22), and the references provision (§ 601.24), respectively. However, it was determined that the legislative objectives of the Chapter 401 amendments and the Compact cannot be met without the monitoring, recording and recordkeeping provisions. The Department adapted the regulations in § § 601.19 and 601.20 from existing SPDES regulations because they are already well-known to and implemented by those who use withdrawn water for purposes that generate waste water discharges. The permit denial, suspension and revocation provision in § 601.16 appears in substantially similar form in the SPDES regulations, and is necessary to put permittees on notice of the circumstances that can lead to rejection of a water withdrawal proposal or suspension or revocation of a permit. The same is true for § 601.22 and 601.24.

9. 'Federal Standards.'

The state's water withdrawal law does not derive its authority from federal laws or regulations. The regulations exempt withdrawals that are regulated by FERC from the permit requirements.

10. 'Compliance Schedule.'

The regulations become effective April 1, 2013 and the relevant 2013 permit application deadlines falls on June 1. The regulations provide time to enable regulated persons to achieve compliance with the rule. A table summarizing the applicable time frames is provided in the full text of the Regulatory Impact Statement; however, the regulations should be consulted for a fuller understanding of the time frames.

Summary of Revised Regulatory Flexibility Analysis

1. 'Effect of Rule.' Statutory amendments to Environmental Conservation Law (ECL) article 15, title 15 (Chapter 401 of the 2011 Laws of New York) both expand and limit this water withdrawal permit program. The amendments expand the permit program to include withdrawals for purposes beyond public water supply, such as those for commercial, manufacturing, industrial, oil and gas development, and other purposes. The amendments generally limit the permit program to withdrawals that meet or exceed a threshold volume (of 100,000 gallons per day (gpd)). The effect is to regulate far more of the higher-volume withdrawals across the state while exempting from permitting requirements withdrawals associated with lower-volume public water supply systems (PWSS). The amendments to 6 NYCRR part 601 and subpart 621.4, and the consolidation of part 675 (Great Lakes water withdrawal registration) into part 601, implement this permitting program. The types of water withdrawal systems that are subject to the permit program are located in all areas of the state; so small businesses and local governments that undertake water withdrawals for purposes other than PWSS will be impacted by the regulations, although the impact will be offset by the 100,000 gpd threshold, other exemptions, the availability of an 'initial permit,' and the staggered or delayed implementation schedule.

2. 'Compliance Requirements.' The adopted regulations, which become effective April 1 2013, do not distinguish between water withdrawal systems operated by small businesses and those operated by local governments. Existing agricultural withdrawals of any volume are exempt from the permit requirement altogether so long as these existing withdrawals are registered in accordance with current law (including ECL article 15 titles 16 and/or 33) as of February 15, 2012. Moreover, the registration requirement for agricultural withdrawals is subject to an even more generous size threshold of an average of 100,000 gpd in any consecutive 30-day period. New agricultural withdrawals above the size threshold will require permits. The new part 601 implements other statutory exemptions to the water withdrawal permit requirement, including fire suppression withdrawals and withdrawals approved by the Delaware River Basin Commission or Susquehanna River Basin Commission. Small businesses and local governments may benefit from these provisions.

Initial Permits. An 'initial permit' includes all of the terms and conditions of a water withdrawal permit, but is a 'minor action' under the revision to subpart 621.4 that results in a slightly abbreviated permitting process. A water withdrawal system qualifies for an initial permit under the following circumstances: the withdrawal exists as of February 15, 2012; it is over the size threshold; it is properly reported to DEC by February 15, 2012 under existing law; it is not a public water supply; and the withdrawal is not otherwise exempt. The slightly simpler administrative process for initial permits eases the compliance requirements for existing and previously-unregulated water withdrawals that are not exempt.

In addition, the 'initial permit' application deadline for existing water withdrawals above the size threshold depends on the amount of water withdrawn. Specifically, applications for initial permits are not due until: February 15, 2017 for withdrawals equal to or greater than 0.1 but less than 0.5 million gallons per day (mgd); February 15, 2016 for withdrawals equal to or greater than 0.5 mgd but less than 2 mgd; February 15, 2015 for withdrawals equal to or greater than 2 mgd but less than 10 mgd; February 15, 2014 for withdrawals equal to or greater than 10 mgd but less than 100 mgd; and June 1, 2013 for withdrawals equal to or greater than 100 mgd. These rolling deadlines will benefit small businesses and local governments that withdraw lesser amounts of water.

3. 'Professional Services.' Small business owners and local governments that own or operate water withdrawal systems are subject to the same requirements as other owners of water withdrawal systems, and would be required to retain the same level of professional services to comply with the regulations. The requirements are described in the 'Costs' section of the Regulatory Impact Statement (RIS). A small business or local government who has a professional engineer with relevant experience on staff may use its engineer to produce the documents required in the regulations.

4. 'Compliance Costs.' Small business owners and local governments that operate water withdrawal systems are subject to the same requirements as others, and will likely incur similar costs as other withdrawal operators. The 'Costs' section in the RIS summarizes the requirements.

5. 'Economic and Technical Feasibility.' Small businesses and local governments who operate existing, currently-unregulated water withdrawal systems above the size threshold will need to meet the 'initial permit' requirements of the regulations, unless exempt. Applying for an 'initial permit' is quicker and less costly because it usually avoids the need for a permit hearing (as described in the RIS). While public notice and comment on the 'initial permit' application must occur, a permit hearing on top of that would generally not be necessary.

It is important to understand that the economic burden related to the 'initial permit' process would be greater if the applicant has not or does not report or register their withdrawals under ECL article 15 titles 16 or 33 by February 15, 2012, as is discussed in the RIS. The water withdrawal reporting requirements in ECL article 15 title 33 are statutory and compliance is a pre-condition to eligibility to apply for an 'initial permit'. The same is true for the Great Lakes Basin registrations requirements of ECL article 15 title 16. If such existing withdrawals at or above the size threshold are not reported or registered under titles 16 or 33, as applicable, by February 15, 2012, the small business owner or municipal entity will not be eligible to apply for the quicker and less costly 'initial permit' and will instead be required to apply for and obtain a standard water withdrawal permit under its more time consuming and more costly process. The costs associated with applying for an 'initial permit' for existing water withdrawals should be substantially less as most engineering, testing, environmental and alternative analyses costs would have already been incurred when the project was initially constructed.

In addition to creating a more flexible permit application process for existing withdrawals above the size threshold, through the 'initial permit,' the regulations also afford flexibility and enhance the feasibility by providing additional time, up to five years depending on the capacity of the water withdrawal system, to submit the 'initial permit' application to the Department.

6. 'Minimizing Adverse Impacts.' In terms of additional measures taken to minimize potential adverse impacts of complying with the regulations, we note that water hydropower withdrawals that are federally regulated through a FERC (Federal Energy Regulating Commission) license are exempt from the water withdrawal permit requirement. To avoid potential duplication in the annual reporting obligation, and as is further discussed in the RIS, annual reports or registrations of water withdrawals that are submitted under ECL article 15 titles 16 or 33 are deemed sufficient under the regulations until those statutory provisions sunset on December 31, 2013.

As stated above, under the amended statute and these regulations, new public water supply systems below the volume threshold, regardless of the number of service connections, are no longer required to apply for water withdrawal permits. Similarly, existing agricultural withdrawals that are registered or reported to DEC under ECL article 15 titles 16 or 33 on or before February 15, 2012 are exempt altogether from the water withdrawal permit requirement and the registration requirement for agricultural withdrawals is subject to a more generous size threshold.

For water withdrawal systems that are not exempt and that are above the size threshold as of February 15, 2012, the 'initial permit' process is somewhat less costly and time consuming than the standard permit process and provides additional time to comply depending on the capacity of the water withdrawal system.

7. 'Small Business and Local Government Participation.' The public outreach that occurred during the development of the statutory amendments was of significant and material assistance in drafting these regulations. DEC played a role in drafting the legislation underlying this

rulemaking. In that process, DEC sought and received input from many stakeholders, including representatives of small businesses and local governments. The discussions were about how regulated entities would be subject to the law, and the discussions resulted in legislative changes to address concerns that are now also carried out in these regulations.

In response to discussions with the New York Farm Bureau, DEC modified the statutory definition of threshold volume for agricultural withdrawals, and made other changes applicable to agricultural withdrawals. During the legislative process, DEC met with the Business Council and the New York State Chemical Alliance to address concerns of New York's businesses. These groups explained that it would be burdensome for such groups to apply for permits for withdrawals that have already existed. To address this concern, the amended legislation includes provisions allowing existing systems to utilize the more efficient and less costly "initial permit" process. The Department also met with the Independent Power Producers of New York, Inc. After consideration of the concerns raised, the Department committed to ensuring Department's water withdrawal regulations would not impose requirements duplicative of federal requirements and would require the Department to coordinate its review of water withdrawal permits with State Pollutant Discharge Elimination System (SPDES) permits, and any other applicable DEC permits which may already include conditions related to water withdrawals. These regulations, therefore, exempt withdrawals that are regulated by FERC from the regulations' permit requirements. In addition, these regulations expressly require that the Department review a water withdrawal permit application in coordination with the SPDES permit or other permit program.

DEC also met with and had discussions with representatives of the New York State Association of Town Superintendents of Highways, Inc.; Ski Areas of New York, Inc. and representatives of the state's ski areas; persons representing the interests of golf courses and installers of irrigation systems; and several local governments. These, either individually or collectively, resulted in changes to the draft statutory amendments prior to their passage and thereby also to these regulations. The regulatory provisions that reflect a direct response to the public outreach include, without limitation, the following: the definitions in § 601.2 ('environmentally sound and economically feasible,' establishment of the 'threshold volume' at a level as high as 100,000 gallons per day, with a more generous interpretation for farm withdrawals, and 'vessel' is defined such that it does not include tanker trucks); the annual reporting in § 601.5 (potential duplication with reporting under ECL article 15 titles 16 and 33 eliminated, the list of over seven exemptions from annual reporting); the 'initial permit' provisions in § 601.7, in their entirety; the provision of fifteen separate water withdrawal permit exemptions in § 601.9, which includes nine more than are in the amended statute, particularly the permit exemption for all withdrawals for agricultural purposes that are properly registered or reported by February 15, 2012; inclusion of "economically feasible" in the water conservation program that is required nnder the permit application provisions in § 601.10; and the allowance for the water conservation programs to bc developed without the services of a professional engineer.

DEC has also undertaken outreach in an effort to ensure that all affected entities were made aware of the water withdrawal reporting requirements of ECL article 15, title 33 that became effective April 1, 2009. DEC posted information about the new reporting requirement on its webpage at http://www.dec.ny.gov/lands/55509.html. In 2009, DEC sent letters to thousands of persons potentially subject to the new reporting requirement as well as to organizations representing those persons, including the Association of Towns of the State of New York, public water suppliers, State Pollutant Discharge Elimination System permittees, and Concentrated Animal Feeding Operations. In 2010, DEC contacted the same persons via e-mail. In August 2011, DEC met with the New York Fann Bureau to discuss further outreach to alert farmers to the benefits of registering or reporting prior to February 15, 2012.

Revised Rural Area Flexibility Analysis

1. 'Types and Estimated Numbers of Rural Areas.' Prior to its amendment in 2011, Environmental Conservation Law (ECL) article 15 title 15 required permits solely for public water supplies with five or more service connections, regardless of the volume of water withdrawn. The statutory amendments (Chapter 401 of the 2011 Laws of New York) both expanded and limited this water withdrawal permit program. The amendments expanded the permit program to include withdrawals for purposes beyond public water supply, such as those for commercial, manufacturing, industrial, oil and gas development, and other purposes. The amendments generally limited the permit program to withdrawals that meet or exceed a threshold volume (of 100,000 gallons per day (gpd)). The effect is to regulate far more of the higher-volume withdrawals across the state while no longer issuing water withdrawal permits for lower-volume public water system withdrawals. Withdrawals below the size threshold must still comply with water pollution control laws (ECL article 17), Department of Health regulations, as applicable, and state environmental quality review (SEQR) requirements. The amended law also authorizes the Department of Environmental Conservation (DEC) to establish quantitative standards to maintain stream flows protective of aquatic life, consistent with the policy objectives in ECL article 15 of assuring drinking water supplies, aquatic habitat, and recreational uses. The repeal and replacement of 6 NYCRR part 601, the revision of subpart 621.4, and the consolidation of part 675 (Great Lakes water withdrawal registration) into part 601, implement this expanded permitting program and the authorized exemptions thereto. The types of water withdrawal systems that are subject to the expanded permit program are located in all areas of the state, including rural areas. Therefore, all rural areas may be impacted by the regulation.

2. 'Reporting, Recordkeeping and Other Compliance Requirements, and Professional Services.' The regulations are the same for water withdrawal systems located in rural areas. However, to the extent that water withdrawal systems in rural areas are less likely to exceed the above-stated size threshold, they are less likely to be subject to the water withdrawal permit requirement. Agricultural withdrawals of any volume are exempt from the permit requirement altogether so long as the withdrawals were registered in accordance with ECL article 15 titles 16 and/or 33 as of February 15, 2012. Moreover, the registration requirement for agricultural withdrawals is subject to an even more generous size threshold of an average of 100,000 gpd in any consecutive 30-day period. The new part 601 implements other statutory exemptions to the water withdrawal permit requirement, such as those for fire suppression withdrawals and withdrawals approved by the Delaware River Basin Commission or Susquehanna River Basin Commission.

Initial Permits. An "initial permit" includes all of the terms and conditions of a standard water withdrawal permit, but is a 'minor action' under the modification to subpart 621.4 4 that results in a slightly abbreviated permitting process. In the absence of a timely application for an initial permit, a standard water withdrawal permit must be applied for and approved under the full permit process. A water withdrawal system qualifies for an initial permit under the following circumstances: the withdrawal existed as of February 15, 2012; it is over the size threshold; it was properly reported to DEC by February 15, 2012 under existing law; it is not a public water supply; and the withdrawal is not otherwise exempt. Existing public water supplies with water supply permits need do nothing different. The slightly simpler administrative process for initial permits eases the compliance requirements for existing and previously-unregulated water withdrawals that arc not exempt.

In addition, among water withdrawal systems above the size threshold that qualify for initial permits, the regulations in part 601 provide more time for operators of smaller water withdrawal systems to apply for initial permits. This is more likely to be a benefit in rural areas. Specifically, under the provisions of part 601.7, initial permit applications are not due until February 15, 2017 for withdrawals equal to or greater than 0.1 but less than 0.5 million gallons per day (mgd); February 15, 2016 for withdrawals equal to or greater than 0.5 mgd but less than 2 mgd; February 15, 2015 for withdrawals equal to or greater than 2 mgd but less than 10 mgd; February 15, 2014 for withdrawals equal to or greater than 10 mgd but less than 100 mgd; and June 1, 2013 for withdrawals equal to or greater than 100 mgd.

3. 'Costs.' The cost to comply with the regulations will depend on the size, purpose and complexity of thc water withdrawal system. Other than the factors mentioned above, it is not expected that there will be any variation in the compliance costs based upon rural area status.

4. 'Minimizing Adverse Impacts.' Please see Items 1 and 2, above. As stated, public water supply systems below the size threshold, which are more likely to be located in rural areas, are no longer required to have water withdrawal permits. As further stated above, agricultural withdrawals that were registered or reported to DEC under ECL article 15 titles 16 or 33 on or before February 15, 2012 are exempt from the water withdrawal permit requirement under the amended law and the part 601 amendments (although such withdrawals must continue to be registered). The registration requirement for agricultural withdrawals is subject to a more generous size threshold.

For water withdrawal systems that are not exempt and that are above the size threshold as of February 15, 2012, the initial permit process is somewhat less costly and time consuming than the standard permit process. Initial permit applications are due last for the smallest withdrawal systems above the size threshold. Existing public water supplies with water supply permits need do nothing different.

5. 'Rural Area Participation:' DEC sought and received input from many stakeholders in the development of the amendments enacted in Chapter 401, which included representatives of farmers as well as business interests which may have some facilities located in rural areas. In 2010 DEC had several discussions with thc New York Farm Bureau and modified the proposed statutory amendments to add ECL § 15-1504 (specific to agricultural withdrawals), change the definition of threshold volume for agricultural withdrawals, and make other changes applicable

to agricultural withdrawals to address concerns of New York's farmers. DEC met with the Business Council and the New York State Chemical Alliance in 2010 to address concerns of New York's businesses and significant amendments were made to the proposed law to address their concerns, including the addition of the "initial permit" provisions. The Department also met with the Independent Power Producers of New York, Inc. After consideration of the concerns raised, the Department committed to ensuring Department's water withdrawal regulations would not impose requirements duplicative of federal requirements and would require the Department to coordinate its review of water withdrawal permits with State Pollutant Discharge Elimination System (SPDES) permits, and any other applicable DEC permits which may already include conditions related to water withdrawals. These regulations, therefore, exempt withdrawals that are regulated by FERC from the regulations' permit requirements. In addition, these regulations expressly require that the Department review a water withdrawal permit application in coordination with the SPDES permit or other permit program.

In March, April and May 2011 DEC had a meeting and several discussions with persons representing the interests of the New York State Association of Town Superintendents of Highways, Inc. to discuss potential permit requirements for water pumping equipment at mines owned and operated by towns. In April 2011, DEC met with Ski Areas of New York, Inc. and representatives of the state's ski areas to address concerns related to the impacts the proposed statutory amendments and implementing regulations might have on New York's ski areas. DEC also discussed the proposed amendments with persons representing the interests of golf courses and installers of irrigation systems.

In addition, DEC undertook outreach in an effort to ensure that all affected entities were made aware of the water withdrawal reporting requirements of ECL article 15, title 33 that became effective April 1, 2009. DEC posted information about this reporting requirement on its webpage at http://www.dec.ny.gov/lands/55509.html. In 2009, DEC sent letters to thousands of persons potentially subject to the new reporting requirement as well as to organizations representing those persons, including the Association of Towns of the State of New York, public water suppliers, State Pollutant Discharge Elimination System permittees, and Concentrated Aniual Feeding Operations. In 2010, DEC contacted the same list of persons via e-mail. In August 2011, DEC met with the New York Farm Bureau to discuss further outreach to alert farmers to the benefits to them of registering or reporting prior to February 15, 2012.

Revised Job Impact Statement

1. 'Nature of Impact.' The proposed revision to the water withdrawal regulations may create high-paying technical jobs in engineering and training.

2. 'Categories and Numbers Affected.' Under the proposed revisions to 6 NYCRR Part 601, operators of previously-unregulated water withdrawal systems must submit several technical documents, such as annual reports as well as various parts of a permit application, including an engineer's report, pump tests and analyses for groundwater withdrawals, safe yield analyses for surface water withdrawals, water conservation programs, and the analysis of alternatives sufficient to complete a project justification. It is expected that the proposed regulatory revisions will generate high-paying engineering jobs, as well as technical jobs that do not require the services of a professional engineer. The field of water withdrawal planning, monitoring and reporting includes specialized areas of expertise: civil/structural engineering and hydrologic/hydraulic analysis, with some utilizing computer modeling. There will be a need for engineers and other professionals to have additional training in water withdrawal and the proposed water conservation programs. Therefore, there will be an opportunity for companies and colleges to develop training programs and offer specialized training in New York. This would create job opportunities for trainers as well as support staff opportunities. The Department has no way of determining the number of engineering or construction jobs or training opportunities.

3. 'Regions of adverse impact.' There are no adverse job impacts expected.

4. 'Minimizing Adverse Impacts.' There are no adverse job impacts expected.

5. 'Self-employment opportunities.' The proposed regulations will create an environment favorable for experienced engineers, licensed surveyors, computer modelers, and water conservation planners specializing in hydrology and hydraulic analysis to start their own businesses. Self-employment opportunities also will likely exist for experienced engineers to conduct training and inspections, and to prepare engineering reports, and for experienced individuals in the additional trades indicated above.

Assessment of Public Comment

Comments were received from a variety of sources through regular and electronic mail: 186 submissions comprising over 650 individual comments. NYSDEC appreciates the public input and thoroughly considered each comment. Changes were made to the regulations to reiterate or further clarify the original meaning for the benefit of the public and take questions into account. As stated in the Notice of Adoption, non-substantive changes were made to subsections 601.2-601.3, 601.5-601.12, 601.14, 601.17-601.20, and 601.24. The Assessment of Public Comment (APC) presents and responds to all of the comments that were received during the public comment period. A revised or new rule making is not required. The effective date of the regulations is April 1, 2013 and the first due date for permit applications is June 1, 2013.

This summary condenses the comments that were frequently posed and NYSDEC's responses from the APC. Frequent Comment 1 concerned the schedule for "initial permit" applications in 601.7(b)(2). Diverse views were received. Response. Initial Permits are only available for already-existing withdrawals above the threshold volume that were properly reported before February 15, 2012 and not exempt. Pursuant to ECL 15-1501(9), NYSDEC is to issue initial permits for these existing withdrawals for the maximum capacity reported as of February 15, 2012. The statute does not include a deadline for NYSDEC.

Since 2010, water withdrawal systems with the capacity to withdraw more than 100,000 gallons per day have been required to report water use data per ECL article 15 title 33. Of these reporting systems, more than 600 that will need initial permits. Through the 601.7 initial permit schedule, NYSDEC will evaluate the largest already-existing systems first as they are likely to have the greatest impact on the State's water resources. This will bring them under regulation and subject them to the new ten-year permit renewal process sooner than the remaining initial permitees. Pursuant to 601.5(a), the remaining already-existing withdrawals that require initial permits must be reported annually even though permits are not required yet.

Frequent Comment 2 – Fees on usage, applications and annual reporting 601.5(c). Diverse views were expressed and a question was raised as to whether there was a new permit fee structure. Response. To the extent a fee structure does not exist under an existing statute, this comment is outside the scope of this rule making as it recommends legislation. Absent such legislation, NYSDEC does not have authority to impose application or usage fees on withdrawals or system capacities. As to the $50 or $200 annual reporting fees in ECL article 15 titles 16 and 33, these provisions were repealed and no replacement fee was legislated in the 2011 statutory amendments to title 15.

Frequent Comment 3 – Ten-year Term of Permits 601.7 (e), 601.11 (b). Diverse views were expressed. Response. ECL 15-1503(6) requires water withdrawal permits with maximum term of ten years. While NYSDEC anticipates that most water withdrawal permits will have this ten year term, shorter time frames may be used on a case by case basis when appropriate. In addition, NYSDEC's review of Annual Reports may identify scenarios that may trigger the need for a permit modification or indicate possible permit violations. One scenario is systems that are approaching their permitted withdrawal limits.

Frequent Comment 4 – water conservation measures that are "environmentally sound and economically feasible" 601.2(g), 601.7(e), 601.10(f), 601.10(k)(4), 601.11(c)(7). There was inquiry as to the meaning of this phrase. Response. These terms are used in the Great Lakes - St. Lawrence River Basin Water Resources Compact and are defined in ECL 15-1502 as well as the regulations in 601.2 (g). NYSDEC currently has a manual (Water Conservation Manual for Development of a Water Conservation Plan") and Water Conservation Program Form that are used for public water supply, both of which are available on DEC's website at www.dec.ny.gov/lands/39346.html. The forms and manual are being updated to address non-potable withdrawals. The annual reports required of each permitted withdrawal will include an update on the progress and effectiveness of ongoing water conservation measures.

Frequent Comment 5 –Smaller withdrawals and high volume hydraulic fracturing (HVHF). The regulations do not adequately consider water withdrawals, including those below the 100,000 gallon per day threshold volume, which may be used by the natural gas industry for HVHF or other purposes. Response. All proposed water withdrawals above the threshold volume, no matter the intended purpose or usage, unless exempt, will be evaluated under Part 601 based upon the ability of the source to supply the proposed withdrawal demand while taking into account the cumulative impacts of multiple withdrawals on the source. A single water withdrawal facility will need a permit for its multiple sources of supply that cumulatively equal or exceed 100,000 gallons per day. Multiple facilities on the same source will be evaluated jointly for possible cumulative impacts when evaluating an application to modify or renew a water withdrawal permit or for a new permit to withdraw from the same source. If New York decides to allow HVHF, then it is anticipated that all water withdrawn or purchased for HVHF, regardless of the volume, would be required to be obtained from sources that are either permitted pursuant to these Part 601 regulations or approved by the Susquehanna River Basin Commission (SRBC) or Delaware River Basin Commission (DRBC).

Frequent Comment 6 – Withdrawal data, monitoring data. The withdrawal data required in annual reports and all required water monitoring data should be available to the public in a uniform manner via NYSDEC's website. Response. NYSDEC maintains as much data as possible electronically. The annual report form on NYSDEC's website may be submitted electronically, which is encouraged. The annual reports will be expanded to include updates on water conservation measures. The goal is to make as much of this data as possible publicly available on NYSDEC's website. Under Part 601, any records required to be kept by the permittee are to be made available to NYSDEC upon request, including monitoring data. Information verifying the accuracy of equipment is also to be made available to NYSDEC upon request. Some water withdrawal permits may require, as a condition, the submission of monitoring data to NYSDEC on a periodic basis, rather than on request.

Frequent Comment 7 – Stream flows, flow standards. NYSDEC should specify how minimum stream flows (aka flow standard) that will be protective of aquatic life will be determined and enforced. Response. NYSDEC is developing a technical guidance for use in determining minimum (passby) flows. The guidance document will include methods to be used to monitor stream flows and ensure compliance with permit conditions.

Frequent Comment 8 – Withdrawals already regulated by SPDES permits. Regulating such withdrawals under two permits would be burdensome. Response. NYSDEC will coordinate the review of Part 601 permit applications with the SPDES permit process. This is reflected in 601.7 and 601.11(h) whereby the timing and review of initial and standard withdrawal permit applications is coordinated with SPDES permit renewals. The deadline in 601.7(b)(2) requires facilities with SPDES permits that control water withdrawals to apply for an initial water withdrawal permit 180 days prior to the expiration of their SPDES permits. The Department acknowledges this may not be possible for facilities with SPDES permits that are expiring in 2012 and administratively extended. The deadline has been clarified as follows such that it is the later of the 180 period or June 1, 2013. Further, the Part 601 applicant will be able to develop documents that satisfy both permitting programs (e.g. Engineering Report), to the extent appropriate.

Frequent Comment 9 – Evaluation of cumulative impacts. Diverse statements were received, such as, NYSDEC is required to assess the cumulative impacts posed by existing withdrawals (including impacts due to consumptive use) before proceeding with this rule making; NYSDEC is required to assess cumulative impacts as part of the water withdrawal permitting process under these regulations; and the definition of 'significant individual or cumulative adverse impacts' should be defined. Response. The short environmental assessment form for this rule making explains the basis for the negative declaration for this rule making. The expansion of the water withdrawal permitting program to cover non-potable withdrawals (e.g., in addition to public water supplies) does not allow a new activity to be undertaken. Rather, it regulates an already-existing activity (non-potable withdrawals above the threshold volume).

Since 1989, non-potable withdrawals over 100,000 gpd in the Great Lakes basin have been required to be registered and reported to NYSDEC on an annual basis. Under the Great Lakes Compact, NYSDEC compiled baseline data of permitted, registered facilities withdrawing 100,000 gpd or more in the Great Lakes Basin. The water withdrawal reporting requirement was extended statewide in 2009 by article 15 title 33. Through the 2011 statutory amendments to article 15 title 15, these three programs have been consolidated into one. The data NYSDEC has gathered so far has provided comprehensive information on the water resources in the state of New York, the reported withdrawals, and the overall impacts of these withdrawals.

The potable water use remains the paramount use of water under ECL article 15, and the water withdrawal permit application review process takes that into account. Sub-section 601.11(c)(6), in conjunction with subsections (c)(3) and (c)(8), and the over-arching statutory authority, without limitation, allow for the consideration of consumptive use in the permitting process. Concerning whether to define, 'significant individual or cumulative adverse impacts,' each water withdrawal system and source are unique and vary widely. The evaluation of significant individual or cumulative adverse impacts is undertaken in the best professional judgment of Department staff. Specific projected impacts may be very significant in one instance but insignificant in a different water withdrawal system relative to its source. Uniform application of a single definition would diminish NYSDEC's broad statutory authority to regulate water withdrawals. However, it is anticipated that guidance may be developed to better illustrate various impacts in relation to sources.

Frequent Comment 10 -- An exemption for dewatering and emergency situations should be included in the regulations. Response. The regulations have been clarified by specifically addressing temporary water withdrawals for construction, dewatering, or for hydrostatic or aquifer testing purposes less than an average of 100,000 gallons per day in any thirty day consecutive period (3 million gallons during a 30 day period). Such withdrawals are not designed as permanent systems of water allocation and do not require a permit based on a single, rare or truly short-term withdrawal above the threshold within a given month that may occur for testing or construction dewatering purposes. This exemption would not apply to water withdrawals intended for HVHF. If New York decides to allow HVHF, then it is anticipated that all water withdrawn or purchased for HVHF, regardless of the quantity, would be required to be obtained from sources that are either permitted pursuant Part 601 or approved by SRBC or DRBC.

Frequent Comment 11 – Forms to be used for permit applications, annual reports, and inter-basin diversions. Response. NYSDEC is updating the forms. They are administrative in nature, will reflect the statutory and regulatory requirements, and cannot be finalized until the regulations are finalized. NYSDEC is authorized to require information necessary to make a determination on the requirements in the regulations. The information requested of the applicant will be similar to existing forms. No permit applications under adopted Part 601 are due until June 1, 2013. NYSDEC anticipates having all necessary forms available in advance of that date.

Frequent Comment 12 – Inquiries were received about the public comment process. Response. The notice of proposed rule making was published in the State Register and the Environmental News Bulletin (ENB) on November 23, 2011. Public hearings were not required. However, Staff provided three public information meetings regarding the proposed rule making on December 6, 8 and 12, 2012, in New Paltz, West Henrietta and Albany, respectively. The public comment period for the proposed rulemaking was longer than is required under the State Administrative Procedures Act, was scheduled to close on January 22, 2012, but was further extended to February 6, 2012, as published.

NOTICE OF ADOPTION

LEV, ZEV, GHG, Environmental Performance Label, New Aftermarket Catalytic Converter, and Emissions Warranty/ Recall Standards

I.D. No. ENV-31-12-00009-A

Filing No. 1127

Filing Date: 2012-11-09

Effective Date: 30 days after filing; section 218-7.2(c) eff. June 1, 2013

PURSUANT TO THE PROVISIONS OF THE State Administrative Proeedure Act, NOTICE is hereby given of the following action:

Action taken: Amendment of Parts 200 and 218; repeal of Part 252 of Title 6 NYCRR.

Statutory authority: Environmental Conservation Law, sections 1-0101, 1-0303, 3-0301, 19-0103, 19-0105, 19-0107, 19-0301, 19-0303, 19-0305, 19-1101, 19-1103, 19-1105, 71-2103, 71-2105; and section 177 of the Federal Clean Air Act (42 USC 7507)

Subject: LEV, ZEV, GHG, environmental performance label, new aftermarket catalytic converter, and emissions warranty/recall standards.

Purpose: To incorporate California's most recent low emission vehicle program standards.

Substance of final rule: The New York State Department of Environmental Conservation (Department) is proposing to amend 6 NYCRR Part 218, 6 NYCRR Part 252 and Section 200.9. Section 200.9 is a list that cites Federal and California codes and regulations that have been referenced by the Department in the course of amending Parts 218 and 252. The purpose of the amendment is to revise the existing low emission vehicle (LEV) program to incorporate modifications California has made to its vehicle emission control program to reduce criteria pollutant and greenhouse gas (GHG) emissions. The Department is amending Sections 218-1.2, Definitions; 218-2.2, Reporting; 218-3.1, Fleet Average; 218-3.2, Fleet average reporting and projection; 218-4.1, ZEV percentages; 218-4.2, Voluntary alternative compliance plan (ACP); 218-5.1, Assembly-line quality audit testing and reporting for 1993, 1994, 1996 and subsequent model-years; 218-7.2, Prohibitions; 218-8.2, Prohibitions; 218-8.3, Fleet average greenhouse gas requirements; and 218-8.5, Greenhouse gas exhaust emissions reporting. New Sections 218-9, Emissions control system warranty requirements; 218-10, Recall requirements; and 218-11, Environmental performance labels are being created. Existing Section 218-9, Severability is being renumbered as Section 218-12. The remaining Sections in Part 218 are unchanged. The existing Part 252 Environmental Performance Labels will be repealed.

Section 218-1.2 is amended to include revisions to definitions that govern the provisions of this Part.

Section 218-2.2 is amended to revise the certification reporting requirements.

Section 218-3.1 is amended to incorporate California's latest LEV standards. These changes will apply to all 2014 and subsequent model year passenger cars (PC), light-duty trucks (LDT), and medium-duty vehicles (MDV) up to 14,000 pounds Gross Vehicle Weight Rating (GVWR).

The LEV proposal will: require fleet average Super Ultra-low Emission Vehicle (SULEV) performance by model year 2022; increase the stringency and restructure the Non-Methane Organic Gas (NMOG) and oxides of nitrogen (NOx) standards; increase the stringency of the Particulate Matter (PM) standards; increase emission control component durability requirements; increase the stringency and coverage of evaporative emission control requirements; permit manufacturers to pool emissions of criteria pollutants including hydrocarbon (HC), carbon monoxide (CO), and NOx in California and Section 177 states to demonstrate compliance.

Section 218-3.2 is amended to revise the fleet average reporting requirements. The words "and projection" are being deleted from the title. Section 218-3.2(b) is also being deleted. Manufacturers will no longer be required to submit annual fleet average projection reports to the Department. This change will align the Department's requirements with California and other Section 177 State requirements.

Section 218-4.1 is amended to incorporate California's latest zero emission vehicle (ZEV) standards. The California regulations take effect for all vehicles up to 10,000 pounds GVWR beginning with the 2012 model year. The ZEV proposal will essentially be split into two periods covering the 2012-2017 model years and the 2018-2025 model years.

The amendments for the 2012-2017 timeframe will: create new ZEV types; extend the travel provision; reduce the ZEV requirement for intermediate low volume manufacturers (IVM); remove credit carry forward restrictions; clarify vehicle credit eligibility. An optional Section 177 ZEV compliance path will also be created as an alternative to the base ZEV requirements. The alternative compliance option meets the states' interests in placing BEV and PHEV in Section 177 states earlier than would be required under the base program, while also providing vehicle manufacturers with a smoother ramp-up in the number of vehicles required and a reduced ZEV obligation over the life of the program.

The amendments for the 2018-2025 timeframe will: amend manufacturer size definitions, aggregated ownership criteria, and lead time provisions; eliminate partial zero emission vehicles (PZEV) and advanced technology PZEV (ATPZEV) as compliance options; increase ZEV compliance requirements; allow IVM to meet entire ZEV requirement with transitional ZEV (TZEV); limit the use of banked PZEV, ATPZEV, and neighborhood electric vehicle (NEV) credits to meet ZEV requirements; eliminate the travel provision for Type I, I.5, II, and III ZEV; allow GHG over-compliance credits to be used to offset a portion of a manufacturer's ZEV requirement.

Section 218-4.2 is being repealed. The voluntary ACP program concluded at the end of the 2009 model year and was not extended.

Section 218-5.1 is being amended to remove existing Section 218-5.1(a).

Section 218-7.2 is being amended to include a new Section 218-7.2(c). Section 218-7.2(c) incorporates California's new aftermarket catalytic converter requirements and prohibition of used catalytic converters.

Sections 218-8.2 and 218-8.3 are being amended to incorporate California's latest GHG standards. These changes will apply to all 2017 and subsequent model year PC, LDT, and MDV up to 10,000 pounds GVWR. The amendments will: establish separate footprint indexed CO2 grams per mile emission standards for PC and LDT harmonized with proposed federal GHG standards; establish separate emission standards for CH4 and N2O to harmonize with federal standards; include mandatory requirements for motor vehicle air conditioning (MVAC) refrigerants; include MVAC fleet average leak rate limits and indirect emission limits; create off-cycle credit provisions similar to federal provisions; create incentives for full-size pickup truck emission reductions; create optional credit provisions for upstream emissions.

Section 218-8.5(a) is being amended to change the reporting date from March 1st to May 1st. This change will align New York's reporting date with California's.

Existing Section 218-9 is renumbered to create Section 218-12. This Section contains severability provisions.

A new Section 218-9 is being created to incorporate California's emissions control system warranty requirements. These requirements will apply to 2016 and subsequent model year PC, LDT, and MDV up to 14,000 pounds GVWR.

A new Section 218-10 is being created to incorporate California's recall requirements. These requirements will apply to 2016 and subsequent model year PC, LDT, and MDV up to 14,000 pounds GVWR. The California emissions warranty and recall regulations are designed to reduce vehicle emissions by identifying, recalling, and repairing noncompliant vehicles to meet applicable emission standards and test procedures.

A new Section 218-11 is being created to incorporate California's environmental performance label standards. These standards were previously incorporated in Part 252. The standards will be updated and moved to Part 218 to consolidate all of the new motor vehicle emission standards in one Part.

Existing Part 252 will be repealed.

Final rule as compared with last published rule: Nonsubstantive changes were made in section 200.9.

Text of rule and any required statements and analyses may be obtained from: Jeff Marshall, P.E., NYSDEC, Division of Air Resources, 625 Broadway, Albany, NY 12233-3255, (518) 402-8292, email: airregs@gw.dec.state.ny.us

Additional matter required by statute: Pursuant to Article 8 of the State Environmental Quality Review Act, a Short Environmental Assessment Form, a Negative Declaration and a Coastal Assessment Form have been prepared and are on file.

Revised Regulatory Impact Statement, Revised Regulatory Flexibility Analysis, Revised Rural Area Flexibility Analysis and Revised Job Impact Statement

No changes were made to previously published Regulatory Impact Statement, Regulatory Flexibility Analysis, Rural Area Flexibility Analysis and Job Impact Statement.

Assessment of Public Comment

The New York State Department of Environmental Conservation (Department) is proposing to amend 6 NYCRR Part 218, Emission Standards for Motor Vehicles and Motor Vehicle Engines; 6 NYCRR Part 200, General Provisions; and repeal 6 NYCRR Part 252, Environmental Performance Labels to reflect changes to California's low emission vehicle (LEV) program that incorporate updated LEV, greenhouse gas (GHG), zero emission vehicle (ZEV), environmental performance label, aftermarket catalytic converter, and emissions warranty and recall standards; and to maintain identical standards with California for a given weight class as required under Section 177 of the Clean Air Act. Section 177 provides that states may adopt the California new vehicle emissions standards provided that these standards are identical to California's.

The Department published the proposed regulations on August 1, 2012. Hearings were held in Avon on September 17, 2012; Albany on September 19, 2012; and Long Island City on September 20, 2012. The comment period closed at 5:00 p.m. on September 27, 2012. The Department received written and oral comments from seven commenters representing vehicle and emission control component manufacturer trade organizations, environmental groups, and public health groups. All of the comments have been reviewed, summarized, and responded to by the Department.

The commenters expressed support for the Department's adoption of the proposed regulations. No comments were received expressing opposition to the regulation. Comments covered general support for the regulation, public health and environmental benefits, LEV standards, greenhouse gas standards, ZEV standards, aftermarket catalytic converter standards, and emissions warranty and recall. There were also several comments that were determined to be beyond the scope of this rulemaking.

Department of Financial Services

EMERGENCY RULE MAKING

Unclaimed Life Insurance Benefits and Policy Identification

I.D. No. DFS-48-12-00003-E

Filing No. 1131

Filing Date: 2012-11-09

Effective Date: 2012-11-09

PURSUANT TO THE PROVISIONS OF THE State Administrative Procedure Act, NOTICE is hereby given of the following action:

Action taken: Addition of Part 226 (Regulation 200) to Title 11 NYCRR.

Statutory authority: Financial Services Law, sections 202 and 302; and Insurance Law, sections 301, 316, 1102, 1104, 2601, 4521 and 4525 and art. 24

Finding of necessity for emergency rule: Preservation of general welfare.

Specific reasons underlying the finding of necessity: Many life insurance companies and fraternal benefit societies ("insurers") have not adopted or implemented reasonable procedures and standards for investigating claims

EXHIBIT D TO HENNESSEY AFFIRMATION — DECISION IN WIND POWER ETHICS GROUP V. PLANNING BD OF TOWN OF CAPE VINCENT, NO. 2010-2882 (SUP. CT., JEFFERSON COUNTY, JANUARY 26, 2011) [532-538]

At a Term of Supreme Court held in and for the County of Jefferson, in the City of Watertown, New York on the 13th day of January, 2011.

PRESENT: HONORABLE HUGH A. GILBERT
Supreme Court Justice

STATE OF NEW YORK

SUPREME COURT COUNTY OF JEFFERSON

WIND POWER ETHICS GROUP,

Petitioner-Plaintiff,

- vs -

PLANNING BOARD OF THE TOWN OF CAPE VINCENT, and RICHARD EDSALL, TOM RIENBECK, GEORGE MINGLE, ANDREW BINSLEY and KAREN BOURCY, in their capacities as planning board members,

Respondents-Defendants,

-and-

ST. LAWRENCE WINDPOWER, LLC,

Respondent-Defendant.

MEMORANDUM DECISION AND ORDER

Index No. 2010-2882

RJI No. 22-10-0990

Article 78 of the New York Civil Practice Law and Rules provides an expeditious and essentially uniform procedure for judicial review of challenges to action or inaction by agencies and officers of State and local government. The challenges asserted by the Wind Power Ethics Group stem from a State law

involving environmental review.

Article 8 of the New York Environmental Conservation Law is entitled "Environmental Quality Review". Commonly known as the State Environmental Quality Review Act or SEQRA, it and its implementing regulations establish a procedure framework designed to incorporate the consideration of environmental factors into the existing planning, review and decision-making process of State, regional and local government agencies at the earliest possible time so as to minimize to the greatest degree possible the adverse environmental consequences of any project that is approved. ***Aldrich vs. Pattison,*** 107 AD2d 258, 263 (1985). SEQRA and its implementing regulations require agencies to act and choose alternatives which, consistent with social, economic and other essential considerations, to the maximum extent practicable, minimize or avoid adverse environmental effects. ECL 8-0109 (1); ***E.F.S. Ventures Corp. vs. Foster,*** 128 AD2d 28, 34 (1987). The record must establish that Respondents complied, both procedurally and substantively, with the provisions of the State Environmental Quality Review Act (ECL Article 8). ***McCaffrey vs. Board of Estimate,*** 130 AD2d 465 (1987).

Challenges involving a failure to follow SEQRA are maintainable in an Article 78 proceeding. ***Matter of Save the Pine Bush vs. Planning Bd. of City of***

Albany, 70 NY2d 193, 203 (1987). It is not the role of the Court to weigh the desirability of any action or choose among alternatives, however, but to assure that the agency itself has satisfied SEQRA procedurally and substantively. ***Akpan vs. Koch,*** 152 AD2d 113, 118 (1989).

Entitling itself as a Petitioner-Plaintiff this Wind Power Ethics Group files an October 26, 2010 Petition and Complaint in which (1) a first cause of action asserts a failure to take a "hard look" at potential environmental impact; (2) a second cause of action of a failure to undertake "coordinated review" pursuant to SEQRA; (3) a third cause of action of failure to consider public comments pursuant to SEQRA; (4) a fourth cause of action of failure to consider cumulative impacts; (5) a fifth cause of action of conflict of interest violations; and (6) a sixth cause of action of violations of the Town of Cape Vincent Code of Ethics.

In its judicial review of an agency's substantive determination on environmental matters, without determining the merits of the project, the Court is obliged to determine whether the agency has complied with the applicable law, identified the relevant areas of environmental concern, taken a "hard look" at them and made a reasoned elaboration of the basis for its determinations. ***Matter of Jackson vs. New York State Urban Dev. Corp.,*** 110 AD2d 304, 308-309 (1985), affirmed 67 NY2d 400 (1986).

Therefore, one of the pre-requisites is that the local agency take a "hard look" at the relevant areas of environmental concern. ***E.F.S. Ventures Corp. vs. Foster,*** 128 AD2d 28, 38 (1987); reversed on other grounds 71 NY2d 359, 367 (1988); ***Matter of Briarwood Community Assoc. vs. City of New York,*** 147 AD2d 639, 639-640 (1989). The "hard look" standard does not authorize a Court to conduct a detailed de novo analysis of every environmental impact of, or alternative to, a proposed project which was included in, or omitted from, an environmental impact statement. ***Matter of Schiff vs. Board of Estimate of City of N.Y.,*** 122 AD2d 57, 59 (1986). The issue is whether a "hard look" was taken. ***Matter of Main Seneca Corp. vs. Erie County Indus. Dev. Agency,*** 125 AD2d 930, 931 (1986). The issue is whether the administrative agency made a thorough investigation of the problems involved and reasonably exercised its discretion. ***Matter of New Scotland Ave. Neighborhood Assn. vs. Planning Bd. of City of Albany,*** 142 AD2d 257, 263 (1988). Before an agency has made a finding of nonsignificance pursuant to SEQRA, has it identified the relevant areas of environmental concern, taken a "hard look" at them, and made a reasoned elaboration for the basis of its declaration? ***Matter of Fernandez vs. Planning Bd. Of Vil. of Pomona,*** 122 AD2d 139, 140-141 (1986).

The determination of the Planning Board of the Town of Cape Vincent being challenged is a September 15, 2010 Resolution adopting and accepting the

statement of SEQRA findings by a vote of 3-0 with two abstentions. This Court concurs with Respondents that the abstentions negate any potential of conflict or ethics that may have been asserted in the Fifth and Sixth causes of action of the Petition and Complaint. A review of the one hundred fourteen (114) page statement of SEQRA findings attached to the Resolution and incorporated therein by reference, the contents of the four bankers' boxes of records and proceedings submitted to the Court and the persuasive legal and factual arguments by counsel for Respondents establishes to this Court that the requisite environmental SEQRA review was undertaken and completed.

Furthermore, Respondents here raised a significant and fatal issue concerning Petitioner's standing to pursue the SEQRA claims. Wind Power Ethics Group is the only Petitioner in this proceeding. No individual members were named or joined. In order to establish that it has the requisite organizational standing, Wind Power Ethics Group was required to establish "that at least one of its members would have standing to sue, that it is representative of the organizational purposes it asserts and that the case would not require the participation of individual members." ***New York Association of Nurse Anesthetists vs. Novello,*** 2 NY3d 207, 211 (2004). Whether Wind Power Ethics Group is an unincorporated association or a limited liability company as it now claims, we must concur with Respondents that it failed to prove that it had standing to pursue the claims made herein.

Petitioner's allegations concerning standing are found in paragraphs 8, 9, 25 and 26 of the Petition. We concur with Respondents that while these conclusory allegations may be sufficient to state a claim of standing, Petitioner has failed to establish standing. ***Matter of Nolsen Corp. vs. Ontario County Board of Supervisors,*** 295 AD2d 924 (2002); ***Matter of Piela vs. Van Voris,*** 229 AD2d 94 (1997).

Unlike the Petitioner in ***Matter of Wind Power Ethics Group, et ano vs. Town of Cape Vincent TBA***, (Index No. 07-0789) previously decided by this Court, the Petition herein was not accompanied by sworn affidavits of any individual members. We concur with Respondents that the adjudication of this proceeding required the participation of individual members who Petitioner failed to join. ***Matter of Citizens Organized to Protect the Environment vs. Planning Board of the Town fo Irondequoit,*** 50 AD3d 1460 (2008). The submission of Affidavits of John Byrne, Clifford Schneider, Albert Bowers III and Michael Bell in Reply does not cure the defect in the Petition or confer standing. ***Jackson Cutler vs. Long,*** 2 AD3d 590 (2003); ***Hoyte vs. Epstein,*** 12 AD3d 487 (2004).

It is not our role to substitute our Judgment for that of the Planning Board. ***Akpan vs. Koch,*** 75 NY2d 561 (1990). Having found that the Planning Board fully complied with the procedural and substantive requirements of SEQRA, it is

THEREFORE, it is

ORDERED, ADJUDGED AND DECREED that the Petition is respectfully denied and dismissed.

Dated: January 26, 2011
at Watertown, New York

ENTER

HUGH A. GILBERT
Supreme Court Justice

REPLY MEMORANDUM OF LAW IN FURTHER SUPPORT OF VERIFIED PETITION, DATED MAY 8, 2014 [539- 572]

SUPREME COURT OF THE STATE OF NEW YORK COUNTY OF QUEENS	X	
In the Matter of the Application of SIERRA CLUB and the HUDSON RIVER FISHERMEN'S ASSOCIATION NEW JERSEY CHAPTER, INC., Petitioners, For a Judgment Pursuant to Article 78 of the Civil Practice Laws and Rules -against- JOSEPH MARTENS, COMMISSIONER, NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION, Respondent, T.C. RAVENSWOOD L.L.C., Necessary Party.	:	Index No. 2949-14 Hon. Robert J. McDonald
	X	

PETITIONERS' REPLY MEMORANDUM OF LAW IN OPPOSITION TO RESPONDENT RAVENSWOOD'S MOTION TO DISMISS

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PRELIMINARY STATEMENT AND SUMMARY OF ARGUMENT

The issue at the heart of this case is whether DEC has discretion under New York's new water permitting law in setting the terms and conditions for an "initial" water withdrawal permit, and consequently whether the "initial" water withdrawal permit issued to Respondent Ravenswood is properly categorized as a Type I action under SEQRA, or is exempt from SEQRA as a "ministerial" act. If the issuance of the Ravenswood permit is properly categorized as a Type I action, as Petitioners contend it should have been, DEC failed to properly comply with SEQRA when it failed to conduct an environmental review of the permit application.

Additional issues presented by the case include whether Petitioners have standing, whether DEC properly complied with the requirements of the new water withdrawal permitting law when it failed to include certain required conditions and water conservation measures in the permit; whether the application was exempt from review under the federal, state and local Coastal Zone laws; and whether DEC violated its public trust obligations by failing to properly protect aquatic life in the East River from the depredations of Ravenswood's once through cooling system.

ARGUMENT

POINT I
SIERRA CLUB AND HRFA HAVE ORGANIZATIONAL STANDING TO CHALLENGE THE DEC'S COMPLIANCE WITH SEQRA.

As stated in Ravenswood's Memorandum of Law (hereinafter "Ravenswood MOL"), to obtain standing Petitioners must show (1) an injury in fact that (2) falls within the zone of interests protected under the statute authorizing the challenged action, and (3) that the resolution of the claim does not require the participation of its individual members. Ravenswood MOL, 6. Petitioners meet each of these tests.

A. Petitioners Meet the Applicable Tests for Standing

Petitioners Sierra Club and Hudson River Fishermen's Association ("HRFA") have each demonstrated organizational standing in this proceeding based on the criteria for organizational standing set forth in *Save the Pine Bush, Inc. v. Common Council of City of Albany* (13 NY3d 297 [2009]); *Society of the Plastics Industry, Inc. v. County of Suffolk* (77 NY2d 761 [1991]); *Matter of Dental Socy. v Carey* (61 NY2d 330 [1984]) and *Douglaston Civic Ass'n, Inc. v. Galvin* (36 NY2d 1 [1974]. In support of their claims to standing in this case, Petitioners provided the affidavit of Gilbert Hawkins, a member of both Sierra Club and Hudson River Fishermen's Association, New Jersey Chapter, with their Initial Memorandum of Law (hereinafter "Initial MOL"). Hawkins Aff., ¶¶ 7, 9. Mr. Hawkins' affidavit shows that both Sierra Club and HRFA have a member who meets the zone of interest test of *Society of Plastics* as well as the broader standing rules set forth in *Save the Pine Bush* and *Association for a Better Long Island*.

Under the principles of the *Plastics* case, in order to show that one or more members of the organization have standing to sue, the organization has to not only identify a member of the organization, but also show that the identified member meets the standards required to have standing. The zone of interest test established in the *Plastics* case, is the test most often applied to determine whether or not an individual has standing to sue in a SEQRA challenge. However, in the *Save the Pine Bush* case, decided in 2009, the Court of Appeals broadened standing rules for organizations whose members use and enjoy a natural resource more than the public at large, and specifically adopted the standing rules in the United States Supreme Court case of *Sierra Club v Morton* (45 US 727, 734 [1972]) that recognized that an injury to a particular plaintiff's "[a]esthetic and environmental well-being" are enough to confer standing. Indeed, the *Save the Pine Bush* court cited with approval the United States Supreme Court case of *Lujan v Defenders of Wildlife* (504 US 555, 562-563 [1992]) where the court indicated that "the desire to use or

observe an animal species, even for purely esthetic purposes, is undeniably a cognizable interest for purpose of standing." 504 US at 562-563

Mr. Hawkins states in his affidavit that he is an active member of both HRFA and the Sierra Club. Indeed, he is currently President of HRFA, and has served as Environmental Director and as a member of the Board of Directors of HRFA from 1996 to the present. Hawkins' Affidavit ¶¶ 2,7. Mr. Hawkins states that he is also a member of the Sierra Club, and has been a member of the executive committee for the Hudson-Midlands New Jersey Group of the Club since 2005. Besides being an active member of the two organizations, and he is an active fisherman who fishes "whenever I can. Lately, that has been about once a month." *Id*. ¶ 14.

While Mr. Hawkins does not indicate the specific area where he fishes, it is clear from his affidavit, when taken as a whole, that he fishes in the New York harbor estuary, which he claims is adversely effected by the fish kill caused by the Ravenswood intake.

Mr. Hawkins says that as President of HRFA he attends each general membership meeting of the organization, which is attended by approximately 75 to 100 members, where the members give reports on the fishing conditions in New York Harbor and the East River. *Id*. ¶ 12. Therefore, he is personally familiar with the activities of the members of HRFA concerning their fishing habits, and states that during the spring and fall fish migration seasons, HRFA members fish in the New York harbor estuary every day. *Id*. ¶ 13.

Finally, he also says, to his own knowledge, that the power plant fish kills have been a concern of HRFA for many years, and that the HRFA was instrumental in stopping the mass slaughter of stripe bass by the First Indian Point Nuclear Power Plant, and participated in an administrative challenge to the fish kills caused by the once through cooling system, the same

cooling system at Ravenswood, at the Danskamer Power Plant on the Hudson River in 2006. *Id*. ¶ 15.

Concerning fish kills, Mr. Hawkins states that he is concerned that the fish kills caused by the once through cooling system at the Ravenswood generating stations are having a negative impact on his and other HRFA members' ability to catch fish and on the health of the fish population in the river. In fact, he indicates that he sees declines of some type of fish in the river. In paragraph 16, he indicates that the species weakfish have traditionally been one of the key species fished by himself and HRFA members, but in the last six years weakfish have virtually disappeared from the harbor.

Finally in paragraph 18, he indicates that he has reviewed studies that were made in 2005-2007, which he attaches to his Affidavit, and which confirms the fact that there is a high rate of weakfish kill caused by the Ravenswood water intake. Also see paragraphs 20 and 21.

For these reasons, the affidavit submitted by Mr. Hawkins clearly shows that he complies with the in fact injury requirement for standing, and that his injury as a fisherman is different than the public at large. Obviously, not all members of the public are fishermen, and therefore, his injury is different from the public at large. Moreover, it is clear as a fisherman, he uses and enjoys the New York estuary, New York Harbor the Hudson River and the East River more than the public at large, and therefore, meets the standards as espoused in *Save the Pine Bush*. As previously indicated, the Court of Appeals in *Save the Pine Bush* quoted with approval the statement in *Lujan v Defenders of Wildlife* that "the desire to use or observe an animal species, even for purely esthetic purposes, is undeniably a cognizable interest for purposes of standing." 504 US at 562-563. Therefore, Mr. Hawkins "use" or observation of an animal species, in this case fish, meets the *Save the Pine Bush* standard for standing.

Therefore, since Mr. Hawkins is an active member of both the Sierra Club and HRFA, these two Petitioners have met the first prong of the standard for organizational standing, having at least one member who meets the injury in fact test. Respondent Ravenswood raises the creative, although disingenuous argument that since the Ravenswood facility has withdrawn water from the East River since the 1960s, and since their newly issued water withdrawal permit allows them to continue withdrawing water in the same amount and in the same manner as previously, therefore, no one could meet the injury in fact standard since Ravenswood is doing nothing different than it has done in the past. Leaving aside for the moment the consistent holdings of the New York courts that standing requirements should not be so restrictive as to not allow anyone standing to challenge an administrative action, which would be the result of Respondent Ravenswood's position on this point, the fact is that Ravenswood's argument ignores the intervening passage of the Water Resources Protection Act of 2011, amending the water supply law, ECL, Article 15, Title 15, 15-1501 *et. seq*. (hereinafter WRPA). This new law is the first statutory provision in New York law to require that users other than public water supply systems obtain water withdrawal permits. Among the requirements of the law are that proposed withdrawals "be implemented in a manner to ensure it will result in no significant individual or cumulative adverse impacts on the quantity or quality of the water source and water dependent natural resources . . . [and] in a manner that incorporates environmentally sound and economically feasible water conservation measures. ECL § 15-1503.2 (f) and (g).

The new law was intended and does provide for a new regimen of permitting of large industrial water users like Ravenswood, and requires the DEC to assure the conservation measures indicated that will preserve New York State's supply of water for all residents of the state, as well as the natural resources dependent upon that water. To take the position that there

could be no injury in fact because Ravenswood withdrew the same amount of water previously that is allowed in its initial permit, without any environmental review under SEQRA, is in fact the gravamen of Petitioners' claims in this proceeding, since Petitioners believe that a thorough environmental review as required by SEQRA, would in fact provide alternatives and mitigating measures that SEQRA would require to assure the conservation goals of the Water Resources Protection Act.

B. Informational Injury Is an Appropriate Claim of the Petitioner Organizations

While Respondent Ravenswood does not specifically identify how the Petitioners have not demonstrated that the interests they assert in this proceeding are germane to their purposes, the affidavits of both Roger Downs and Gilbert Hawkins clearly indicate the long standing interests and activities of both Sierra Club and HRFA in protecting New York's waters and the natural resources dependent thereon. Since Respondent Ravenswood has not specifically challenged whether or not the Petitioners organizations' interests are germane to its purposes so as to satisfy the court that they are appropriate representatives of those interests, it is unnecessary to point to the specific paragraphs of each affidavit indicating the long standing interests, as well as activities, of the Petitioners. These are sufficiently particularized in those affidavits, and just as the Court of Appeals noted in a different context that the National Organization for Women, was "a bona fide and nationally recognized organization dedicated to eliminating discriminatory practices against women" *National Organization for Women et al., Appellants, v. State Division of Human Rights* (34 NY2d 416 [1974]) so too are Sierra Club, the oldest and largest environmental organization in the country, and HRFA, which was specifically formed to protect the aquatic resources of the Hudson River Watershed, recognized organizations dedicated to the preservation of the environment and water resources.

Respondent Ravenswood indicated that they could find no cases holding the right to sue for informational injury. However, this Court need look no further than the recent decision of the Court of Appeals in the *Matter of the Association for a Better Long Island v New York State Department of Environmental Conservation*, *DEC* (____ N.Y.3d ____, 2014 WL1280310 [April 1, 2014])[1] where the court observed:

> Petitioners further allege that the violation of these procedural statutes deprived them of an adequate 'airing' of the relevant issues and impacts of the proposed amendments, as well as an accurate assessment of the projected costs involved. The asserted statutory provisions set forth certain procedural steps to be followed when promulgating rules or regulations. The alleged violations, including the deprivation of an opportunity to be heard, constitute injuries to petitioners within the zone of interests sought to be protected by the statutes.

The Court of Appeals has regularly admonished against instituting rules of law that deny petitioners their ability to challenge administrative actions. Therefore, as to standing, the Court of Appeals has indicated that standing rules "should not be heavy-handed" *Matter of Sun-Brite Car Wash v Board of Zoning & Appeals of Town of North Hempstead*, 69 N.Y.2d 406, 413 (1987) and as indicated in *Society of Plastics*, "this is not a case where to deny standing to this plaintiff would be to insulate governmental actions from scrutiny (see *Matter of Har Enters. v Town of Brookhaven*, 74 NY2d 524, 529). *Society of Plastics* at 788.

The *Society of Plastics* case, which denied standing to a trade association because its interest was economic only and did not fall within the zone of interest of SEQRA, noted that in "the more common scenario of associations dedicated to environmental preservation seeking to represent the interests of persons threatened with environmental harm. . . . , in-fact injury within the zone of interest of environmental statutes has been established by proof that agency action

[1] Slip opinion attached as Exhibit A to the Affirmation of Rachel Treichler dated May 8, 2014.

will directly harm association members in their use and enjoyment of the affected natural resources." *Id*. at 775-776.

Sierra Club and HRFA are such organizations, and this proceeding is the common scenario of "associations dedicated to environmental preservation seeking to represent the interests of members threatened with environmental harm." *Id*.

In its Memorandum of Law, Ravenswood does not discuss Gilbert Hawkins. Instead, Ravenswood emphasizes Roger Downs' affidavit, also provided by Petitioners with their Initial MOL. Mr. Downs' affidavit emphasizes the informational injury he would suffer as a member of the Sierra Club if DEC's decision to forgo environmental impact review for Ravenswood's water withdrawal permit is allowed to stand.

Mr. Downs' informational injury is within the zone of interests protected by WRPA because the permitting program established by WRPA is subject to "the provisions of article 70 of this chapter," (ECL § 15-1503[5]), which are the "uniform review procedures for major regulatory programs" administered by DEC. ECL § 70-0101. These procedures are meant "to encourage public participation in government review and decision-making processes and to promote public understanding of all government activities." ECL § 70-0103(4).

The procedural provisions of Article 70 "govern the review by the department of applications for permits for proposed projects and modifications, suspensions, revocations, renewals, reissuances and recertifications of permits" administered by DEC, (ECL § 70-0107[2]), specifically including ECL Title 5 of Article 15, which includes WRPA. ECL § 70-0107(3)(a). Under the Article 70 procedures, if public comments on a permit application warrant "the imposition of significant conditions" on a proposed permit, DEC is required "hold a public hearing on the application." ECL § 70-0119(1). By exempting its decision on the Ravenswood

water withdrawal permit from SEQRA, DEC has rendered Mr. Downs' comments on the proposed decision meaningless, as there was no possibility DEC could, under its interpretation of the "initial permit" provision of WRPA, find his or anyone else's public comments warrant "the imposition of significant conditions" on the proposed permit. *Id*. DEC's decision to preclude the possibility of a public hearing by deeming the Ravenswood water withdrawal permit decision non-discretionary therefore creates an injury to Mr. Downs' and Sierra Club's interest in participating in the DEC permitting decision.

Mr. Downs' informational injury is also within the zone of interests protected by SEQRA. DEC has stated in the past that "SEQRA is intended to protect the public's opportunity to participate in environmental decisionmaking." *DEC Comm'r Interim Decision, In re 628 Land Assoc.* ([Sept. 12, 1994], available at http://www.dec.ny.gov/hearings/10932.html]. Importantly, the Court of Appeals has stated that "the Legislature's clear intent [is] that an EIS be used as an informational tool to aid in the planning process." *Incorporated Village of Atlantic Beach v. Gavalas* (81 N.Y.2d 322, 326 [1993]). Thus where, as here, DEC elects not to even consider whether an EIS is necessary, as Petitioners contend DEC was required to do so, injury Petitioners interest in participating in that decision is clearly harmed in a manner that is squarely within the zone of interests protected by SEQRA.

The informational injury in this case is particularly important, since there can be no question that millions of fish and millions of aquatic species are killed because of the once-through cooling system used at the Ravenswood plant. Moreover, as indicated in Petitioners' Initial MOL, there are alternatives that could be required of Ravenswood under the permitting discretion of the DEC pursuant to WRPA that would significantly mitigate the destruction of these aquatic species.

C. It Is Unnecessary to Join any Members of the Petitioners in order to Assert Organizational Standing

In making a determination whether an asserted claim or appropriate relief requires the participation of an individual member of the organization, the Court of Appeals has stated that: "It is enough to allege the adverse effect of the decision sought to be reviewed on the individuals represented by the organization; the complaint need not specify individual injured parties." [Citations omitted]. *Matter of the Dental Society of State of New York v Carey* (61 NY2d 330 [1984]). The fundamental issue is whether or not individual members are necessary "to fully adjudicate this proceeding or to grant the relief sought." *Matter of Aeneas McDonald Police Benevolent Association, Inc. v City of Geneva*, 92 NY2d 326, 331 [1998]).

In the instant action, the organizational petitioners clearly represent the long standing interests of their members, and have the capacity to adjudicate the proceeding without the participation of its individual members. This is not a case that like that cited by Ravenswood, *Matter of Citizens Organized to Protect the Environment v Planning Board of the Town of Irondequoit*, (50 AD3d 1460 [4th Dept 2008]), where the court said that the "petition, which was primarily concerned with the environmental effects on property owned by Robert Brinkman and Christina Brinkman, would require the participation of the Brinkmans." [Citation omitted]. *Id*. at 1461. Rather, the instant case asserts the rights of the Petitioners' members to assure adequate environmental review as required by SEQRA, and therefore, the relief requested in the petition could be granted without the participation of any individual member of the organizations.

The *Irondequoit* holding is also inapposite here, because in that case the court addressed the standing of an unincorporated association in that case and here the Petitioners are both corporations. In New York, there is no requirement that a corporation name a member or officer in the caption of its pleading. Unincorporated associations are so required. See Gen. Associations

L. § 102 ("An action or special proceeding may be maintained, by the president or treasurer of an unincorporated association to recover any property, or upon any cause of action, for or upon which all the associates may maintain such an action or special proceeding, by reason of their interest or ownership therein, either jointly or in common."). However, corporations such as the Petitioner are entitled "[t]o sue and be sued in all courts and to participate in actions and proceedings, whether judicial, administrative, arbitrative or otherwise, in like cases as natural persons." Bus. Corp. L. § 102(a)(2). See also N.Y. Const. Article X, § 4 (parallel language).

The interests of both Sierra Club and HRFA include environmental protection. Downs Aff., ¶ 3; Hawkins Aff., ¶ 6. Thus, both Petitioners' corporate interests are directly related to the subject matter of this proceeding, as both allege, *inter alia,* that that DEC impermissibly bypassed its duty to undertake an environmental impact review of the consequences of permitting one of the State's largest water withdrawals, despite WRPA's clear mandate to do so.

To establish standing in a CPLR Article 78 proceeding, an association or organization "must show that at least one of its members would have standing to sue." *New York State Assn. of Nurse Anesthetists v. Novello* (2 NY3d 207 [2004]). However, "proof of special damage or in-fact injury is not required in every instance." *Sun-Brite Car Wash, Inc. v. Board of Zoning Appeal*,(69 N.Y.2d 406 [1989]). Where a petitioner's interests "are within the 'zone of interest' protected" by a statute, the petitioner has standing, because "it is desirable that environmental disputes be resolved on their merits rather than by preclusive, restrictive standing rules." *Ecumenical Task Force of Niagara Frontier, Inc. v. Task Force of Love Canal Area Revitalization Agency (*179 AD2d 261, 265, [4th Dept 1992], *app. dis'd* 80 NY2d 758 [1992]).

Finally, this Court should find petitioners have standing because the proper administration of the state's new water withdrawal law is a matter of statewide public concern. If "the public

interest would be subverted if no one were found to have standing to challenge the [agency's action]," . . . [u]nder the totality of the circumstances, even if the petitioners may not have established direct harm different from that of the public at large, they have properly pled standing herein." *Oyster Bay Associates Limited Partnership v. Town of Oyster Bay* (13-16015 [10-9-2013] 2013 NY Slip Op. 52292[U] [Suffolk Co. 2013], citing *Committee to Preserve Brighton Beach v. Planning Commission of the City of New York*, 259 AD2d 26 [1st Dept 1999]; *State Communities Aid Assn. v. Regan*, 112 A.D.2d 681 [3rd Dept 1985]; *Albert Elia Bldg. Co. v. New York State Urban Dev. Corp*., 54 AD2d 337 [4th Dept 1976]; *Roosevelt Island Residents Assn. v. Roosevelt Island Operating Corp.*, 7 Misc.3d 1029[A], [NY County. 2005]). This holding is consistent with the Court of Appeals holding in a case involving citizen taxpayer standing pursuant to State Finance Law § 123 (b) (1):

> Actions of this type can serve as a means for citizens to ensure the continued vitality of the constraints on power that lie at the heart of our constitutional scheme (cf. *Matter of Dairylea Coop. v Walkley*, 38 NY2d 6, 10 [1975] Committee for an Effective Judiciary v State, 209 Mont 105, 112-113, 679 P2d 1223, 1227 [1984*]; State ex rel. Howard v Oklahoma Corp. Commn*., 614 P2d 45, 52 [Okla 1980]). Thus, where a denial of standing would pose "in effect ... an impenetrable barrier to any judicial scrutiny of legislative action," our duty is to open rather than close the door to the courthouse [citations omitted].

Saratoga County Chamber of Commerce, Inc. v. Pataki (100 NY2d 801, 815 [2003]). The Court of Appeals has strengthened this principle even further in the new case of *Association for a Better Long Island v. DEC*, decided April 1, 2014.

For the foregoing reasons, Petitioner organizations have standing to pursue this proceeding.

POINT II
ISSUANCE OF AN "INITIAL" WATER WITHDRAWAL PERMIT IS NOT A MINISTERIAL ACTION UNDER SEQRA AND REVIEW UNDER SEQRA IS REQUIRED

In response to Petitioners' claim that DEC violated SEQRA by failing to engage in an environmental review of the Ravenswood water withdrawal permit application, Respondents assert that issuance of an "initial" water withdrawal permit falls within certain exemptions from SEQRA review for "ministerial" actions. DEC Memorandum of Law (hereinafter "DEC MOL") 16, Ravenswood MOL 15-16. Respondents' assertions, however, are inconsistent with the plain wording of the applicable statutes, regulations and case law, and are contradicted by statements made by the DEC in support of the water withdrawal regulations.

A. Issuance of the Ravenswood "Initial" Permit is an "Action" Under SEQRA

Under SEQRA there is a *prima facie* presumption that the issuance of a permit is an "action" subject to SEQRA. , ECL § 8-0105.4(i). Respondent DEC asserts that issuance of the Ravenswood "initial" permit does not constitute an "action" under SEQRA because it was a ministerial act excluded from the definition of an action by ECL § 8-0105.5 (ii). DEC MOL 21. However, DEC's actions in issuing the permit involved numerous acts of discretion, as set forth at length in Petitioners' Initial Memorandum of Law (hereinafter "Initial MOL") and summarized below.

The exemption contained in ECL § 8-0105.5 (ii) is almost identical to the Type II exemption contained in the SEQRA regulations for "official act[s] of a ministerial nature, involving no exercise of discretion, including building permits and historic preservation permits where issuance is predicated solely on the applicant's compliance or noncompliance with the relevant local building or preservation code(s)." 6 NYCRR §617.5(c)(19). See AR 38, 48. If, as Petitioners assert, issuance of the Ravenswood permit falls outside the exemption in ECL §8-

0105.5 (ii), then for the same reasons, it will fall outside the Type II exemption in 6 NYCRR §617.5(c)(19). If issuance of the Ravenswood "initial" permit is not an exempt action under SEQRA, an environmental review is required.

B. WRPA Provides DEC with Discretion to Set Conditions of an "Initial" Permit

All parties to this proceeding agree that the provisions of the Water Resources Protection Act of 2011 ("WRPA"), codified at ECL §15-1501 *et seq*., require DEC to issue "initial" water withdrawal permits to existing users, such as Ravenswood, who have reported their water usage in the amount of their maximum reported capacity. If this were the sole provision relating to the issuance of "initial" permits, Petitioners would not dispute the applicability of the ministerial exemptions. But WRPA and the new water withdrawal permitting regulations, 6 NYCRR Part 601, require numerous additional terms and conditions that DEC is also mandated to include in an "initial" water withdrawal permit. The discretion involved in determining these additional terms and conditions precludes deeming the issuance of an "initial" water withdrawal permit ministerial, and makes it subject to review under SEQRA.

The plain language of ECL § 15-1501.9 provides that "initial" permits are subject to "appropriate terms and conditions as required under this article."[2] The terms and conditions required of all water withdrawal permits issued under Article 15, ECL §15-1501 *et seq*, including "initial" permits, are specified in ECL § 15-1503.2. "Initial" permits are not treated differently from permits generally under Section 15-1503.2 for "initial" permits. To issue any water withdrawal permit, DEC must determine that all eight elements under Section 15-1503.2 are met.

[2] The exact wording of Section 15-1501(9) is as follows: "9. The department shall issue an initial permit, subject to appropriate terms and conditions as required under this article, to any person not exempt from the permitting requirements of this section, for the maximum water withdrawal capacity reported to the department pursuant to the requirements of title sixteen or title thirty-three of this article on or before February fifteenth, two thousand twelve." The meaning of the term "initial permit" is not defined in Article 15 of the ECL.

These determinations involve the exercise of substantial amounts discretion by DEC, as outlined in greater detail in Petitioners Initial MOL.

C. DEC's Regulations Provide DEC with Discretion to Set Conditions of an "Initial" Permit

The requirements of ECL § 15-1501.9 and ECL § 15-1503.2 are reiterated in the new water permitting regulations. Section 601.7(e) of the regulations provides that "An initial permit . . . includes all terms and conditions of a water withdrawal permit, including environmentally sound and economically feasible water conservation measures to promote the efficient use of supplies, and is subject to modification, suspension and revocation, pursuant to the requirements of this Part." 6 NYCRR § 601.7(e). Section 601.11(c) of the regulations lists the same eight elements DEC must determine are met under ECL § 15-1503.2. Nothing in the wording of ECL §§ 15-1501.9 or 15-1503.2 or Sections 601.7(e) and 601.11(c) of the regulations supports DEC's claim that these provisions do not apply to the issuance "initial" permits. See DEC MOL 19. DEC's claim that the factors set forth in ECL § 15-1503.2 and 6 NYCRR § 601.11(c) are "irrelevant" to the issuance of an "initial" permit, *id*., is directly contrary to the plain language of ECL § 15-1501.9 and 6 NYCRR § 601.7(e), which expressly incorporate the conditions of ECL § 15-1503.2, and 6 NYCRR § 601.11(c). DEC's claim that it would be "futile for DEC to consider them" in the context of an "initial" permit, *id*., is nonsensical, as is its claim that "an Initial permit could not set a new requirement for closed-cycle cooling because Initial permit holders are entitled to continue withdrawing water at the maximum capacity reported to DEC." *Id*. 22-23. The tension between saying that the recipient of an "initial" permit is entitled to a permit for a certain capacity, and that their use of that capacity is subject to certain conditions, is the same tension that is present with regard to the issuance of any water withdrawal permit for any specified amount. The right to use the amount specified is subject to the conditions set forth in

the permit. DEC concedes that water conservation measures must be included in a permit. DEC MOL 5. There is no logical distinction between water conservation measures and other types of conditions that may be put into a permit.

Likewise, there is no basis for DEC claims that it "had limited discretion to place conditions on the Ravenswood Initial permit concerning 'environmentally sound and economically feasible water conservation measures to promote the efficient use of supplies,'" and that "those conditions would not have been informed by an environmental review." DEC MOL 18. DEC wants this Court to believe that it exercised its discretion with respect to those conditions—and reviewed them under SEQRA when the SPDES permit was issued, not when the Initial permit was issued." *Id*.. However, the eight determinations mandated by WRPA were not considered when the SPDES permit was issued.

DEC inaccurately characterizes the required extent of DEC's consideration of water conservation measures, under the water permitting law, as limited to certain generic conditions and to case-specific conditions derived from the SPDES permit. No authority for that interpretation can be found in either the statute or the implementing regulations. Section 601.7(f) of the regulations says that "Where the water withdrawal system listed in an initial permit application is associated with a project, facility, activity or use that is subject to a SPDES permit or another Department permit, the Department will review the initial permit application in coordination with the SPDES or other permit program, particularly with respect to any pending permit renewals." This section does not state that incorporating provisions from a SPDES permit will fulfill DEC's duties under 6 NYCRR § 601.11(c). DEC claims that most of the conditions it imposed in Ravenswood's water withdrawal permit were required by the implementing regulations of the Water Resources Law—filing Annual Water Withdrawal Reports, installing

measuring devices on all sources of water supply, and calibrating those devices once a year—and thus not discretionary. In support of this claim, DEC cites the routine monitoring, recording, and reporting requirements applicable to permittees contained in 6 NYCRR § 601.20. The claim that such provisions were mandatory, not discretionary is belied by the fact that DEC exercised discretion not to impose all the requirements of this section in the Ravenswood water withdrawal permit, and it fails to explain why DEC views the requirements of Section 601.20 as mandatory and not the requirements of Section 601.11(c).

DEC acknowledges that the Ravenswood water withdrawal permit does not require the plant to do an annual water audit. DEC MOL 18. DEC justifies its decision not to require a water audit by stating that "the water the plant withdraws from the East River is discharged back to the River with no consumptive loss**."** *Id.* As a result, DEC says, "an environmental review would not have informed DEC's decision to impose [audit requirements]." Id. But this justification is not supported by the record. Ravenswood's application shows that it has very sizeable consumptive losses. A table in the application showing amounts of water withdrawn and consumed by the plant for each month of 2013 shows that water consumed monthly by the plant was between 7.5 and 17 MGD. AR 21. These are very substantial amounts of water, larger than most water withdrawals in New York and far greater than the minimum threshold for water withdrawal permitting of 0.1 MGD. 6 NYCRR § 601.2(p). Moreover, there can be much greater evaporative loss once the heated water is released back to the river. These consumptive losses and the potential for greater evaporative loss should have been examined in an EIS. There are significant potential environmental impacts from DEC's decision not to require a water audit.

D. Case Law Establishes that DEC Has Discretion to Set Conditions of an "Initial" Permit

The tests set forth in the cases cited by Respondents support a determination that issuance of the Ravenswood permit was not a ministerial action. In *Atlantic Beach v Gavalas* (81 NY2d 322, 326 [1993]), the Court of Appeals states that the "pivotal inquiry" in determining whether an agency decision is ministerial or discretionary for purposes of determining the applicability of SEQRA is "whether the information contained in an EIS may 'form the basis for a decision whether or not to undertake or approve such action,'" citing *Pius v Bletsch* (70 NY2d 920 [1987]). The *Gavalas* court explained the test:

> Logically, where an agency is empowered to "act" by granting or denying a permit based only on compliance with a conventional Building Code or fire safety regulations, it makes little sense to require preparation of an EIS. Such a requirement would certainly not advance the Legislature's clear intent that an EIS be used as an informational tool to aid in the planning process (see, ECL 8-0109 [2]).
>
> In contrast, the discretion involved in the exercise of site plan approval powers which was vested in the issuing agency in *Pius* is illustrative of agency "action" because a relationship exists between the types of decisions to be made and the environmental concerns enumerated in an EIS. *In Matter of E.F.S. Ventures Corp. v Foster* (71 N.Y.2d 359).

After referring to the *Gavalas* test in its MOL, DEC says that "an environmental review could not have formed the basis for DEC to deny Ravenswood its Initial permit because DEC was required to issue the Initial permit." DEC MOL 16. But under the *Gavalas* test, the is not whether DEC was required to issue the "initial" permit, but whether DEC's discretion to condition the permit would be informed by an EIS.

In the case of an "initial" water withdrawal permit, the conditions required by ECL § 15-1501(2) would be informed by an EIS. To take just one example, subdivision (g) of § 15-1501(2) requires that "the proposed water withdrawal will be implemented in a manner that incorporates

environmentally sound and economically feasible water conservation measures." And the regulations authorize DEC to implement this requirement by imposing "environmentally sound and economically feasible water conservation measures" as conditions in water withdrawal permits. Section 601.11(c)(7). The Water Withdrawal Law also mandates "proper consideration of other sources of supply that are or may become available," and consideration of whether the withdrawal can be "reasonably avoided" altogether (here, as with a closed-cycle cooling system), "limited to quantities that are considered reasonable for the purposes for which the water use is proposed", limited to minimize "significant individual or cumulative adverse impacts on the quantity or quality of the water source and water dependent natural resources", or notwithstanding permitting a previously reported withdrawal capacity accompanied by "environmentally sound and economically feasible water conservation measures." ECL §§ 15-1501(2) (a), (d), (e), (f), and (g). The instant proceeding thus presents a strong contrast to the limited discretion at issue in the cases cited by DEC and Ravenswood.

In the case of *Ziemba v City of Troy* (37 AD3d 68 [3rd Dept 2006]), the court applied the *Gavalas* test and found that issuing a building permit in the circumstances of that case did not require discretion. The *Ziemba* court determined that, "when an agency has some discretion, but that discretion is circumscribed by a narrow set of criteria which do not bear any relationship to the environmental concerns that may be raised in an EIS, its decisions will not be considered 'actions' for purposes of SEQRA's EIS requirements," (37 AD3d at 74, quoting *Gavalas* at 326). Compare DEC MOL, 17. Here, DEC's discretion to include conditions in the Ravenswood permit is contained in a broad set of criteria that are directly related to the environmental concerns that may be raised in an EIS. The facts of the present case are thus even stronger than the facts in *Pius v Bletsch* in which the court of appeals held that the amount of discretion involved in issuing

a site plan approval mean that the issuance of the approval was discretionary and an EIS was required. In *Pius*, the court stated:

> We conclude that, in light of the Director's specifically delegated site plan approval powers coupled with the authority to make certain case-by-case judgments on site plan design and construction materials issues, the Town of Huntington's subdivision regulations and site improvement specifications vests discretion of a kind which qualifies as an unexempted "action" in connection with the issuance of a building permit. Inasmuch as the issuance of a permit under this regulation is an action, the Director, as head of the "lead agency" under SEQRA, was entitled to require a DEIS as a precondition to the issuance of a permit.

Id. at 922. DEC then the *Ziemba* case as an example of a permit that is exempt from SEQRA even though there was some discretion regarding permit conditions. DEC MOL, 17. But consideration of a permit application for a water withdrawal permits involves the very types of considerations that the court in *Ziemba* identified as requiring an EIS, i.e., "the potential impact of a proposed action on 'land, water, plants and animals, growth and character of the community and other environmental concerns.'" *Ziemba* at 75. Under the WRPA, DEC's discretion regarding water conservation measures and other environmental matters clearly has to do with environmental concerns that are central to SEQRA. The present case should therefore be distinguished from *Ziemba*.

E. DEC's Response to Comments on the Regulations Acknowledged DEC Has Discretion to Set Conditions of an "Initial" Permit

The position taken by DEC in this proceeding regarding the scope of its discretion in issuing "initial" water withdrawal permits is contrary to the position it took when responding to public comments on the proposed water withdrawal regulations.[3] In several responses, DEC

[3] Responsiveness summary for the final water withdrawal regulations, Assessment of Public Comment: Section V -- Table of Comments and Responses, Page 41-42 of 167, attached as Exhibit A- to the Affirmation of Rachel Treichler dated May 8, 2014

acknowledges that it has substantial discretion in issuing "initial" water withdrawal permits.[4] Entergy Nuclear Operations, Inc., the owner of the Indian Point power plant, raised several questions during the comment process regarding the issuance of "initial" permits. In "Question #148" in the Table of Comments and Responses, Entergy observed ,"There appears to be . . . no provision in the Proposed Regulations prohibiting substantive review of initial permits, and therefore no reason to believe NYSDEC will refrain from substantively reviewing initial permits for existing facilities or requiring that new substantive provisions be included in initial permits," Id.. DEC responded:

> ECL §15-1501(9) requires that the Department issue an initial permit for the maximum capacity reported or registered with the Department on or before February 15, 2012; *however, it also provides that the permit will be subject to appropriate terms and conditions as required under ECL Article 15*. While the Department expects the initial permit process to be an expedited and less costly permit process, *it will review the permit applications and include in the permit appropriate conditions, including water conservation measures*. [Emphasis added.][5]

Similarly, in Question #149, Entergy noted, "Further, the Proposed Regulations do not provide different standards for the issuance of initial permits and new permits. Instead, the Proposed Regulations make clear that an initial permit for existing facilities must include 'all terms and conditions of a water withdrawal permit.' Id . at §601.7(e) .Without a definitive statement that initial permits for existing facilities are subject to different issuance standards, it is logical to assume that initial permits are subject to the same issuance standards as new permits. Entergy therefore requests that NYSDEC provide clarification on the standards for issuance of initial permits for existing facilities and whether the standards will be the same as those for new permits for proposed facilities." DEC responded:

[4] *Id*.
[5] *Id*.

> ECL §15-1503 establishes permit application requirements and standards for permit issuance. This Section applies to all permits. *The statute does not authorize the Department to apply different standards for the issuance of initial permits.* It requires only that the applicant obtain a permit for the maximum withdrawal capacity reported to the Department. [Emphasis added.]

F. DEC's Litigation Position is Not Entitled to Deference

Because the present case involves an issue of statutory construction, the principle of judicial deference to agency interpretations does not apply. The rules for when a court should defer to an agency interpretation of a statute are set forth in *Raritan Development Corp. v Silva* (91 NY2d 98 [1997]):

> [T]his Court has consistently applied the same standard of review for agency determinations. Where "the question is one of pure legal interpretation of statutory terms, deference to the BSA is not required" (*Matter of Toys "R" Us v Silva*, 89 N.Y.2d 411, 419). On the other hand, when applying its special expertise in a particular field to interpret statutory language, an agency's rational construction is entitled to deference (see, *Matter of Jennings v New York State Off. of Mental Health*, 90 N.Y.2d 227, 239; *Kurcsics v Merchants Mut. Ins. Co.*, 49 N.Y.2d 451, 459). 103*103 Even in those situations, however, a determination by the agency that "runs counter to the clear wording of a statutory provision" is given little weight (*Kurcsics v Merchants Mut. Ins. Co.*, 49 NY2d, at 459; see also, *Matter of Toys "R" Us v Silva*, 89 NY2d, at 418-419).

Id. 102-103. In the *Raritan* case, the Court of Appeals declined to defer to the interpretation of a section of New York City's Zoning Resolution put forth by the Board of Standards and Appeals of the City of New York (BSA). The Court said, "The statutory language could not be clearer. As noted above, a cellar is defined within the Zoning Resolution in terms of its physical location in a building. 'Floor area' includes dwelling spaces when not specifically excluded and 'cellar space,' without further qualification, is expressly excluded from FAR calculations. Thus, FAR calculations should not include cellars regardless of the intended use of the space. BSA's interpretation conflicts with the plain statutory language and may not be sustained." [Footnotes

omitted.]. *Id*. at 103. In *Matter of Brown v NYS Racing and Wagering Boar*,(60 AD3d 107 [2nd Dept 2009]), the court stated: "when a 'question is one of pure legal interpretation of statutory terms, deference to the [agency] is not required,'", and said: "In such instances, courts should construe clear and unambiguous statutory language as to give effect to the plain meaning of the words used." *Id*. at 115. The court in *Brown* found, "There being no ambiguity in the operative statutory terms, we must necessarily deem the pertinent provisions of the Education Law as subject to pure legal interpretation and give effect to their plain meaning, without necessarily deferring to the interpretation advanced by NYSED." *Id*. at 116. *Accord Kash v Jewish Home* (61 AD 3d 146, 149 [4th Dept. 2009], "Because we conclude that the language of Public Health Law § 2801-d is clear and unambiguous, we are required to give effect to its plain meaning"); *HLP Properties, LLC, v NYS DEC* (21 Misc3d 658, 667 [Sup Ct NY County 2008], "Agency determinations running counter to the clear wording of a statutory provision are afforded little weight.")

In the *HLP* case, Petitioners challenged DEC's denial of their application to participate in the Brownfield Cleanup Program under ECL § 27-1401 on the grounds that the DEC's decision was not made based on a demonstrated ineligibility under the statute, but rather, an ineligibility based on DEC's interpretation of the statute. DEC, in opposition, contended that its determination, which utilized agency-created guidance documents in determining petitioners' ineligibility, was not unreasonable. In *HLP*, the court found that DEC's interpretation of the statute was unreasonable. The court stated:

> [W]hile the implementation of a statute may place an agency in a position where they are forced to deal with competing interests, striking a balance between those interests is exclusively a legislative function (Boreali v Axelrod, 71 NY2d 1 [1987]). Stated differently, an agency, by law, is not allowed to "legislate" by adding "guidance requirements" not expressly authorized by

> statute (see *Matter of Medical Socy. of State of N.Y. v Serio*, 100 NY2d 854 [2003]; *Boreali v Axelrod*, 71 NY2d 1 [1987*]; Destiny USA Dev., LLC v New York State Dept. of Envtl. Conservation*, 19 Misc 3d 1144[A], 2008 NY Slip Op 51161[U] [Sup Ct, Onondaga County 2008]).
>
> The DEC, in using its own administratively-created and far more limiting guidelines to determine petitioners' ineligibility, engaged in this proscribed activity.

Id. at 669.

In addition, "It is a well-settled principle of statutory construction that a statute or ordinance must be construed as a whole and that its various sections must be considered together and with reference to each other." *People v Mobil Oil Corp*., (48 NY2d 192, 199 [1979]); *Abood v Hospital Ambulance Serv*. (30 NY2d 295, 300 [1972]); *Friedman v Conn Gen Life Ins*, 9 NY3d 105 [2007], "A court must consider a statute as a whole, reading and construing all parts of an act together to determine legislative intent (see *McKinney's Cons Laws of NY*, Book 1, Statutes § 97), and, where possible, should 'harmonize [all parts of a statute] with each other ... and [give] effect and meaning ... to the entire statute and every part and word thereof' (*id*. § 98; see also *People v Mobil Oil Corp*., 48 NY2d 192, 199 [1979]."); *People v Jones* (112 Misc2d 841 [Sup Ct Queens County 1982], "Statutory words must be read in their context, and words, phrases, and sentences of a statutory section should be interpreted with reference to the scheme of the entire section."); see *McKinney's Cons Laws of NY*, Book 1, Statutes, §§ 97-98.

Here, the purpose of Title 15 of the ECL is expansive, including numerous policies to protect, conserve and develop New York's water resources, including a strong policy promoting regulation of activities that adversely affect those resources. ECL § 15-0103. As Petitioners have previously noted, a major impetus for passage of the WRPA was to implement the requirements of the Great Lakes-St. Lawrence River Basin Water Resources Compact (ECL § 21-1001).

Petitioners' Initial MOL at 14, quoting the Assembly Sponsor's Memorandum in Support. [6] The legislation applied key elements of the Compact's decision-making standards to water withdrawal permits issued throughout the state; including the Compact requirements that withdrawals must "incorporate environmentally sounds and economically feasible water conservation measures" and "result in no significant individual or cumulative adverse impacts to the quantity or quality of "the waters and water-dependent resources in the source watershed."*Id*.

If the exemptions urged by Respondents were accepted, it would gut the applicability of the new water withdrawal law. The vast majority of the users subject to the permitting requirements of the new water withdrawal law are existing users. If existing users are exempted from the substantive requirements of the law, then those requirements are essentially meaningless.

G. Petitioners Do Not Attack the WRPA

Respondent Ravenswood claims that "a review of the Petition as a whole establishes that Petitioners' real challenge is to the Legislature's determination when crafting the Act [WRPA] to exempt existing water withdrawals from environmental review by explicitly removing any discretion from NYSDEC regarding whether to issue a permit to facilities with existing water withdrawals." Ravenswood MOL 14. But, as is apparent from the discussion above and in Petitioners' Initial MOL, Petitioners' claims are exactly to the contrary. Petitioners' Initial MOL states at 16, 20:

> Moreover, despite DEC's assertion that "the Legislature has restricted the Department's discretion to the standard form permit," no such restriction is contained in the statute. . . .

[6] Petitioners' Initial MOL at 14, quoting p. 10 in the Assembly Sponsor's Memorandum in Support of Bill Number A5318A, contained in the Bill Jacket for A5318A/S3798 2012, attached as Exhibit E to the affirmation of Rachel Treichler dated March 21, 2014. Identical statements are made in a DEC Memorandum to Mylan L. Denerstein, Esq., Counsel to the Governor, by Maureen A. Coleman, DEC Legislative Counsel, dated August 3, 2011, recommending approval for the legislation, p. 16 of the Bill Jacket.

> The legislature's intent that DEC exercise broad discretion in specifying the terms and conditions of all water withdrawal permits, including "initial" permits, is made clear in ECL § 15-1503.2: . . . .
>
> In conclusion, DEC's claim that it has no discretion in setting the terms and conditions contained in an "initial" permit is directly contrary to the clear wording of ECL §§ 15-1501.9 and 15-1503.2.

As just noted, Ravenswood refers to "the Legislature's determination when crafting the Act [WRPA] to exempt existing water withdrawals from environmental review," Ravenswood MOL 14, but there is no indication of such a goal in the legislation or the legislative history. In fact, the legislation promotes environmental review. By providing for the issuance of water withdrawal permits, the legislation imposes a requirement that brings SEQRA, which applies to the issuance of permits, into play. There is no indication that the legislature had any inkling of the interpretation now being urged by Respondents. Roger Downs, Conservation Director of Petitioner Sierra Club's Atlantic Chapter, who actively monitored the legislative process during the enactment of the WRPA, states in para. 9 of his affidavit:

> Granting a water withdrawal permit to the Ravenswood facility for 1 billion gallons a day without an environmental assessment under SEQRA defies the intent and purpose of the water resources law – especially as there are many practical alternatives to once through wet cooling that use significantly less water without killing fish. The intent of the newly enacted legislation is not to duplicate existing SPDES permits for excessive withdrawals, but to provide the Department of Environmental Conservation with tools to manage New York's water resources in a comprehensive [manner]. A primary tool to facilitate this goal is the environmental impact assessment process.

H. Petitioners Do Not Attack the Water Withdrawal Regulations

Respondent Ravenswood also claims that "Petitioners failed to directly challenge the regulations, which explicitly confirmed that facilities such as the Ravenswood Facility would be entitled to a permit without undergoing repetitive environmental review." Ravenswood MOL 14.

Ravenswood cites the DEC's proposed rulemaking in support of this contention, id., but the proposed rulemaking is no different in this regard than the adopted regulations, and the plain wording of the regulations is contrary to Ravenswood's contention, as explained above.

I. Petitioners Do Not Attack the Ravenswood SPDES Permit

Finally, Respondent Ravenswood claims that "the Petition is nothing but a collateral attack on the Ravenswood Facility's SPDES permit" (Ravenswood MOL 13). The Petition, however, takes no issue with the Ravenswood SPDES permit. Petitioners' actual argument is that the DEC's new water withdrawal permitting program is independent of the SPDES permitting program and therefore calls for an independent environmental impact review of the potential consequences for other users and the environment of the issuance of a water withdrawal permit. Ravenswood asserts that the " impacts [of the cooling water structures] (e.g., fish impingement) were squarely addressed by the NYSDEC as part of its consideration and issuance of the Ravenswood Facility's SPDES Permit." Ravenswood MOL 13. However, Ravenswood concedes that no environmental review was done of the Ravenswood SPDES permit at the time it was renewed in 2012, *id*. 14, and that the SEQRA review conducted in 2007 was a Negative Declaration. *Id*. 4. The published notice of the 2007 SPDES application, ENB Region 2 Completed Applications 12/20/2006, attached to the O'Donnell Affidavit as Exhibit C, states: "State Environmental Quality Review (SEQR) Determination: Project is an Unlisted Action and will not have a significant impact on the environment. A Negative Declaration is on file. A coordinated review was not performed. SEQR Lead Agency: None Designated." As noted in Petitioners' Initial MOL, Petitioners have not been able to obtain a copy of 2007 Negative Declaration. Copies of all environmental reviews conducted of the Ravenswood SPDES permit

were requested in a FOIL request by one of Petitioners' attorneys.[7] DEC's response to this request was as follows:

> Item 5 All environmental reviews conducted in connection with the issuance of any Ravenswood SPDES permit: Environmental reviews are a process not a record. The results of that process are primarily documented by the permit application and issued permit have been provided [sic].[8]

Apparently, there is no record of the environmental issues considered in 2007 that resulted in the Negative Declaration.

But even if a full environmental review had been conducted of the Ravenswood SPDES permit, such a review would be inadequate to substitute for a full environmental review of the Ravenswood water withdrawal permit. The scope of an environmental review under the SPDES regulations is far more limited that the scope of issues to be addressed by a water withdrawal permit.

For purposes of determining the application of SEQRA to the issuance of a water withdrawal permit, it is not relevant that Ravenswood's operations are long-standing, as the new regulatory program falls on new and old facilities alike. Cf. Ravenswood MOL, 2. The WRPA and the new water withdrawal permitting regulations do not grandfather existing facilities or otherwise exempt them from the reach of new permitting requirements. This is not unusual when new permitting programs are adopted. For example, the landfill permitting and operation regulations adopted by New York State in the 1970s imposed substantial new costs on existing landfills. As a result, the number of New York MSW landfills dropped from over two hundred before the regulations were adopted to about 26 today.

[7] FOIL request dated August 13, 2013, attached as Exhibit A to the Treichler Affirmation dated March 21, 2014.

[8] DEC response dated August 27, 2013, to Treichler FOIL request, attached as Exhibit B to the Treichler Affirmation dated March 21, 2014.

J. Ravenswood's SPDES Permit does not require Best Available Technology

As part of its assertion that the Petition is no more than a collateral attack on its SPDES permit, Ravenswood asserts that its SPDES permit requires Best Available Technology ("BTA"). Ravenswood MOL 2. However, there is no basis for that assertion. On July 10, 2011 DEC issued its "BTA for Cooling Water Intake Structures" guidance.[9] The guidance states that cooling water intake structures will be subject to one of four "performance goals" when selecting BTA, all four requiring "closed-cycle cooling." Id., 1-2. The Policy further states:

> Facilities for which a BTA determination has been issued prior to the effective date of this policy and which are in compliance with an existing compliance schedule of BTA implementation and verification monitoring will not be subject to new requirements as a result of this policy unless/until the results of verification monitoring demonstrate the necessity of more stringent BTA requirements. A full technical review will be conducted when a permit renewal or modification application is submitted following the completion of the verification monitoring program.

Id., 2. DEC's BTA guidance also provides:

> This policy will be implemented when: (i) an applicant seeks a new SPDES permit; (ii) a permittee seeks to renew an existing SPDES permit; or (iii) a SPDES permit is modified either by the Department or by the permittee, for a facility that operates a CWIS in connection with a point source thermal discharge . . .

Id., 6. Notwithstanding this 2011 policy, DEC renewed Ravenswood's SPDES permit in November 2012 without requiring closed-cycle cooling. State MOL, Jacobson Aff., ¶ 13. Cf. Ravenswood MOL, 4. Ravenswood's SPDES permit does not therefore require BTA.

[9] DEC Policy CP #52, Best Technology Available (BTA) for Cooling Water Intake Structures (July 10, 2011), available at <http://www.dec.ny.gov/docs/fish_marine_pdf/btapolicyfinal.pdf>.

POINT III
DEC FAILED TO PLACE APPROPRIATE TERMS AND CONDITIONS IN THE RAVENSWOOD PERMIT AS REQUIRED BY THE WRPA AND THE REGULATIONS

DEC questions in its MOL whether Petitioners have abandoned their claim that DEC failed to apply appropriate terms and conditions in the Ravenswood "initial" permit. DEC MOL 22. Petitioners have not abandoned this claim. The claim is fundamentally connected to Petitioners' claims regarding the DEC's exercise of discretion and its claim regarding DEC's failure to engage in an EIS. It is supported by numerous observations in Petitioners' Initial MOL regarding DEC's failure to include adequate terms and conditions in the Ravenswood permit as a result of its failure to impose the terms and conditions required by ECL § 15-1503.2, including its failure to impose environmentally sound water conservation measures such as closed cycle cooling. Initial MOL, 19-20. DEC acknowledges that "Petitioners take issue with the fact that the Initial permit does not require Ravenswood to employ a closed-cycle cooling system." DEC MOL 22.

DEC's failure to impose adequate terms and conditions in the Ravenswood water withdrawal permit was a direct consequence of DEC's determination to categorize the Ravenswood application as exempt under SEQRA. This resulted in DEC's failure to utilize the discretion granted to it under WRPA to impose necessary terms and conditions.

It is undisputed that the massive volumes of water used by the Ravenswood Generating Facility are attributable largely to the fact that the facility relies on a once-through cooling system and that a closed-cycle cooling system would use much less water. DEC is obligated to determine whether closed-cycle cooling represents an "environmentally sound and economically feasible water conservation measure," as that term is defined by law.

DEC states that conservation measures incorporated into the Ravenswood SPDES permit "have decreased Ravenswood's water withdrawals by approximately twenty-six percent between July 2012 to April 2013," (DEC MOL 13), but other measures, such as closed-cycle cooling would reduce the withdrawals much more substantially and should have been considered under the other factors required by ECL § 15-1501(2). DEC is required to exercise discretion under the WRPA to apply these factors independently of the applicable tests under the SPDES permit requirements. Thus, DEC is required to exercise discretion to determine whether the WRPA requires closed-cycle cooling at the Ravenswood facility. As noted in Petitioners' initial MOL, the standards required in issuing a water withdrawal permit are much more stringent that the conservation standards required in a SPDES permit. See Petitioners' Initial MOL at 18-19.

POINT IV
DEC VIOLATED THE COASTAL ZONE LAWS

Respondents concede that if the Ravenswood permit application is a Type I action under SEQRA, then the Coastal Zone laws apply. The listing by the New York State Department of State of the issuance of a water withdrawal permit by the DEC as one of the types of DEC permit actions that requires review under the New York City Waterfront Revitalization Program demonstrates that the Department of State regards the issuance of any type of water withdrawal permit as not exempt from SEQRA. Petitioners' Initial MOL 32.

POINT V
DEC VIOLATED THE PUBLIC TRUST DOCTRINE

Respondent DEC states that Petitioners cite no authority for the proposition that the public trust doctrine, a common law doctrine, "imposes requirements on DEC above and beyond the statutory requirements." DEC MOL 23. DEC says "so long as DEC complied with those statutes—as it did here—it is in compliance with the public trust doctrine." But DEC's

compliance with these statutes is exactly what Petitioners dispute. Petitioners assert that DEC failed to comply with numerous statutory mandates to protect the public trust interest when it approved the Ravenswood water withdrawal permit and failed to engage in an environmental review of its impacts. The public trust doctrine applies to the duties of all arms of state government, including state agencies such as the DEC. It is widely recognized that the public trust doctrine applies to the actions of state agencies. In one of the leading cases on the public trust doctrine, *National Audubon Society v Superior Court of Alpine County* (33 Cal3d 419 [1983]), the California Supreme Court stated, "[B]efore state courts and agencies approve water diversions they should consider the effect of such diversions upon interests protected by the public trust, and attempt, so far as feasible, to avoid or minimize any harm to those interests [emphasis added]." *Id.* at 426.

CONCLUSION

For the foregoing reasons, DEC failed its statutory responsibilities under SEQRA, WRPA, the ECL, and the Coastal Zone laws, as well as its public trust duties

DATED: Buffalo, New York
May 8, 2014

Respectfully submitted,

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573

REPLY AFFIRMATION OF RACHEL TREICHLER, ESQ. IN FURTHER SUPPORT OF VERIFIED PETITION, DATED MAY 8, 2014 [573-574]

SUPREME COURT OF THE STATE OF NEW YORK
COUNTY OF QUEENS

In the Matter of the Application of SIERRA CLUB and the HUDSON RIVER FISHERMEN'S ASSOCIATION NEW JERSEY CHAPTER, INC., Petitioners, For a Judgment Pursuant to Article 78 of the Civil Practice Laws and Rules -against- JOSEPH MARTENS, COMMISSIONER, NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION, Respondent, T.C. RAVENSWOOD L.L.C., Necessary Party.	:	**AFFIRMATION IN SUPPORT OF PETITIONERS' REPLY MEMORANDUM OF LAW** Index No. 2949-14 Hon. Robert J. McDonald

I, Rachel Treichler, an attorney admitted to the practice of law before the courts of the State of New York, affirm the following to be true under the penalties of perjury pursuant to CPLR 2106:

1. I am an attorney for the Petitioners in the above-captioned matter.

2. I have attached the Slip opinion in *Matter of the Association for a Better Long Island v New York State Department of Environmental Conservation, DEC* (____ N.Y.3d ____, 2014 WL1280310 [April 1, 2014]) as Exhibit A.

3. I have attached excerpts from NYSDEC, Adoption of Water Withdrawal Regulations, Assessment of Public comments (November 2012), as Exhibit B.

Dated: May 8, 2014

Rachel Treichler
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Attorney for the Petitioners

EXHIBIT A TO TREICHLER AFFIRMATION — SLIP OPINION IN MATTER OF THE ASSOCIATION FOR A BETTER LONG ISLAND V. NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION, 2014 WL1280310 (APRIL 1, 2014) [575-585]

FOR EDUCATIONAL USE ONLY

--- N.E.3d ----, 2014 WL 1280310 (N.Y.), 2014 N.Y. Slip Op. 02216

Judges and Attorneys

THIS DECISION IS UNCORRECTED AND SUBJECT TO REVISION BEFORE PUBLICATION IN THE NEW YORK REPORTS.

Court of Appeals of New York.
In the Matter of the ASSOCIATION FOR A **BETTER LONG ISLAND**, INC., et al.,
Petitioners,
Town of **Riverhead** et al., Appellants,
v.
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION, et al.,
Respondents.

April 1, 2014.

Background: Association dedicated to economic growth of region, land-owning limited liability company (LLC) and its managing partner, and town and its community development agency (CDA) commenced hybrid Article 78 petition/declaratory judgment action challenging regulatory amendments, made by Department of Environmental Conservation's (DEC) Division of Fish, Wildlife and Marine Resources, establishing a formal process through which individuals could obtain permits to allow for incidental taking of endangered or threatened species. The Supreme Court, Albany County, George B. Ceresia, Jr., J., 35 Misc.3d 786, 935 N.Y.S.2d 488, granted Department's motion to dismiss. Petitioners appealed. The Supreme Court, Appellate Division, 97 A.D.3d 1085, 949 N.Y.S.2d 291, affirmed. Leave to appeal was granted to town and its community development agency.

Holdings: The Court of Appeals, Lippman, Chief Judge, held that:
(1) town and CDA sufficiently alleged an injury in fact, as required for standing to challenge Department's procedures for adopting the amended regulations;
(2) town and CDA satisfied "zone of interests" requirement for standing to challenge Department's procedures for adopting the amended regulations; but
(3) alleged economic injuries did not support standing to bring claim asserting that Department issued negative declaration without taking a hard look; and
(4) substantive challenges to amended regulations were not ripe.

Affirmed as modified.

West Headnotes

[1] KeyCite Citing References for this Headnote

13 Action
13I Grounds and Conditions Precedent
13k13 k. Persons Entitled to Sue. Most Cited Cases

"Standing" is a threshold determination, resting in part on policy considerations, that a person should be allowed access to the courts to adjudicate the merits of a particular dispute that satisfies the other justiciability criteria.

[2] KeyCite Citing References for this Headnote

15A Administrative Law and Procedure
15AV Judicial Review of Administrative Decisions
15AV(A) In General
15Ak665 Right of Review
15Ak666 k. Interest in General. Most Cited Cases

15A Administrative Law and Procedure KeyCite Citing References for this Headnote
15AV Judicial Review of Administrative Decisions
15AV(A) In General
15Ak665 Right of Review
15Ak668 k. Persons Aggrieved or Affected. Most Cited Cases

With respect to standing to challenge administrative action, plaintiff has the burden of establishing both an injury in fact and that the asserted injury is within the zone of interests sought to be protected by the statute alleged to have been violated.

[3] KeyCite Citing References for this Headnote

414 Zoning and Planning
414X Judicial Review or Relief
414X(A) In General
414k1584 Right of Review; Standing
414k1585 k. In General. Most Cited Cases

To have standing in a land use matter, plaintiff must show that it would suffer direct harm, injury that is in some way different from that of the public at large.

[4] KeyCite Citing References for this Headnote

13 Action
13I Grounds and Conditions Precedent
13k13 k. Persons Entitled to Sue. Most Cited Cases

The requirements for standing ensure that the courts are adjudicating actual controversies for parties that have a genuine stake in the litigation.

[5] KeyCite Citing References for this Headnote

13 Action
13I Grounds and Conditions Precedent
13k13 k. Persons Entitled to Sue. Most Cited Cases

Rules for standing should not be heavy-handed, and courts are reluctant to apply principles of standing in an overly restrictive manner where the result would be to completely shield a particular action from judicial review.

[6] KeyCite Citing References for this Headnote

149E Environmental Law
149EXIII Judicial Review or Intervention
149Ek649 Persons Entitled to Sue or Seek Review; Standing
149Ek654 k. Government Entities, Agencies, and Officials. Most Cited Cases

Allegations of town and its community development agency, that they were governmental entities titled to land for purpose of redevelopment, whose property was subject to the amended regulations in question, and that Department of Environmental Conservation (DEC), in connection with their prior proposal to subdivide the land at issue, provided them with outline for comprehensive habitat protection plan and indicated its intention to serve as lead agency for purposes of State Environmental Quality Review Act (SEQRA) review, sufficiently alleged injury in fact, as required for standing to bring action challenging procedures for DEC's adoption of amended regulations establishing a formal process through which individuals could obtain permits to allow for incidental taking of endangered or threatened species. McKinney's ECL §§ 3-0301(2)(a) (prior to 2012 amendment), 11-0535; McKinney's State Administrative Procedure Act §§ 202, 202-a(3)(c); 6 NYCRR § 182.11(a).

[7] KeyCite Citing References for this Headnote

13 Action
13I Grounds and Conditions Precedent
13k13 k. Persons Entitled to Sue. Most Cited Cases

A litigant's "some day" intentions, without any description of concrete plans, or

indeed even any specification of when the "some day" will be, do not support a finding of the actual or imminent injury, as required for standing.

[8] KeyCite Citing References for this Headnote

149E Environmental Law
149EXIII Judicial Review or Intervention
149Ek649 Persons Entitled to Sue or Seek Review; Standing
149Ek654 k. Government Entities, Agencies, and Officials. Most Cited Cases

Town and its community development agency which held title to land for purpose of redevelopment, by alleging that Department of Environmental Conservation's (DEC) violation of statutory procedures for amending regulations deprived them of an adequate "airing" of the relevant issues and impacts of the amended regulations in question, as well as an accurate assessment of projected costs involved, sufficiently alleged an injury within zone of interests sought to be protected by statutory procedures allegedly violated by Department, as required for standing to challenge DEC's procedures for adoption of amended regulations establishing a formal process through which individuals could obtain permits to allow for incidental taking of endangered or threatened species. McKinney's ECL §§ 3-0301(2)(a) (prior to 2012 amendment), 11-0535; McKinney's State Administrative Procedure Act §§ 202, 202-a(3)(c); 6 NYCRR § 182.11(a).

[9] KeyCite Citing References for this Headnote

149E Environmental Law
149EXIII Judicial Review or Intervention
149Ek662 k. Ripeness. Most Cited Cases

Claims of town and its community development agency which held title to land for purpose of redevelopment, challenging procedures for Department of Environmental Conservation's (DEC) adoption of amended regulations establishing a formal process through which individuals could obtain permits to allow for incidental taking of endangered or threatened species, were ripe for judicial review, where the regulations had been promulgated and were in effect. McKinney's ECL §§ 3-0301(2)(a) (prior to 2012 amendment), 11-0535; McKinney's State Administrative Procedure Act §§ 202, 202-a(3)(c); 6 NYCRR § 182.11(a).

[10] KeyCite Citing References for this Headnote

149E Environmental Law
149EXIII Judicial Review or Intervention
149Ek649 Persons Entitled to Sue or Seek Review; Standing
149Ek654 k. Government Entities, Agencies, and Officials. Most Cited Cases

Town and its community development agency which held title to land for purpose of redevelopment, by alleging only economic injury, i.e., that their ability to develop the property was impeded and they would incur substantial cost, failed to show an injury within zone of interests protected by State Environmental Quality Review Act (SEQRA), as required for standing to bring action alleging that Department of Environmental Conservation (DEC) issued a negative declaration without taking the necessary hard look under SEQRA. McKinney's ECL § 8-0101 et seq.

[11] KeyCite Citing References for this Headnote

149E Environmental Law
149EXIII Judicial Review or Intervention
149Ek649 Persons Entitled to Sue or Seek Review; Standing
149Ek651 k. Cognizable Interests and Injuries, in General. Most Cited Cases

Economic injury, alone, does not confer standing to sue under the State Environmental Quality Review Act (SEQRA), since it is not within the zone of interests sought to be protected by the statute. McKinney's ECL § 8-0101 et seq.

[12] KeyCite Citing References for this Headnote

149E Environmental Law
149EXIII Judicial Review or Intervention
149Ek649 Persons Entitled to Sue or Seek Review; Standing
149Ek654 k. Government Entities, Agencies, and Officials. Most Cited Cases

Ripeness requirement for standing was not satisfied, for substantive claims of town and its community development agency which held title to land for purpose of redevelopment, alleging that Department of Environmental Conservation's (DEC) amended regulations establishing a formal process through which individuals could obtain permits to allow for incidental taking of endangered or threatened species were ultra vires, constituted an impermissible regulatory taking, and were irrational, arbitrary, and capricious, where there had been no final agency action inflicting concrete harm; until town and community development agency submitted a permit application and DEC imposed the requirements of the amended regulations to their detriment, allegations that they were affected by those regulations through an encumbrance on their property or the imposition of costs were too speculative. McKinney's ECL § 11-0535; 6 NYCRR § 182.11(a).

Frank A. Isler, for appellants.

Andrew B. Ayers, for respondents.

LIPPMAN, Chief Judge.

Petitioners Town of Riverhead and Town of Riverhead Community Development Agency (Riverhead) seek to challenge 2010 amendments to the regulations of respondent Department of Environmental Conservation (DEC). The issue presented is whether petitioners have standing to challenge these amendments. We find that petitioners can proceed with three of their procedural claims, but that they lack standing with respect to the substantive causes of action.

In November 2010, the Division of Fish, Wildlife and Marine Resources of the DEC, adopted amendments to 6 NYCRR part 182, pertaining to the protection of endangered and threatened species. Although DEC had the pre-existing authority to prohibit the intentional taking (e.g., hunting or trapping) of endangered or threatened species (*see* Environmental Conservation Law § 11-0535), the amendments established a formal process through which individuals could obtain a permit to allow for the incidental taking of such species. As amended, the regulations provide that individuals seeking an incidental take permit must submit a mitigation plan for minimizing the impact to endangered or threatened species, which must result in a net conservation benefit to the subject species (*see* 6 NYCRR § 182.11[a]).[FN1]

Riverhead owns approximately 3,000 acres of real property known as Enterprise Park at Calverton (EPCAL). The land, formerly the Grumman manufacturing facility site, was conveyed to petitioner by the United States Navy, pursuant to an act of Congress, for the express purpose of economic redevelopment. The property is apparently the habitat of at least two endangered or threatened species and will be subject to and affected by the amendments.

Riverhead commenced this hybrid CPLR article 78 petition/declaratory judgment action within four months of the promulgation of these amendments, claiming procedural flaws in their adoption and challenging their substance. The first three causes of action alleged procedural violations concerning DEC's failure to comply with certain provisions of the Environmental Conservation Law and State Administrative Procedure Act-specifically, failing to refer the proposed amendments to the State Environmental Board, failing to hold public hearings and failing to properly evaluate and analyze the potential regulatory impacts. The fourth cause of action alleged a failure to take the necessary hard look under the State Environmental Quality Review Act (SEQRA) and the remaining, substantive, causes of action alleged that the amendments were ultra vires, constituted an impermissible regulatory taking and were irrational, arbitrary and capricious. DEC moved to dismiss, arguing that petitioners lacked standing and that the proceeding was not ripe for judicial review.

Supreme Court granted DEC's motion and dismissed the proceeding, finding both that the causes of action were not ripe and that petitioners did not have standing (35 Misc.3d 786, 797, 935 N.Y.S.2d 488 [Sup Ct, Albany County 2011]). The Appellate Division affirmed, concluding that, although the procedural claims were ripe, petitioners

lacked standing on any claim by virtue of their failure to allege an injury in fact (97 A.D.3d 1085, 1086, 949 N.Y.S.2d 291 [3d Dept 2012]). The Court also found that the substantive challenges were not yet ripe, since any alleged harm was speculative until petitioners filed an application and the agency implemented the regulations at issue. This Court granted petitioners leave to appeal, and we now modify by reinstating the procedural causes of action.

[1] [2] [3] [4] "Standing is a threshold determination, resting in part on policy considerations, that a person should be allowed access to the courts to adjudicate the merits of a particular dispute that satisfies the other justiciability criteria" (*Society of Plastics Indus. v. County of Suffolk*, 77 N.Y.2d 761, 769 [1991]). Petitioner has the burden of establishing both an injury in fact and that the asserted injury is within the zone of interests sought to be protected by the statute alleged to have been violated (*see Society of Plastics*, 77 N.Y.2d at 772–773, 570 N.Y.S.2d 778, 573 N.E.2d 1034). In land use matters, moreover, petitioner "must show that it would suffer direct harm, injury that is in some way different from that of the public at large" (*Society of Plastics*, 77 N.Y.2d at 774, 570 N.Y.S.2d 778, 573 N.E.2d 1034). These requirements ensure that the courts are adjudicating actual controversies for parties that have a genuine stake in the litigation (*see Society of Plastics*, 77 N.Y.2d at 773–774, 570 N.Y.S.2d 778, 573 N.E.2d 1034).

[5] However, we have also recognized that standing rules "should not be heavy-handed" (*Matter of Sun-Brite Car Wash v. Board of Zoning & Appeals of Town of N. Hempstead*, 69 N.Y.2d 406, 413 [1987]). Rather, we have been reluctant to apply these principles in an overly restrictive manner where the result would be to completely shield a particular action from judicial review (*Matter of Har Enters. v. Town of Brookhaven*, 74 N.Y.2d 524, 529 [1989]).

Riverhead's first cause of action alleges that DEC violated ECL 3–0301(2)(a) by failing to obtain the advice and approval of the State Environmental Board prior to adopting the amendments.[FN2] The second cause of action asserts that DEC failed to conduct public hearings, as required by ECL 3–0301(2)(a) and section 202 of the State Administrative Procedure Act. Riverhead further alleges that the failure to conduct the hearings prevented them "from obtaining a full airing of the issues and impacts surrounding the new and substantial requirements that would be imposed by the Amendments if adopted." In the third cause of action, Riverhead maintains that DEC violated the requirements of State Administrative Procedure Act § 202–a (3)(c) by failing to provide a regulatory impact statement that properly evaluated and analyzed the projected costs of the amendments.

[6] [7] Under the circumstances presented, Riverhead has standing to maintain the above procedural claims. Petitioners, governmental entities titled to land for the purpose of redevelopment, whose property is subject to the amended regulations, have alleged a sufficient injury in fact for these purposes. We do not, and need not, decide

whether land ownership, by itself, could satisfy the injury requirement. As the United States Supreme Court has recognized, a litigant's " 'some day' intentions—without any description of concrete plans, or indeed even any specification of *when* the some day will be-do not support a finding of the 'actual or imminent' injury that our cases require" (*Lujan v. Defenders of Wildlife,* 504 U.S. 555, 564 [1992]). Here, however, there is more than an amorphous allegation of potential future injury. Petitioners have asserted a concrete interest in the matter the agency is regulating, and a concrete injury from the agency's failure to follow procedure. Moreover, in connection with Riverhead's prior proposal to subdivide the land at issue, DEC provided them with an outline for a comprehensive habitat protection plan and indicated its intention to serve as lead agency for the purposes of SEQRA review. Petitioners' allegations are sufficient to satisfy the requirements that they have an actual stake in the litigation and suffer a harm that is different from that of the public at large (*see Lujan,* 504 U.S. at 573 n. 7, 8 [an individual can enforce procedural rights—which have been recognized as "special"—"so long as the procedures in question are designed to protect some threatened concrete interest of his that is the ultimate basis of his standing"]).

[8] ☑ [9] ☑ Petitioners further allege that the violation of these procedural statutes deprived them of an adequate "airing" of the relevant issues and impacts of the proposed amendments, as well as an accurate assessment of the projected costs involved. The asserted statutory provisions set forth certain procedural steps to be followed when promulgating rules or regulations. The alleged violations, including the deprivation of an opportunity to be heard, constitute injuries to petitioners within the zone of interests sought to be protected by the statutes. Most significantly, to deny petitioners standing in this case would have the effect of insulating these amendments from timely procedural challenge—a result that is contrary to the public interest (*see Har Entrs.,* 74 N.Y.2d at 529, 549 N.Y.S.2d 638, 548 N.E.2d 1289). Given the compressed four-month statute of limitations (*see* SAPA 202[8]), we would be erecting an "impenetrable barrier" to any review of this facet of the administrative action (*see generally Matter of Transactive Corp. v. New York State Dept. of Social Services,* 92 N.Y.2d 579, 589 [1998]). Therefore, we find that petitioners have adequately alleged standing to contest the procedural claims. As the Appellate Division found, the procedural claims are ripe because the regulations have been promulgated and are in effect (*see Matter of Essex County v. Zagata,* 91 N.Y.2d 447, 453 [1998]).

The above-referenced factors are adequate to satisfy the jurisprudential concerns underlying the standing doctrine. Specifically, petitioners, whose property is directly affected by the amendments, face a concrete injury within the zone of interests protected by the procedural statutes. It is plain that this case does not present the risk that the courts will be adjudicating the rights of individuals who have only a tangential stake in the litigation. And we certainly do not hold that any individual who simply alleges a failure to follow SAPA requirements would have standing. Rather, the universe of potential plaintiffs is suitably delimited (*see Society of Plastics,* 77 N.Y.2d at 779, 570 N.Y.S.2d 778, 573 N.E.2d 1034).

[10] ☑[11] ☑ The fourth cause of action, asserting that DEC issued a negative declaration without taking the necessary hard look under SEQRA, however, was properly dismissed as petitioners fail to allege any environmental harm. They assert that the regulations will impede their ability to develop the property and will cause them to incur substantial costs. As we have consistently held, "economic injury [alone] does not confer standing to sue under SEQRA" (*Society of Plastics*, 77 N.Y.2d at 777, 570 N.Y.S.2d 778, 573 N.E.2d 1034; *see also Matter of Gernatt Asphalt Prods. v. Town of Sardinia*, 87 N.Y.2d 668, 687 [1996]; *Matter of Mobil Oil Corp. v. Syracuse Indus. Dev. Agency*, 76 N.Y.2d 428, 433 [1990]), since it is not within the zone of interests sought to be protected by the statute.

[12] ☑ Petitioners likewise lack standing to pursue their substantive claims. Indeed, those claims are not yet ripe as there has been no final agency action inflicting concrete harm (*see Matter of Gordon v. Rush*, 100 N.Y.2d 236, 242 [2003]). Until petitioners submit a permit application and DEC imposes the requirements of the amended regulations to their detriment, allegations that they are affected by those requirements through an encumbrance on their property or the imposition of costs are too speculative. There is, as of yet, no actual injury caused by the substantive provisions of the amended regulations. Relatedly, our finding of lack of standing as to the substantive claims does not create an "impenetrable barrier" to review, since the statute of limitations does not start to run until the agency issues a determination of a permit application.

Accordingly, the order of the Appellate Division should be modified, without costs, by reinstating appellants' first, second and third causes of action and, as so modified, affirmed.

* * *

Order modified, without costs, by reinstating appellants' first, second and third causes of action and, as so modified, affirmed.

Judges GRAFFEO, READ, SMITH, PIGOTT, RIVERA and ABDUS-SALAAM concur.

FN1. The regulations define a net conservation benefit as:

> "a successful enhancement of the species' subject population, successful enhancement of the species' overall population or a contribution to the recovery of the species within New York. To be classified as a net conservation benefit, the enhancement or contribution must benefit the affected species listed as endangered or threatened in this Part or its habitat to a greater degree than if the applicant's proposed activity were

not undertaken"

(6 NYCRR § 182.2[n]).

FN2. The State Environmental Board was eliminated and the statutory requirement was removed in 2012 (L 2012, ch 60, pt D, § 44), but petitioners allege that the Board's lack of approval in 2010 renders the amendment invalid.

N.Y.,2014.
Association for a **Better Long Island**, Inc. v. New York State Dept. of Environmental Conservation
--- N.E.3d ----, 2014 WL 1280310 (N.Y.), 2014 N.Y. Slip Op. 02216

Judges and Attorneys (Back to top)

Judges | Attorneys

Judges

- **Ceresia, Hon. George B. Jr.**
State of New York Supreme Court, 3rd Judicial District
Troy, New York 12180
Litigation History Report | Judicial Motion Report | Judicial Reversal Report | Judicial Expert Challenge Report | Profiler

- **Graffeo, Hon. Victoria A.**
State of New York Court of Appeals
Albany, New York 12207
Litigation History Report | Judicial Reversal Report | Judicial Expert Challenge Report | Profiler

- **Lippman, Hon. Jonathan**
State of New York Court of Appeals
Albany, New York 12207
Litigation History Report | Judicial Reversal Report | Judicial Expert Challenge Report | Profiler

- **Pigott, Hon. Eugene F. Jr.**
State of New York Court of Appeals
Albany, New York 12207
Litigation History Report | Judicial Reversal Report | Judicial Expert Challenge Report | Profiler

- **Read, Hon. Susan Phillips**
State of New York Court of Appeals
Albany, New York 12207
Litigation History Report | Judicial Reversal Report | Judicial Expert Challenge Report | Profiler

- **Rivera, Hon. Jenny**
State of New York Court of Appeals
Albany, New York 12207
Litigation History Report | Judicial Reversal Report | Judicial Expert Challenge Report | Profiler

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586

EXHIBIT B TO TREICHLER AFFIRMATION — EXCERPTS FROM NYSDEC, ADOPTION OF WATER WITHDRAWAL REGULATIONS, ASSESSMENT OF PUBLIC COMMENTS, DATED NOVEMBER 2012 [586- 590]

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
ADOPTION OF WATER WITHDRAWAL REGULATIONS NOVEMBER 2012
ASSESSMENT OF PUBLIC COMMENTS

TABLE OF CONTENTS

I. INTRODUCTION Page 1
II. METHODOLOGY Page 3
III. LOCATING RESPONSES TO PUBLIC COMMENTS Page 4
IV. FREQUENT COMMENTS AND NYSDEC RESPONSES Page 4
V. TABLE OF PUBLIC COMMENTS AND RESPONSES PAGE 13
VI. TABLE OF COMMENT SOURCES PAGE 15
VII. COMPLETE COPIES OF ALL WRITTEN COMMENTS PAGE 17

I. INTRODUCTION

The New York State Department of Environmental Conservation (NYSDEC) issued a Notice of Proposed Rule Making on November 23, 2011, to repeal the existing water withdrawal regulations at Title 6 of the Official Compilation of Codes, Rules and Regulations of the State of New York (6 NYCRR) Part 601 and adopt a new Part 601. The proposed rule also repealed Part 675 and incorporated its salient provisions into Part 601, and modified subpart 621.4, Uniform Procedures, to ensure consistent use of terms and to include water withdrawal "initial permits" in the 'minor' project category. These regulations were proposed to harmonize the Department's regulations with the water withdrawal bill (A.5318-A/ S.3798) signed into law by Governor Cuomo on August 15, 2011.

Three public information meetings were held regarding the proposed rule making on December 6, 8 and 12, 2012, in New Paltz, West Henrietta and Albany, respectively. The public comment period for the proposed rulemaking was scheduled to close on January 22, 2012, but was extended to February 6, 2012. During the public comment period, comments were received from a variety of sources through regular and electronic mail. NYSDEC received 186 submissions of public comments, comprising over 650 individual comments. The Department appreciates the input of the public and thoroughly considered each comment. As a result of the comments, changes were made to the regulations to reiterate or further clarify the original meaning for the benefit of the public and take questions into account. However, the changes made are non-substantive and do not require a revised or new rule making.

This Assessment of Public Comment (APC) presents all of the comments that were received during the public comment period, and summarizes and assigns a code to each in an effort to make the comments more accessible and searchable.

V. TABLE OF COMMENTS AND RESPONSES

The Table of Comments and Responses begins on the next page. It contains a complete listing of all comments and NYSDEC's responses. The table allows readers to find answers to specific questions they have raised and is organized as follows:

- The first column lists the name of the individual or entity that submitted the comment.
- The second column identifies the alphanumeric code assigned to each comment (please see Section II, entitled "Methodology," in this APC).
- The third column provides a summary of the comment.
- The fourth column provides the response to the comment or a reference to the specific Frequent Comment Response in Section III herein that addresses the comment.

Example:

Name	Comment Code	Content Summary	Response
Sanders, Kent	S-2.16	601.10(g) Why do they need to submit a copy of an annual report they already submitted to DEC?	The submittal of an annual report will be part of the application completeness determination.

In a few instances, the name of an individual or entity may appear in the Table of Comments and Responses more than once, because he or she sent more than one letter. For example, an individual who spoke for a group and then wrote a letter in his or her own name (or vice-versa) will find that these submissions were coded separately and that each appears in the Table of Comments and Responses.

It was not always clear if an individual made comments on his or her own behalf or on behalf of an organization. The reader is advised to examine both the group (G) listing for the name of the group, firm, or association used on the letterhead of a written submission and the individual (I) listing for his/her own name.

ASSESSMENT OF PUBLIC COMMENT: SECTION V -- TABLE OF COMMENTS AND RESPONSES
(sorted by 'Name/Organization')

	A	B	C	D
1	**Name/ Organization**	**Comment Code**	**Comment Summary**	**Response**
2	Adirondack Council Lorey, Scott	G-16.1	We are still concerned about several parts of the proposed regulation as currently drafted. First, some existing water withdrawals will not have to seek a permit for five years! While we understand that new sources and existing larger sources will be required to obtain a permit sooner, we do not believe DEC should allow these numerous smaller sources wait this amount of time for an initial permit	Please see Response to Frequent Comment #1.
3	Adirondack Council Lorey, Scott	G-16.2	We suggest that DEC can better implement the permit system and protect New York's water by staggering the permits into a three year phase-in cycle. For example, new permits and those over 5 million gpd would be issued in the first year (Class I) by the spring of 2013. Withdrawals between 1 and 4.99 million gpd (Class II) would be in the second year and any withdrawals between .1 and .99 million gpd (Class. III) would be permitted in the third year. Any new permits after the first year can then be placed in its respective class based on it size.	Please see Response to Frequent Comment #1.
4	Adirondack Council Lorey, Scott	G-16.3	DEC should reduce the length of permits down from the proposed 10 years to five. This will better ensure that any major changes in the amount of permits sought or water to be withdrawn can be more adequately addressed by DEC in less than a decade. While we understand that DEC has experienced a 25 percent reduction in staff over the last 21 years and that this is a new regulation it must enforce, that is not a good reason to shirk your responsibility to strongly protect the environment.	Please see Response to Frequent Comment #3.

ASSESSMENT OF PUBLIC COMMENT: SECTION V -- TABLE OF COMMENTS AND RESPONSES
(sorted by 'Name/Organization')

	A	B	C	D
145	Entergy Nuclear Operations, Inc, - Zoli, Elise	C-10.5	A determination to ensure a proposed project "will result in no significant individual or cumulative adverse impacts on the ... *quality* of the water" is duplicative of the SPDES permit program standards. Similarly, a determination on "environmentally sound" and "economically feasible" conservation measures for reducing water withdrawals overlaps with §704.5 of the SPDES permit program governing the location, design, construction and capacity of cooling water intake structures. *See* 6 NYCRR§ 704.5.	Please see Response to Frequent Comment #8.
146	Entergy Nuclear Operations, Inc, - Zoli, Elise	C-10.6	Importantly, open-cycle cooling systems do not interfere with water conservation, and their cooling water intake structures, including the capacity of such structures, are regulated under the Best Technology Available ("BTA") standard set forth in §704.5, which ensures that the structures will minimize adverse environmental impact.	Please see responses to Frequent Comments #8 and #11.
147	Entergy Nuclear Operations, Inc, - Zoli, Elise	C-10.7	As noted above, we respectfully submit that the proposed exemption is narrowly tailored to ensure NYSDEC's right of review of substantial consumptive water users, including those with SPDES permits.	Please see response to Frequent Comment #8. Large cooling water facilities often consumptively use significant amounts of water. However, initial permits for withdrawals above the threshold are to be issued to existing facilities that reported their water use to the Department prior to 2/15/12, but only for a withdrawal equal to the maximum withdrawal capacity reported by 2/15/12 per 601.7(d).
148	Entergy Nuclear Operations, Inc, - Zoli, Elise	C-10.8	The initial permits for existing facilities are purportedly meant to reduce the cost and time associated with a permit hearing by classifying the initial permit as a "minor action" under 6 NYCRR § 621.4 (b). There appears to be, however, no provision in the Proposed Regulations prohibiting substantive review of initial permits, and therefore no reason to believe NYSDEC will refrain from substantively reviewing initial permits for existing facilities or requiring that new substantive provisions be included in initial permits.	ECL §15-1501(9) requires that the Department issue an initial permit for the maximum capacity reported or registered with the Department on or before February 15, 2012; however, it also provides that the permit will be subject to appropriate terms and conditions as required under ECL Article 15. While the Department expects the initial permit process to be an expedited and less costly permit process, it will review the permit applications and include in the permit appropriate conditions, including water conservation measures.

	A	B	C	D
149	Entergy Nuclear Operations, Inc, - Zoli, Elise	C-10.9	Further, the Proposed Regulations do not provide different standards for the issuance of initial permits and new permits. Instead, the Proposed Regulations make clear that an initial permit for existing facilities must include "all terms and conditions of a water withdrawal permit." *Id*. at §601.7(e). Without a definitive statement that initial permits for existing facilities are subject to different issuance standards, it is logical to assume that initial permits are subject to the same issuance standards as new permits. Entergy therefore requests that NYSDEC provide clarification on the standards for issuance of initial permits for existing facilities and whether the standards will be the same as those for new permits for proposed facilities.	ECL §15-1503 establishes permit application requirements and standards for permit issuance. This Section applies to all permits. The statute does not authorize the Department to apply different standards for the issuance of initial permits. It requires only that the applicant obtain a permit for the maximum withdrawal capacity reported to the Department.
150	Env. Energy Alliance of NY - Calazza, Roger	G-14.1	The Alliance requests an explicit exemption for once through cooling withdrawals because existing regulations under 6 NYCRR 704.5 adequately protect the environment and existing rules already require the reporting of substantially similar data. Alliance member companies require the use of cooling water for its electric generating facilities. The DEC has a long history – dating back to the passage of the Clean Water Act almost 40 years ago - in regulating the use of the State's water for cooling purposes through its State Pollutant Discharge Elimination System (SPDES) permitting process. Most recently; DEC has updated its policy on the uses of cooling water, and many electrical generating facilities have conducted exhaustive studies on the ways in which cooling water intakes structures can minimize the impact of impingement and entrainment.	The Department does not agree that these withdrawals should be exempt from Part 601 permitting requirements. The water withdrawal statute and regulations concern the withdrawal and location of return or possible transfer of the water. The quantity analysis must meet criteria under ECL article 15 title 15 that previously applied only to public water supplies. This is not duplicative with SPDES, but the permitting requirements of each may be satisfied by similar documentation so as to avoid duplicative work product development. Section 601.7(f) expressly provides that the initial permit application will be reviewed in coordination with the SPDES permit or other permit program. Section 601.7(b)(3) provides that the initial permit application is not due until 180 days prior to the date the SPDES permit is due to expire, absent renewal. These help ensure consistency. The final regulations have been clarified in Section 601.11(h).

SUPREME COURT OF THE STATE OF NEW YORK
COUNTY OF QUEENS

In the Matter of the Application of SIERRA CLUB and the HUDSON RIVER FISHERMEN'S ASSOCIATION NEW JERSEY CHAPTER, INC., Petitioners, For a Judgment Pursuant to Article 78 of the Civil Practice Laws and Rules -against- JOSEPH MARTENS, COMMISSIONER, NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION, Respondent, TRANS CANADA RAVENSWOOD L.L.C., Necessary Party.	**STIPULATION WAIVING CERTIFICATION** Index No. 2949-14 Hon. Robert J. McDonald

It is hereby stipulated pursuant to Rule 5532 of the Civil Practice Law and Rules that the Record on Appeal herein consists of true and correct copies of all the necessary papers identified in the Table of Contents set forth herewith and that certification of the record by the Clerk of the County of Queens is hereby waived.

Dated: July 17, 2015

By: _____

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