

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Environmental Permits, Region 8
6274 East Avon-Lima Road, Avon, NY 14414-9516
P: (585) 226-5400 | F: (585) 226-2830
www.dec.ny.gov

October 1, 2019

Leo Dickson and Sons
Attn: Phil Dickson
5226 Bonny Hill Rd
Bath, NY 14810-8145

Re: Permit Renewal
DEC ID# 8-4699-00012/00001
Leo Dickson & Sons Landspreading Sites and Farm
Permit to Operate a Solid Waste Management Facility

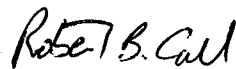
Dear Mr. Dickson:

The permit renewal you requested is enclosed. Please read it carefully and note the conditions that are included in it. The permit is valid for only those activities expressly authorized therein, which involves the storage of liquid biosolids and food processing waste, and land application of food processing waste and stabilized biosolids on agricultural fields. Work beyond the scope of the permit and the approved project plans may be considered a violation of the law and be subject to appropriate enforcement action. Granting of this permit does not relieve the permittee of the responsibility of obtaining any other permission, consent, or approval from any other Federal, State or local government which may be required.

Be advised, 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.

No authority is granted by this Permit to operate, construct, or maintain any installation in violation of any law, statute, code, ordinance, rule, or regulation of the State of New York or any of its political subdivisions. If you have any questions on the extent of the work authorized or your obligations under the permit, please feel free to contact me at 5B5-226-5396.

Sincerely,



Robert B. Call
Environmental Analyst

cc: M. Osypian, NYSDEC DMM R8
G. Maclean, NYSDEC DMM R8
T. Haley, NYSDEC DEP R8
D. Loew, NYSDEC OGC R8
Town of Thurston



Department of
Environmental
Conservation



PERMIT
Under the Environmental Conservation Law (ECL)

Permittee and Facility Information

Permit Issued To:
LEO DICKSON & SONS, INC.

5226 BONNY HILL RD

BATH, NY 14810-8145

Facility:
LEO DICKSON & SONS LANDSPREADING
SITES AND FARM

5226 BONNY HILL RD|AND MULTIPLE
TOWNSHIPS

BATH/CAMERON/THURSTON, NY

Facility Location: In MULTIPLE TOWNS in STEUBEN COUNTY

Facility Principal Reference Point: NYTM-E: 307.91 NYTM-N: 4680.809

Latitude: 42°15'21.1" Longitude: 77°19'43.4"

Authorized Activity: Storage of liquid biosolids and food processing waste, and land application of food processing waste and stabilized biosolids on agricultural fields, in accordance with the conditions of this permit. Approved waste sources, application sites and storage facilities are listed in Attachment A, Attachment B (B-1, B-2, and B-3), and Attachment C of this permit.

Permit Authorizations

Solid Waste Management - Under Article 27, Title 7

Permit ID 8-4699-00012/00001

(Solid Waste ID 51L05)

Renewal

Effective Date: 10/1/2019

Expiration Date: 9/30/2024

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: KIMBERLY A MERCHANT, Deputy Regional Permit Administrator

Address: NYSDEC Region 8 Headquarters
6274 E Avon-Lima Rd
Avon, NY 14414

Authorized Signature: Kimberly A. Merchant Date 10/1/2019



Permit Components

SOLID WASTE MANAGEMENT PERMIT CONDITIONS

GENERAL CONDITIONS, APPLY TO ALL AUTHORIZED PERMITS

NOTIFICATION OF OTHER PERMITTEE OBLIGATIONS

SOLID WASTE MANAGEMENT PERMIT CONDITIONS

1) **Conformance With Plans** All activities authorized by this permit must be in strict conformance with the permit application, plans and materials prepared by LaBella Associates P.C. and Agricultural Engineering Services, PLLC (AES), Western New York Crop Management, and Dickson Environmental on various dates (see conditions #26 for detailed list and descriptions of these documents).

D) GENERAL APPLICABILITY

2) **Authorization** - This permit authorizes the storage, staging, and land application, of stabilized biosolids and food processing wastes. Specifically, waste from the sources listed in Attachment A of this permit, may be land applied only to those fields list in Attachment B, pursuant to engineering plans referenced in condition #1 above; and stabilized biosolids and food processing wastes may be stored in the facilities listed in Attachment C; and temporary staging of dewatered solids is allowed and must be done in such a manner as to conform with the requirements listed in condition #20 of this permit.

The Permittee must comply with all conditions of this permit, and 6NYCRR Parts 360 and 361 (excerpts included as Attachment F). Note this facility is a concentrated animal feeding operation (CAFO); as such, the land application, or manure derived waste is regulated by the current SPDES (State Pollutant Discharge Elimination System) CAFO regulations and permits. Waste that is a combination of manure, agricultural process wastewater as defined by the CAFO Permit, food processing waste and/or biosolids is regulated by the most stringent regulation, ie., any Permit Condition of this permit, 6NYCRR Parts 360 and 361, or SPDES CAFO requirement. A summary of the waste streams and the applicable conditions appear in Attachment E.

3) **Compliance with Other Requirements** - This approval does not relieve the Permittee from complying with all other applicable Federal, State, or local ordinances and laws.



4) **Adverse Impact** - The Permittee shall take all steps to minimize or correct any adverse impact on human health or the environment resulting from facility operations. The Permittee shall report any such activity which may endanger human health or the environment to the DEC Region 8 Spill Engineer. Such activities include, but are not limited to uncontrolled releases of waste, leachate, or petroleum products from storage tanks, pipes, containers, vehicles and portable tanks to the soil, groundwater, or surface water. Any such information shall be reported, verbally within two (2) hours from the time the Permittee becomes aware of the circumstances and followed up in writing within seven days. Telephone numbers available for reporting such activities are as follows:

REGULAR BUSINESS HOURS - 585-226-5436

TOLL FREE HOTLINE (24 hours/day) - 1-800-457-7362

5) **Operation Controls** - This permitted facility shall be operated to control vectors and odors. (The facility Odor Control Plans appears in section one of the Dickson Environmental Services, Inc. Operations and Maintenance narrative dated February 2018).

6) **Non-compliance** - In the event a Department representative makes a determination that the Permittee is in non-compliance with any provision of the Environmental Conservation Law, or with any regulation promulgated thereunder or any provision of this permit or of any judicial or administrative order applicable to the facility and enforceable under the Environmental Conservation Law, the Permittee must, upon receipt of written or oral Notice of Noncompliance from the Department, promptly take such steps as are necessary to correct, abate, or remediate the non-complying condition. To the extent feasible, the Permittee must consult the Department regarding the selection and implementation of such measures. Any instance of non-compliance, together with the responsive measures and results of such measures, must be recorded in writing by the Permittee, and submitted to the Department within 48 hours of the non-compliance.

7) **Endangered Species** - Land application must not adversely affect a threatened or endangered species or its designated critical habitat.

8) **Complaint Handling** - All complaints received/at the facility, or forwarded to the facility by Department staff, must be responded to by the end of the working day on the day the complaint is received by the facility. All actions taken by the Permittee to remedy the issue must be documented and provided in writing to regional DEC staff within 48 hours. Correspondence should be addressed to the attention of Greg MacLean, 585-226-2909 (fax) or by email to greg.maclea@dec.ny.gov.

9) **Amendments/Modifications** - Amendments or modifications to the engineering report, plans, specifications, or correspondence listed in Condition #1 and Condition #26, must be approved in writing by the Department prior to their implementation.

10) **DEC Addresses** - All submissions required by this permit shall be submitted in a timely manner to the Regional Materials Management Engineer, NYSDEC, 6274 East Avon-Lima Road, Avon, NY 14414 and Bureau of Waste Reduction and Recycling, NYSDEC, 625 Broadway, NY 12233.



11) **Notification of Conditions Subject to Change** - These permit conditions shall be subject to change in the event that they become inconsistent with future modifications of the rules and regulations of the New York State Department of Environmental Conservation.

II) LAND APPLICATION OPERATIONAL REQUIREMENTS

12) Weather Restrictions

a) Land application is prohibited on water saturated ground or during heavy rainfall. Storage and/or disposal facilities must be available for periods during the year when waste cannot be applied.

b) LAND APPLICATION OF WASTE ON SNOW COVERED OR FROZEN GROUND

(i) Liquid Biosolids

Land application of liquid biosolids is prohibited on snow-covered or frozen ground, except by direct injection on those fields listed in Attachment B-3. Sufficient storage and/or disposal alternatives must be available for those periods when direct injection cannot be accomplished. See attachment D for direct injection performance criteria.

(ii) Dewatered Biosolids

Land application of dewatered biosolids is prohibited on snow-covered or frozen ground. For those periods when the waste cannot be incorporated sufficient reserve composting capacity and/or disposal alternatives must be available.

(iii) Non-Recognizable Dewatered Food Processing Waste

Land application of non-recognizable dewatered food processing waste on frozen or snow-covered ground is limited to the fields listed in Attachment B-3. The surface of the field on which waste has been applied must be perforated using a tractor pulled aerator attachment by the end of the working day on which the waste is applied. Perforation of the soil is not required if the field was plowed prior to the ground freezing and the surface is furrowed at the time the waste is applied.

(iv) Liquid Food Processing Waste, and Liquid from Storage Ponds #2, #3, and #4. Land application is prohibited on snow-covered or frozen ground, except by direct injection on those fields listed in Attachment B-3. Sufficient storage and/or disposal alternatives must be available for those periods when direct injection cannot be accomplished. See attachment D for direct injection performance criteria.

(v) Land application containing manure and/or other agricultural process wastewater must be done in accordance with the 2015 Cornell Guide "Revised Winter and Wet Weather Manure Spreading Guidelines To Reduce Water Contamination Risk", as well as NRCS NY590.



13) Waste Incorporation

a) Recognizable vegetative food waste, and non-recognizable dewatered food processing waste, or any combination of the two that is land applied must be incorporated into the soil within 24 hours of land application. See Condition 12 for restrictions when spreading on frozen or snow covered ground.

b) All Liquid waste including biosolids, nonrecognizable food processing waste, and manure containing biosolids or food processing waste, must be land applied by direct injection, except that this requirement does not apply to liquid from the irrigation pond applied using the hard piped irrigation system. See Attachment D for direct injection performance criteria.

c) Dewatered Biosolids must be incorporated into the soil within 6 hours after land application.

14) **Nutrient Uptake** - A crop must be grown each calendar year on all waste amended fields to promote nutrient uptake. The application rate of the waste and all other fertilizers and /or manure must be tracked to ensure the total nutrient loading limits are not exceeded.

15) **Soil Conservation/Agricultural Management** - Proper soil conservation practices and agricultural management practices must be used to minimize runoff and soil loss through erosion. No runoff may occur to surface water bodies or wetlands. The vegetative filter strips, referenced on page 1 of "Leo Dickson and Son's Field Spreading Maps" date January 2012. These strips must be maintained as grassy areas throughout the life of the permit.

16) **Dikes/Berms** - The Department may require the use of dikes, berms, or other pollution protection devices or techniques on a case specific basis.

17) **Flood Plain** - Land application in a 100-year flood plain must not result in washout of the solid waste applied. Land application is prohibited in flood plain areas designated as a floodway pursuant to 6NYCRR Part 502.

18) **Water Contravention** - Land application rates and practices must not cause contravention of groundwater and surface water standards provided in 6NYCRR Parts 700-705.



III) WASTE STORAGE

19) Liquid Storage

- a) Biological and physical treatment methods must be utilized in uncovered liquid storage ponds to control odors.
- b) Liquid storage facilities that contain only manure are regulated by the SPDES CAFO requirements.
- c) The concrete storage tank located at the heifer barn on Helmer Creek Road shall be completely emptied, cleaned, and inspected by a NYS licensed professional engineer annually. Region 8 DMM staff shall be notified a minimum of two weeks prior to the inspection. Any damage or deterioration revealed during the inspection shall be repaired before the tank receives any additional waste. Any repair work shall be noted in the annual report. Note, this tank is regulated by 6NYCRR Part 361-2.7.
- d) All waste storage facilities that are permitted to contain 6NYCRR Part 360 and CAFO regulated waste must have an accurately installed certified depth marker. If the marker is displaced, the facility must notify the Department in writing within seven (7) days. The depth markers must be corrected and recertified within ninety (90) days.

20) Solids Storage

- a) Overnight storage and treatment of waste solids shall occur only in areas covered by a roof or tarp.
- b) Temporary staging of dewatered food processing waste solids at satellite staging locations, such as the Windfall Road reload station, may not exceed 24 hours.
- c) De-watered biosolids shall not be stored overnight at the temporary satellite staging locations referenced in condition #20b above ("satellite staging locations" or "staging areas"). Biosolids must be removed from satellite staging locations, such as the Windfall Road bunker, at the end of each working day.
- d) Lime or other acceptable additives must be used as needed to reduce odors.
- e) Efforts must be taken to reduce the entry of stormwater into waste at staging locations including the grading of adjacent land to direct stormwater away from the waste. No leachate generated by water entering the waste shall be released from the staging area. Any leachate generated must be collected and land applied or disposed in a manner acceptable to the Department.



IV) SAMPLING REQUIREMENTS

21) Waste Sampling

a.) Liquids in storage ponds #2, #3, and #4 (the irrigation pond) must be sampled and analyzed per 6NYCRR Parts 360 and 361.

b.) Liquid and dewatered non-recognizable food processing waste streams from those sources listed in Attachment A must be sampled and tested annually for the 6NYCRR 361-3.9 Table 1 parameters.

22) Soil Sampling

a.) Soil monitoring shall be conducted as prescribed in 6NYCRR Parts 360 and 361. The sampling locations shall be recorded and shall be submitted with the results of the soil analyses in the Annual Report described below. Sampling must be coordinated to ensure that each permitted field listed in attachment B, that has received regulated waste, is sampled no less than once every three years. Fields that have not received regulated waste for three years or more do not require sampling. Note that the CAFO permit has additional sampling requirements for any field accepting manure and/or other agricultural process wastewater.

b) Within six (6) months of the effective date of this permit, the permittee must complete baseline soil samples and submit a final report to the Department. The final report must include a summary of the data, maps with sampling locations, and original laboratory results. One sample for every fifty (50) acres of 6NYCRR Part 360 permitted fields must be collected. Every sample must consist of a composite of a minimum of ten (10) randomly selected sample locations at a sampling depth consistent with the depth of biosolids incorporation. Samples shall be analyzed for arsenic, cadmium, chromium, copper, lead, mercury, molybdenum, nickel, selenium, zinc, and pH. Failure to submit a final report that is acceptable to the Department shall be a violation of this permit. This condition does not alter or eliminate the permittee's obligations under any other applicable statute, regulation, or permit condition.



V) REPORTING AND RECORDKEEPING

23) **Recordkeeping** All monitoring, recordkeeping, and reporting shall be in conformance with the requirements of 6NYCRR Part 361-2.5.

In addition, each week, a report documenting the previous week's land application activities must be prepared and sent electronically via e-mail to the NYSDEC Region 8 Division of Materials Management Engineer and designated Region 8 DMM staff at greg.maclean@dec.ny.gov, or at any future email addresses provided for the permittee's use by the Department. The report must be received by 4:45 pm on Monday of the following week of the activities described. If Monday is a legal holiday, the report must be received by 4:45 pm on Tuesday. Copies of the reports must be maintained at the facility office and must be available for review by Department staff upon request during normal business hours. The report must contain the following information for each day of the week.

- a) Weather conditions for all seven (7) days for the week being reported including, high and low temperature, precipitation type and amount, and wind direction and speed.
- b) The free board of all liquid waste storage structures containing the following material or any mixture of the following materials: manure, food processing waste, biosolids.
- c) A list of all biosolids, or food processing waste received, including waste type, source, amount, and the immediate destination for the material (for example, was it immediately land applied, taken to the compost building, or was it placed in a storage lagoon?)
- d) A list of all waste land-applied. The waste type, source, amount and field to which the waste was applied must be identified. The list must indicate how the waste was applied, and when it was incorporated into the soil.
- e) A list of any manure imported or exported, including the source, volume and destination of the manure.
- f) A copy of any analytical data received for biosolids or food processing waste received during the week.

24) **Annual Report** - The Permittee must submit an Annual Report each year shall be in conformance with the requirements of 6NYCRR Parts 360 and 361. The Annual Report should include list of the fields on which the vegetative filter strips, referenced in, condition #15, have been established.

25) **CAFO** - The facility's valid State Pollutant Discharge Elimination System (SPDES) Permit for Concentrated Animal Feeding Operations states the following: "The retention and disposal of food processing wastewater is authorized only if it is specified in the Comprehensive Nutrient Management Plan." Please be advised that your Certified Nutrient Management Planner must incorporate "worst case" sampling results for subsequent calculations of field application. This information shall be available upon Department request. Note that any fields receiving manure and other waste streams must fully comply with both 6 NYCRR Parts 360 & 361 and CAFO permit conditions. The facility planner must include cumulative nutrient loadings from all waste streams when calculating annual application recommendations. If you have questions regarding the CAFO component of this activity, please contact Nancy Rice at 585-226-5453.



26) Approved Documents. The following is a list of the documents referenced in Condition #1. All activities authorized by this permit must be conducted in strict conformance with these documents, the conditions of this Permit, and the applicable 6NYCRR Parts 360 and 361 Regulations. The Permit Conditions shall be subject to change in the event that they become inconsistent with future modifications of the rules and regulations of the New York State Department of Environmental Conservation. In the event inconsistencies appear in the submitted documents the most recent document, as determined by date of authorship, shall be considered controlling.

a) "Operation and Maintenance Narrative" Prepared by Dickson's Environmental Services, Inc. Dated February 2018.

b) "Leo Dickson and Son's Manure System Evaluation" Operation and Maintenance Procedures Earthen storage and Concrete storage sections. Prepared by Agricultural Engineering Services (AES) PLLC. Auburn, NY, dated January 2012, except that the minimum freeboard requirement for the uncovered earthen storage lagoon containing only manure (Pond # 1) is 1.0 foot plus a 25-yr, 24-hr storm event minimum freeboard (total freeboard required is approximately 16 in.). See condition # 19b.

c) "Leo Dickson and Son's Heifer Facility's In-Ground Concrete Manure Storage Evaluation " Operation and Maintenance Procedures Section. Prepared by Agricultural Engineering Services (AES) PLLC. Auburn, NY. Dated January 2012.

d) "Part 360 Permit Renewal Application, Prepared for Leo Dickson & Sons, Inc. Bath, New York"; Prepared by Labella Associates, P. C. Dated July 2008.

e) "Part 360 Permit Modification Variance Request, Leo Dickson and Sons, Inc., Permit #LS105". Dated November 26, 2012, and reauthorized by NYSDEC Materials Management staff in April 2018.

f) "Part 360 Permit Renewal Application, Leo Dickson & Sons, Inc. Bath, New York" Dated November 24, 2017. Including related documents once approved by the Department.

g) "Solid Waste Management Renewal Application 2018" prepared by Leo Dickson and Sons, Inc. and Dickson Environmental Services, Inc. Dated January 2018. Including related documents attached to the application.

h) "Leo Dickson & Sons Land Spreading Sites and Farm" prepared by Dickson Environmental and Western New York Crop Management dated August 27, 2019.



VI) ENVIRONMENTAL MONITOR

27) On-site Environmental Monitor

a) Leo Dickson & Sons, Inc. shall fund on-site environmental monitoring services to be performed by the Department. These monitoring services will include, but not be limited to, the following:

- i) Compliance monitoring;
- ii) Inspections and complaint response;
- iii) Pollution prevention assurance.

b) Funds necessary to support the monitoring services and requirements for the coming year shall be provided to the Department by Leo Dickson & Sons, Inc. on an annual basis. The sum to be provided is based on annual on-site environmental monitoring service costs of the Department for up to one quarter of a person-year of service, and is subject to annual revision. Subsequent annual payments shall be made for the duration of this Permit or until the monitoring requirements no longer exist, whichever comes first.

c) Leo Dickson & Sons, Inc. shall be billed annually for each fiscal year beginning on April 1. If this Permit is to first become effective subsequent to April 1, the initial payment may be for an amount sufficient to meet the anticipated cost of the monitoring services through the end of the current fiscal year.

d) The Department may revise the required payment on an annual basis to include all of the Department's costs associated with the monitoring services. The annual revision may take into account such factors as inflation, salary increases, changes in operating hours and procedures, increase or decrease in the amount of monitoring necessary, and increase or decrease in the number of on-site environmental monitors and on-site environmental monitor supervision necessary. Upon written request by Leo Dickson & Sons, Inc. the Department shall provide Leo Dickson & Sons, Inc. with a written explanation of the basis for any revision or modification. If such a revision is required, the Department will notify Leo Dickson & Sons, Inc. of such a revision no later than 60 days in advance of such revision.

e) Prior to making its annual payment, Leo Dickson & Sons, Inc. will receive, and have an opportunity to review, an annual work plan that the Department will undertake during the year.

f) Payments are to be made in advance of the period in which they will be expended and shall be made in full within 30 days of receiving a bill from the Department. Payments shall be addressed to the address and contact person identified in the bill received from the Department.

g) Failure to make the required payments shall be a violation of this Permit. The State reserves all rights to take appropriate action to enforce the above payment provisions.



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:

Regional Permit Administrator
NYSDEC Region 8 Headquarters
6274 E Avon-Lima Rd
Avon, NY14414

4. Submission of Renewal Application The permittee must submit a renewal application at least 180 days before permit expiration for the following permit authorizations: Solid Waste Management.



5. 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.

6. 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.

ATTACHMENT A

Approved Waste Sources

1) Stabilized biosolids generated from the following sources may be accepted for land application contingent on meeting the requirements of this permit.

- Addison, NY Village of: WWTP
- Bath, NY Village of: WWTP
- Canisteo, NY Village of: WWTP
- Castile NY Village of: WWTP
- Cayuga Heights NY Village of: WWTP
- Conesus Lake County Sewer District, NY WWTP
- Dryden, NY Village of: WWTP
- Knoxville, PA Borough of: WWTP
- Montour Falls, NY Village of: WWTP
- Nelson Township, PA: WWTP
- Alfred, NY Village of: WWTP
- Dansville, NY Village of: WWTP
- Dundee, NY Village of: WWTP
- Elkland Borough, PA: WWTP
- Lawrence Borough Authority, PA: WWTP
- Perry, NY Village of: WWTP
- Sabinsville, PA Village of: WWTP
- Trumansburg, NY Village of: WWTP
- Owego, NY Town of: WWTP
- Warsaw, NY Village of: WWTP
- Watkins Glen, NY Village of: WWTP
- Waverly, NY Village of: WWTP
- Wayland, NY Village of: WWTP
- Westfield, PA Borough of: WWTP
- Whitney Point, NY Town of WWTP
- Nunda, NY Village of: WWTP
- Portville, NY Village of: WWTP
- Hornell, NY City of: WWTP Backwash
Collection Lagoon Sludge

2) Food Processing Waste Generated at:

- LePrino Foods - Waverly, PA
- Dietrichs Foods (Dairy Farmers of America) - Middlebury Center, PA
- Upstate (formally Kraft Foods) - Campbell, NY
- Kraft Foods - Lowville, NY
- Kraft Foods - Avon, NY
- Quest - Kerry Bio Science in Norwich NY
- Rejected raw milk load - independent haulers loads rejected by Kraft in Campbell

ATTACHMENT B

PART 360 Permitted Fields - See spreadsheets

Reference the most recent annual report for an updated list of High P fields.

**Attachment B-1
Part 360 Permitted Fields**

| Field Identification Number | Total Field Area | Spreadable Acres |
|--|-------------------------|-------------------------|
| A1 | 29.1 | 26 |
| A2 | 8.3 | 7.3 |
| A3 | 6.9 | 6 |
| A4 | 5.2 | 0.2 |
| A5N | 16.1 | 13.9 |
| A5S | 10.1 | 7.7 |
| A7 | 14.7 | 13 |
| A8 | 3.6 | 3.6 |
| A9 | 13.3 | 10.1 |
| A11 | 38.6 | 28.4 |
| A12 N | 18.4 | 16.1 |
| A12 S | 11.8 | 9.3 |
| B1 | 7.2 | 4.4 |
| B2 | 14.3 | 14.3 |
| B3 | 9.5 | 3.6 |
| B4 | 17.6 | 11.4 |
| B5 | 10.4 | 6.8 |
| B6 | 25.6 | 21.9 |
| B8 | 5.1 | 5.1 |
| B9 | 34.6 | 33.9 |
| B10 | 29 | 25.6 |
| B11 | 5.7 | 5.7 |
| B12 | 7.8 | 7.8 |
| B13 | 4.4 | 4.4 |
| B14 | 5.1 | 5.1 |
| B15 | 8.7 | 8.7 |
| B16 | 4.5 | 4.5 |
| B17 | 12.4 | 12.4 |
| C1 | 13.8 | 12.2 |
| C2 | 2.8 | 1.9 |
| C3 | 25.6 | 20.2 |
| C4 | 6.4 | 0.7 |
| C6 | 7.2 | 5.8 |
| C7 | 6 | 5 |
| C8 | 7.9 | 1.4 |
| C9 | 28.9 | 26.8 |
| C10A | 5.6 | 5.6 |

**Attachment B-1
Part 360 Permitted Fields**

| Field Identification Number | Total Field Area | Spreadable Acres |
|------------------------------------|-------------------------|-------------------------|
| C11 | 5.3 | 5.3 |
| C12 | 3.7 | 3.7 |
| C13 | 7 | 7 |
| D1 | 29.2 | 26 |
| D2 | 45.5 | 40.9 |
| E1 | 27 | 10.1 |
| E3 | 19.5 | 16.9 |
| E4 | 13.2 | 11.5 |
| E5 | 6.1 | 5.4 |
| E6 | 13 | 11.3 |
| F1 | 11 | 5.7 |
| F2 | 27.7 | 17.3 |
| F3 | 12.6 | 10.6 |
| F4 | 13.2 | 10.8 |
| F5 | 2 | 2 |
| F6 | 6.3 | 6.3 |
| F7 | 8.6 | 8.6 |
| F8 | 9.2 | 9.2 |
| F9 | 9.1 | 9.1 |
| F10A | 17.7 | 17.7 |
| F10B | 15.6 | 15.6 |
| F11 | 21.2 | 18.8 |
| F12 | 21.4 | 21.4 |
| F13 | 7.5 | 7.5 |
| F15 | 18.9 | 16 |
| F16 | 20.8 | 17.7 |
| F17 | 10.5 | 8.7 |
| F19 | 12.5 | 12.5 |
| F20 | 22.2 | 19.3 |
| F21 | 42.2 | 40.4 |
| F23 | 23.5 | 20.9 |
| G1 | 11.5 | 9.3 |
| G2 | 5.2 | 3.2 |
| G3 | 27.2 | 27.2 |
| H1 | 20.6 | 20.6 |
| H2A | 6.7 | 4.5 |
| H2B | 6.7 | 6.7 |

**Attachment B-1
Part 360 Permitted Fields**

| Field Identification Number | Total Field Area | Spreadable Acres |
|------------------------------------|-------------------------|-------------------------|
| H2C | 15.3 | 15.3 |
| H3 | 53.8 | 40.2 |
| H4 | 12.2 | 12.2 |
| I1 | 17.3 | 12.1 |
| J1 | 19.4 | 13 |
| J2 | 22.4 | 22.4 |
| J3 | 15.6 | 15.6 |
| J4 | 14.8 | 12.8 |
| K1 | 40.2 | 33.3 |
| L1 | 17.1 | 4.7 |
| L2 | 25.1 | 15.2 |
| M1 | 5.5 | 5.5 |
| M2 | 10 | 7.5 |
| M3 | 10.3 | 10.3 |
| M4 | 12.7 | 12.7 |
| M5 | 21.4 | 21.4 |
| N1 | 21.9 | 19.1 |
| O1 | 17.6 | 16.8 |
| O2 | 12 | 10 |
| P1A | 25.7 | 24.5 |
| P1B | 18.8 | 11.8 |
| Q1 | 11.7 | 11.7 |
| Q2 | 21.5 | 21.5 |
| Q3 | 11.7 | 11.7 |
| Q4 | 18.3 | 3.3 |
| Q5 | 18.6 | 3.4 |
| Q6 | 13.9 | 8.1 |
| Q7 | 7.6 | 2.1 |
| Q8 | 7.9 | 0 |
| Q9 | 8.2 | 8.2 |
| Q10 | 9.3 | 8 |
| Q11 | 14.6 | 4.3 |
| Q12 | 10.2 | 5.9 |
| Q13 | 13.3 | 13.3 |
| Q14 | 15.5 | 13.5 |
| R1 | 5.8 | 2.6 |
| R2 | 6 | 0.04 |

**Attachment B-1
Part 360 Permitted Fields**

| Field Identification Number | Total Field Area | Spreadable Acres |
|------------------------------------|-------------------------|-------------------------|
| R3 | 8.3 | 4 |
| R4 | 15.6 | 7.2 |
| R5-A | 21.1 | 19.2 |
| R6 | 29.4 | 14.2 |
| R7 | 11.4 | 1.3 |
| R8 | 8.9 | 1.2 |
| R9 | 6.8 | 6.8 |
| R10 | 14.7 | 14.7 |
| R11 | 34.5 | 34.5 |
| R12 A | 11.4 | 10.3 |
| R12 B | 10.8 | 9.7 |
| R13 | 9 | 6.9 |
| R14 | 8.2 | 3.5 |
| ST1 | 24.3 | 24.3 |
| ST2 | 5.5 | 5.5 |
| ST3 | 35.9 | 32.7 |
| ST4 | 20.2 | 16.4 |
| ST5 | 27.6 | 27.6 |
| ST6 | 22.5 | 22.5 |
| ST7 | 8.4 | 8.4 |
| ST8 | 13.8 | 11 |
| ST9 | 4.5 | 4.5 |
| ST11 | 26.8 | 26.8 |
| ST12 | 4.3 | 4.3 |
| ST13 | 3.7 | 3.7 |
| ST14 | 1.6 | 1.6 |
| ST15 | 5.3 | 1.9 |
| ST16 | 11.8 | 11.8 |
| ST17 | 4 | 4 |
| ST18 | 9.1 | 9.1 |
| ST19 | 5.1 | 5.1 |
| ST20 | 5.6 | 5.6 |
| U1 | 16.4 | 16.4 |
| U2 | 14.6 | 14.6 |
| V1 | 5.5 | 3.7 |
| V2 | 11.2 | 7.3 |
| V3 | 8.5 | 6.9 |
| W1 | 28.2 | 19.3 |
| W4A | 20.3 | 17.3 |

Attachment B-1
Part 360 Permitted Fields

| Field Identification Number | Total Field Area | Spreadable Acres |
|------------------------------------|-------------------------|-------------------------|
| W4B | 20.8 | 20.5 |
| W6 | 25.1 | 21.4 |
| W8 | 11.7 | 9 |
| W9 | 41.8 | 38.8 |
| Totals | 2300.7 | 1892.04 |

**Attachment B-2
Part 360 Permitted Fields**

The Following Permitted Fields Are Classified As Having A Very High P Index. No Manure or Other Phosphorous Containing Waste May Be Spread On These Fields. Note: The Very High P Index Designation May Be Removed From Or Applied To Individual Fields In The Future Dependent On Soil Analysis and NYSDEC Review and Approval

| Field Identification Number | Total Field Area | Spreadable Acres, For permitted Wastes That Do Not Contain Manure and/ or Phosphorous | Spreadable Acres for Manure and Phosphorous Containing Wastes |
|------------------------------------|-------------------------|--|--|
| A1 | 29.1 | 26 | 0 |
| A2 | 8.3 | 7.3 | 0 |
| A3 | 6.9 | 6 | 0 |
| A5N | 16.1 | 13.9 | 0 |
| A7 | 14.7 | 13 | 0 |
| A11 | 38.6 | 28.4 | 0 |
| A12 N | 18.4 | 16.1 | 0 |
| B2 | 14.3 | 14.3 | 0 |
| B10 | 29 | 25.6 | 0 |
| B14 | 5.1 | 5.1 | 0 |
| B16 | 4.5 | 4.5 | 0 |
| B17 | 12.4 | 12.4 | 0 |
| C1 | 13.8 | 12.2 | 0 |
| C3 | 25.6 | 20.2 | 0 |
| C4 | 6.4 | 0.7 | 0 |
| D1 | 29.2 | 26 | 0 |
| D2 | 45.5 | 40.9 | 0 |
| E3 | 19.5 | 16.9 | 0 |
| F4 | 13.2 | 10.8 | 0 |
| F5 | 2 | 2 | 0 |
| F6 | 6.3 | 6.3 | 0 |
| F7 | 8.6 | 8.6 | 0 |
| F9 | 9.1 | 9.1 | 0 |
| F10A | 17.7 | 17.7 | 0 |
| F10B | 15.6 | 15.6 | 0 |
| F11 | 21.2 | 18.8 | 0 |
| F15 | 18.9 | 16 | 0 |
| F20 | 22.2 | 19.3 | 0 |
| F21 | 42.2 | 40.4 | 0 |
| G2 | 5.2 | 3.2 | 0 |

**Attachment B-3
Part 360 Permitted Fields**

| Waste Listed in Condition 12b, May Be Land Applied On These Fields When The Soil Of The Fields Is Snow Covered And/Or Frozen Contingent On The Restrictions Outlined In Special Condition 12b. | | | | |
|---|-----------------------------|--|--|---|
| Field Identification Number | Total Field Area | Spreadable Acres, For permitted Wastes That Do Not Contain Manure and/ or Phosphorous | Spreadable Acres for Manure and Phosphorous Containing Wastes | Area of the Field with a Slope Less Than 4% on Which Land Application Is Allowed On Frozen and or Snow Covered Ground (per condition 12) |
| A1 * | 29.1 | 26 | 0 | All |
| B6 | 25.6 | 21.9 | 21.9 | South |
| B8 | 5.1 | 5.1 | 5.1 | East |
| B9 | 34.6 | 33.9 | 33.9 | East |
| B10 * | 29 | 25.6 | 0 | All |
| B17 * | 12.4 | 12.4 | 0 | North |
| D2 * | 45.5 | 40.9 | 0 | Center |
| F20 * | 22.2 | 19.3 | 0 | All |
| F21 * | 42.2 | 40.4 | 0 | All |
| I1 | 17.3 | 12.1 | 12.1 | All |
| M2 | 10 | 7.5 | 7.5 | All |
| M5 * | 21.4 | 21.4 | 0 | All |
| N1 | 21.9 | 19.1 | 19.1 | South |
| P1A * | 25.7 | 24.5 | 0 | All |
| R11 | 34.5 | 34.5 | 34.5 | Center |
| ST4 | 20.2 | 16.4 | 16.4 | North |
| V2 | 11.2 | 7.3 | 7.3 | Part |
| Total | 407.9 | 309.59 | 157.80 | |

*This Fields Is Classified As Having A Very High P Index, No Manure or Other Phosphorous Containing Waste May Be Spread on This Field At Any Time. The Very High P Index Designation May Be Removed From This Field In The Future Dependent On Soil Analysis and NYSDEC Review And Approval.

ATTACHMENT C

ON-SITE LIQUID WASTE STORAGE FACILITIES

1. Covered Lagoon

Manure Only

CAFO Regulations apply

2. Pond #1

Manure Only

CAFO Regulations apply, and

must have certified depth markers.

3. Pond #2 (Spread Pond)

Food Waste Only

666,400 gallons capacity, 2.0 feet minimum freeboard, and

must have certified depth markers.

4. Pond #3 (Recirculation Pond)

Food Waste/Manure mixture

2,206,000 gallon capacity, 2.0 feet minimum freeboard, and

must have certified depth markers.

5. Pond #4 (Irrigation Pond)

Food Waste/Manure mixture

3,640,000 gallon capacity, 2.0 feet minimum freeboard, and

must have certified depth markers.

6. Receiving Mix Tank (concrete storage tank)

Food Waste Only

71,800 gallon capacity, 2.0 feet minimum freeboard, and

must have certified depth markers.

7. Heifer Barn concrete storage tank

Permitted Storage Tank:

Part 361-2.7 Regulations apply

Liquid Biosolids, Manure, Liquid Food Processing Waste, or mixture of the three.

53,100 gallon storage capacity, 2.0 feet minimum, and

must have certified depth markers.

ATTACHMENT D

VARIANCES and BIOSOLIDS ANALYTICAL TESTING REQUIREMENTS

Justification for the following variances must be submitted to the Department by March 1, 2018.

The surface impoundments located immediately south and east of the compost building exempted from the requirements of 361-2.7 (c), (d), (f), (i), and (k), as per the variance request dated 3/30/2018 from Philip Dickson and received by the Department on 4/6/2018. This variance was reviewed and reauthorized by Division of Materials Management staff, as previously authorized by a letter dated 12/18/2012 from Salvatore Ervolina, NYSDEC Director of the Division of Materials Management.

BIOSOLIDS ANALYTICAL TESTING REQUIREMENTS

Biosolids from these sources are authorized to be land applied at the Dickson facility.

Village of Watkins Glen

Sampling events required reduced from four to two events per year.

Village of Montour Falls

Sampling events required reduced from four to two events per year.

Borough of Westfield

Sampling events required reduced from four to two events per year.

Village of Bath

Sampling event required reduced from six to four events per year

Village of Warsaw

Sampling events required reduced from six to four events per year.

Attachment E

Waste Streams, Incorporation, Setback and Sampling Requirements Summary

| Waste Stream | Sources | Subsequent Destinations | Incorporation Requirements | Setback Requirements | Waste Stream Sampling | Loading and Other |
|--|--|--|---|--|---|--|
| 1) Manure Only | Main Barn Pond | Direct to cropland or Manure Reception Separation Storage, then Covered Lagoon | None | Potable well: 100' Surface Water (SW) or Wetland : 200' (Also refer to CAFP Permit and NRCS standards) | Annually from all sources including covered lagoon and Pond No. 1 | None to be spread on fields with very high P-index (red shaded on maps). |
| | Heifer Barn In-ground Storage | Direct to cropland or Manure Reception Separation Storage, then Covered Lagoon | | | | |
| | Covered Lagoon | Pond No. 1 or cropland | | | | |
| | Pond No 1 | Pond No. 3 or cropland | | | | |
| | Bedded Pack in Hoppers | Windrow Compost | | | | |
| 2) Liquid Food Waste | Receiving Mix Tank | Pond No. 2 | Direct Injection or the equivalent | Drainage Swale: 25' Property Line: 50' Potable Well: 200' SW or Wetland: 200' Residence: 500' | One sample annually for each waste stream at source. One sample Quarterly from Pond No. 2. Group A parameters. See condition #21 for details. | No Phosphorous containing waste to be spread on fields with high P-index. |
| | Pond No 2 | To Cropland (or Pond No. 3) | | | | |
| | Direct tanker to cropland | | | | | |
| 3) Solid Food Processing Waste Only | Windfall Road Reload Station & Other Satellite Temporary Storage Locations | To Cropland | Incorporated within 24 hours | Same as 2) above | One sample annually for each waste stream. Group A parameters. See condition #21 for details. | No Phosphorous containing waste to be spread on fields with high P-index. |
| 4) Food Waste and Manure Blend | Pond No. 3 | To Cropland or the Irrigation Pond | Direct Injection or the equivalent | Same as in 2) above | One sample quarterly @ Pond No. 3. Group A parameters. See condition #21 for details. | None to be spread on fields with very high P-index (shaded red). |
| 5) Food Waste and Manure and Bunk Leachate | Irrigation Pond | Direct to cropland by Irrigation Reel or indirectly to cropland via pond #3 | No incorporation requirements if on hay fields. | Same as in 2) above | One sample quarterly @ Irrigation Pond. Group A parameters. See condition #21 for details. | None to be spread on fields with very high P-index (shaded red). |
| 6) WWTP Solids (aka Bio-Solid Sludges) | Windfall Road Reload Station & Other Satellite Temporary Storage Locations | To Cropland | Incorporation into soil within 6 HOURS after application. | Same as in 2) above | Number of samples required for an individual POTW annually. Dependent on the number of dry tons the POTW sends to the Dickson Facility per year. >1000 Ton: 12 200 to 100 Ton: 6 25 to 199 Ton: 4 < 25 Ton: 2 Samples must be analyzed for both Groups A & Group B parameters. | Some WWTP Solids are put into the Compost Facility. No Phosphorous containing waste to be spread on fields with high P-index. |
| 7) Liquid Food Processing Wastes | Heifer Barn Concrete In-ground Storage | To Cropland | Direct Injection or the equivalent | Same as in 2) above | Data required for each POTW is the same as item 6 above. | WWTP Liquids get mixed with manure and liquid food waste in the heifer barn storage tank |

ATTACHMENT F
APPLICABLE OPERATIONS REQUIREMENTS AND TABLES

(5) include a written statement from the applicant that the land on which the project is proposed to be located is under the ownership or control of the applicant; and

(6) demonstrate that the quantity and types of waste proposed for use in the project are no more than those needed to satisfy the project's objectives.

(c) Prohibited projects. The department will not issue an RD&D permit under this section that would authorize:

(1) disposal of waste at a facility that would require a permit for a disposal facility regulated under Part 363 of this Title; or

(2) an activity whose primary purpose is to process commercial quantities of waste.

(d) Design and operating requirements.

(1) RD&D projects which include construction of buildings or structures must be performed under the direction of a professional engineer. All other RD&D projects must be performed under the direction of a professional engineer or a research scientist affiliated with an accredited university or research institution.

(2) Compliance with the 40 CFR Part 258 Criteria for Municipal Solid Waste Landfills, as incorporated by reference in section 360.3 of this Title, must be maintained for landfills subject to those requirements.

(3) The quantity and types of waste subject to the RD&D permit must not exceed those needed to effectively address the research objectives. After completion of the RD&D project, all waste must be removed from the project site unless the department authorizes the waste to remain on the project site.

(4) The department may require the permittee to comply with one or more of the design and

operating requirements under this Part and Parts 361, 362, 363, and 365 of this Title.

(5) Within 90 days after the expiration date of the RD&D permit, the permittee must submit to the department a project summary report that includes, at a minimum, the following information:

(i) a summary of the project objectives, information gathered, analyses conducted, and project results, including all monitoring and testing results; and

(ii) a description of any operating problems and the status of their resolution, any other limitations encountered, and areas of further study to be considered.

(iii) Permit duration and renewal. RD&D permits issued under this section will have a specified permit term not to exceed one year. Permits issued under this section will not be renewed more than three times.

Section 360.19 Operating requirements

(a) Applicability. Except as otherwise provided in this Part or in Parts 361, 362, 363, or 365, or Subpart 374-2 of this Title, the owner or operator of a facility that requires a permit or registration must comply with the requirements of this section.

(b) Water protection.

(1) The owner or operator of a facility must prevent waste from being deposited in or entering surface waters or groundwater.

(2) The owner or operator of a facility must operate the facility in a manner that minimizes the generation of leachate and that does not allow any leachate to enter surface waters or groundwater except under authority of a State Pollutant Discharge Elimination System permit.

(c) Waste acceptance and control.

(1) The owner or operator of a facility must institute, maintain, and enforce a waste control plan. Components of this plan must include, but not be limited to, the following measures to ensure that only authorized waste is accepted at the facility:

(i) posting clearly legible signs at all public access points indicating hours of operation and the types of waste accepted and not accepted;

(ii) inspecting incoming loads of waste; and

(iii) specifying which types of waste are authorized to be accepted in contracts with waste suppliers.

(iv) identifying materials intended for beneficial use, a marketing plan for those materials, and a plan for disposal or alternative use of materials that fail to meet the criteria for the intended beneficial use.

(v) in addition, landfills, combustion facilities, thermal treatment facilities, municipal solid waste processing facilities and transfer facilities must:

(a) educate users of their facilities on the proper methods for the management of electronic waste, including:

(1) providing written information annually to all potential users of the facility on the proper methods of recycling electronic waste;

(2) maintaining written information on-site and upon request, providing the information to users of the facility; and

(3) posting, in conspicuous locations at the facility, signs stating that electronic waste cannot be disposed of at the facility; and

(b) post a sign, in a conspicuous

location, stating that mercury-added thermostats are not accepted at the facility.

(2) Except for facilities regulated under section 360.17 and section 360.18 of this Part or Part 361, Part 365, or Subpart 362-4 of this Title, a facility must not accept waste from New York State that is generated within a municipality that is not included in a department-approved comprehensive recycling analysis (CRA) or a department-approved local solid waste management plan (LSWMP).

(3) The owner or operator of a facility must develop and implement a program to train facility staff to implement the waste control plan.

(4) If unauthorized waste is delivered to the facility it must be adequately segregated, secured, and contained in order to prevent leakage or contamination of the environment and must be removed within seven days after receipt, unless a different period is authorized by the department in the waste control plan. Transportation must be performed by a person authorized to transport the waste, and disposition must be to a facility or location authorized to receive the waste for management.

(i) If the owner or operator accepts unauthorized waste, the owner or operator must maintain at the facility a record of each incident identifying the type of waste and its final disposition. The owner or operator must include this information in the facility annual report. For each incident, the owner or operator must record:

(a) the date and time;

(b) a description of the incident;

(c) contact and vehicle information for the waste transporter that delivered the unauthorized waste;

(d) contact information for the generator of the unauthorized waste; and

(e) a description of the response to the incident and the disposition of the waste.

(5) The owner or operator of a facility must not accept waste unless the vehicle transporting the waste is adequately covered or the waste is containerized. When leaving the facility, all vehicles containing waste must utilize a cover which prevents waste and leachate from escaping the vehicle, or the waste must be containerized.

(6) The owner or operator of a facility which is authorized to manage mercury-containing devices or mercury-added consumer products must not place any of those materials in a combustor or landfill, or direct the material to a combustor or landfill.

(7) If a facility provides a residential drop-off area for non-commercial vehicles to unload waste and recyclables, the owner or operator must provide a separate, designated area for that activity and must provide for collection of source-separated recyclables, if other collection is not provided to residents.

(8) The owner or operator of a facility must ensure that all waste leaving the facility is destined to be managed at a facility authorized by the department if located in this state, or authorized by the appropriate governmental agency or agencies if located in another state, territory, or nation.

(9) The owner or operator of a facility must ensure that all unloading and loading areas are adequate in size and designed to facilitate efficient movement of waste to and from the collection vehicles and to facilitate the unobstructed movement of vehicles.

(10) The owner or operator of a facility must ensure that all areas containing waste are strictly and continuously secured to prevent unauthorized access by use of fencing, gates, signs, natural barriers, or other suitable means as determined by the department. Waste must not

be used as a barrier.

(11) The owner or operator of a facility must ensure that storage volumes and throughput limits established by the requirements of this Part 360, 361, 362, 363, or 365 of this Title or by the volumes and throughput declared on the registration form for the facility are not exceeded.

(12) An attendant must be on duty at a facility which has permanent operating mechanical equipment whenever the facility is open.

(d) Operation and maintenance. The owner or operator of a facility must ensure that the following criteria are satisfied:

(1) All maintenance and operating activities at the facility are performed in accordance with the facility manual required by 360.16(c)(4) of this Part, if applicable.

(2) The facility accommodates expected traffic flow in a safe and efficient manner. Facility roadways are passable in all weather conditions.

(3) Tracking of soil, waste, leachate and other materials from the facility onto off-site roadways is prevented.

(4) All equipment, storage containers, and storage areas are sufficient for the quantity and type of waste managed at the facility. Adequate numbers, types, and sizes of properly maintained equipment are available during all hours of operation.

(5) All floors and working areas are adequately drained, properly maintained, and standing water is minimized. All drainage and wash waters are collected and handled in a manner acceptable to the department.

(6) The facility is properly graded to prevent soil erosion and to minimize ponding.

(7) Equipment and systems required to

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manage waste at the facility are properly operated, calibrated, and maintained at all times.

(8) Prior to leaving the facility, any vehicle containing waste must be covered with, at a minimum, a mesh or fabric cover acceptable to the department.

(9) If an unscheduled total facility shutdown exceeds 24 hours, the facility will immediately notify the department describing the incident and the proposed waste management activities.

(e) Routine inspection. The owner or operator of a facility must monitor and inspect the facility for malfunctions, deteriorations, operator errors, and incidents no less frequently than on a daily basis when the facility is open. The owner or operator of a facility must immediately undertake any and all measures needed to eliminate any violation of an operational, closure, or post-closure care requirement of this Part and of Part 361, 362, 363, and 365 of this Title. Measures taken do not preclude the department from exercising its enforcement powers.

(f) Confinement of waste. The owner or operator of a facility must ensure that waste at the facility is confined to an area that can be effectively maintained, operated, and controlled; and that blowing litter is confined to waste holding and

operating areas by fencing or other suitable means. Any litter outside the waste holding area must be controlled.

(g) Dust control. The owner or operator of a facility must ensure that dust is effectively controlled so that it does not constitute a nuisance as determined by the department; and must undertake any and all measures as required by the department to maintain and control dust at and emanating from the facility.

(h) Vector control. The owner or operator of a facility must effectively control on-site populations of vectors.

(i) Odor control. The owner or operator of a facility must ensure that odors are effectively controlled so that they do not constitute a nuisance as determined by the department.

(j) Noise. The owner or operator of a facility must ensure that noise (other than that occurring during construction of the facility) resulting from equipment or operations at the facility does not exceed the following energy equivalent sound levels beyond the property line owned or controlled by the owner or operator of the facility at locations authorized for residential purposes:

| Character of Community within a one-mile radius of facility | Leq Energy Equivalent Sound Levels | |
|---|------------------------------------|-------------------|
| | 7 a.m. to 10 p.m. | 10 p.m. to 7 a.m. |
| Rural | 57 decibels (A) | 47 decibels (A) |
| Suburban | 62 decibels (A) | 52 decibels (A) |
| Urban | 67 decibels (A) | 57 decibels (A) |

The Leq is the equivalent steady-state sound level which contains the same acoustic energy as the time varying sound level during a one-hour period. It is not necessary that the measurements be taken over a full one-hour time interval, but sufficient measurements must be available to allow a valid extrapolation to a one-hour time interval.

(1) If the background sound level exceeds the referenced Leq sound level limit, the Leq sound levels from facility sources and background sources when combined must not exceed the Leq sound level of the background sources alone by more than 3 decibels (A).

(2) The background sound level, measured as L_{eq} , is the existing ambient sound level during a period of peak acoustical energy measured in the absence of sound produced by equipment or operations at the facility. A background sound level monitoring protocol must be submitted to the Department for approval prior to conducting background measurements.

(3) Sound levels must be measured using the slow time constant and A-weighting. During the measurement period, no precipitation must occur and wind speeds must not exceed 12 miles per hour.

(4) Measuring instruments must be Type 1 or Class 1 precision sound level meters, Type 2 or Class 2 general purpose sound level meters, or corresponding special sound level meters Type S1A or S2A.

(5) Noise assessments must include details of the attenuation factors and calculations utilized. Noise assessment calculations are allowed to utilize average annual conditions when calculating atmospheric attenuation.

(6) Mufflers are required on all internal combustion-powered equipment used at the facility.

(k) Recordkeeping and reporting.

(1) Application documents. The owner or operator of a facility must maintain at the facility or other approved location, and make readily available for inspection throughout the life of the facility including the post-closure care period and the custodial care period, a copy of all information and data required as part of the application for the permit or submittal for registration, as well as construction certification and closure construction certification documents.

(2) Operating records. The owner or operator of a facility must maintain at the facility or other approved location, and make readily available for inspection for a period of no less than seven years

from the date a particular record was created, the following operating records:

(i) A daily log of wastes received that identifies the waste type, quantity, date received, and planning unit where the waste was generated, and the quantity and destination of any waste, products or recyclables that are removed from the facility.

(ii) Routine inspection logs that must include, at a minimum, the following information: the date and time of the inspection, the name of the inspector, a description of the inspection including the identity of specific equipment and structures inspected, the observations recorded, and the date and nature of any remedial actions implemented or repairs made as a result of the inspection.

(iii) All monitoring information necessary for compliance with the requirements of this Part and the requirements applicable to permitted facilities in Parts 361, 362, 363, and 365 of this Title.

(iv) Records documenting training programs, schedules, and certifications as required.

(v) Any other information required in a permit or registration under this Part or that the department may require be created and maintained as part of the daily operating records.

(3) Annual report.

(i) The owner or operator of a facility must submit a completed annual report in a format acceptable to the department no later than March 1 of each year for the previous calendar year, on forms prescribed by the department.

(ii) The owner or operator of a facility required to report to the department related to the facility's compliance under this Part or Parts 361, 362, 363, or 365 of this Title, or under the terms of any permit issued under this Part, must make,

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sign, and submit with the report the following certification:

I certify, under penalty of law, that the data and other information identified in this report have been prepared under my direction and supervision in compliance with the system designed to ensure that qualified personnel properly and accurately gather and evaluate this information. I am aware that any false statement I make in such report is punishable pursuant to section 71-2703(2) of the Environmental Conservation Law and section 210.45 of the Penal Law.

(l) Personnel training. The owner or operator of a facility must ensure sufficient and appropriately trained staff are available to manage the quantity and type of waste that will be handled at the facility.

(m) Emergency Response. The owner or operator of a facility must adequately respond to emergencies such as fires, explosions, natural disasters, and spills that occur at the facility.

(n) Tank Requirements. The owner or operator of a facility that includes tanks for waste storage must comply with the following requirements:

(1) All tanks must:

(i) be chemically compatible with the waste being stored;

(ii) be equipped with an overfill prevention system in good working order; and

(iii) have double-walled construction with leak detection, if deemed necessary by the department.

(2) If required by the department, above ground tanks must:

(i) have and maintain a secondary containment system that is compatible with the waste being stored;

(ii) have a secondary containment system designed and built to contain 110 percent of the volume of either the largest tank within the containment system or the total volume of all interconnected tanks, whichever is greater;

(iii) be located on a stable surface which prevents movement, rolling, or settling;

(iv) have a system to remove stormwater from the secondary containment area. Precipitation removal (rain, snow, or ice) must be initiated before ten percent of the storage capacity is reached; and

(v) have a minimum of two feet of freeboard if open on the top.

(3) Self inspection requirements for tanks and related equipment:

(i) tanks must be inspected on no less than a monthly basis when waste is present in the tank, and the interior inspected whenever emptied;

(ii) if the inspection reveals a leak or any other deficiency that would result in failure of the tank, remedial measures must be taken immediately to eliminate the leak or correct the deficiency; and

(iii) the overfill protection system must be inspected monthly when waste is present in the tank.

Section 360.20 Environmental monitoring services

(a) The department may require environmental monitoring services at any facility anytime during the construction, operation, closure, and post-closure of the facility to be paid for by the facility where:

(1) environmental monitoring services are required by law;

(3) In addition to the analyses required in paragraph 361-2.4(e)(1) of this section, the following analyses, in whole or part, may be required, as determined by the department:

(i) fecal coliform, Salmonella sp., enteric viruses, viable helminth ova, other applicable pathogens; and

(ii) any or all of the pollutants identified in Part 375 of this Title or by the department.

(4) An outline of the proposed application rates and justification for the values chosen.

(5) For waste containing any domestic sewage or septage, a detailed description of the processes to reduce pathogenic organisms and vector attraction or sufficient data to demonstrate that human pathogenic organisms are not present in the waste.

(6) A waste monitoring, sampling, and analysis plan that outlines:

(i) the location, purpose, frequency and method for waste sampling;

(ii) the analytical parameters;

(iii) the protocol used to obtain representative samples and for the preparation and preservation of samples; and

(iv) and the laboratory that will be used for analyses.

Section 361-2.5 Design and operating requirements for land application facilities

A land application facility required to obtain a permit must, in addition to the requirements identified in Part 360 of this Title, design, construct, maintain, and operate the facility in compliance with the following criteria. For facilities under this section, a closure

plan and financial assurance are not required.

(a) Pollutant limits.

(1) Each waste destined for land application must not exceed the pollutant concentrations found in Table 6 in section 361-3.9 of this Part.

(2) If the waste contains pollutants at concentrations greater than those set forth in this subdivision, a permit for a land application facility will not be issued unless the generator has implemented an identification and abatement program and has remained in compliance with the requirements of this subdivision for a period of at least six continuous months. At least six analyses for total solids and the parameter(s) of concern must be provided to the department to demonstrate compliance.

(3) Wastewater and partially treated biosolids that are generated at one treatment plant and treated at another wastewater treatment facility before land application are not considered separate waste sources.

(b) Land application criteria.

(1) The minimum horizontal distance from the perimeter of the land application area must comply with the values found in the following table with respect to listed features that exist at the time the initial permit application is submitted to the department.

| Feature | Minimum horizontal separation distance (in feet) |
|---|--|
| Property line..... | 50 |
| Residence, place of business, or public contact area when waste is not injected*..... | 500 |
| Residence, place of business, or public contact area when waste is injected*..... | 200 |
| Potable water well..... | 200 |
| Surface water and State regulated wetland when waste is not injected**..... | 200 |

Surface water and State regulated wetland when waste is injected.....100
 Drainage swale.....25

- * Excludes owner's or operator's residence
- ** For food processing waste: 100 feet

(2) Land application is prohibited in areas where groundwater is within 24 inches of the ground surface at the time of application. Verification of depth to groundwater prior to application can be required by the department. If the field is tiled, the top of the tile must be at least 24 inches below the ground surface and the discharge of the tile must be at least 200 feet from a potable well, surface water, and state-regulated wetland.

(3) Land application is prohibited in areas where bedrock lies less than 24 inches below the ground surface.

(4) The hydraulic loading must not exceed 16,000 gallons per acre in any 24-hour period.

(5) Land application is prohibited on land with a slope exceeding 15 percent. Land application of waste with a total solids content of less than 15 percent is prohibited on land with a slope greater than eight percent, unless incorporated within one hour of application along paths parallel to contour lines for the land.

(6) Land application is prohibited in special flood hazard areas unless approved by the department.

(7) The land application rate must not exceed the lower of the agronomic rate or, for waste with neutralizing value, the application rate needed to achieve a soil pH value in an acceptable range for the crop grown. The department can restrict the application rate based on a nutrient other than nitrogen, such as phosphorus. The application rate must be sufficiently reduced to ensure appropriate application rates are not exceeded if supplemental fertilizer (including manure) will be applied to the site.

(8) In all cases, the waste must be incorporated into the soil within 24 hours after application, unless a cover crop would be damaged by incorporation and concerns regarding odor and run-off can be mitigated by other means approved by the department. If incorporation is used for vector attraction reduction, the period before incorporation is limited to six hours or less.

(9) Land application is prohibited on water-saturated ground or during heavy rainfall. Land application is prohibited on snow-covered or frozen ground, except by direct injection below the land surface. Adequate storage or disposal facilities must be available for periods during the year when waste cannot be applied.

(10) Land application is permitted on all soil types that are capable of supporting the robust growth of the crop grown. The use of active farmland is sufficient to demonstrate compliance with this requirement. Otherwise, sufficient information must be provided to demonstrate compliance.

(11) Proper soil conservation practices and agricultural management practices must be used to minimize run-off and soil loss through erosion.

(12) The temporary field stacking of biosolids prior to land application is allowed, provided the following criteria are met:

- (i) the storage period is a maximum of 30 days;
- (ii) the residuals are stored on the field where they will be applied and the amount stored does not exceed the amount that will be land applied on the site;
- (iii) the storage area complies with the site criteria outlined in paragraphs 360-2.5(b)(1), (2), (3), (6), and (10) of this Subpart;
- (iv) the storage area must not be located on

areas with a slope greater than three percent;

(v) the residuals must have sufficient solids content that they will retain their shape if stacked three feet high and must be formed so that precipitation is shed from the pile;

(vi) any run-off from the stockpile must be contained within the land application site; and

(vii) after removal of the residuals, the storage area must be reseeded.

(b) Monitoring, recordkeeping, and reporting.

(1) Sufficient monitoring data and other information needed to demonstrate compliance with the requirements of this Subpart must be obtained. The frequency and type of monitoring necessary for pathogen and vector attraction reduction will be determined by the department on a case-specific basis and will depend on the monitoring methods employed.

(2) The annual report required by paragraph 360.19(k)(3) of this Title must include:

(i) the location of each field used for land application and the acreage used for land application on the field;

(ii) the crop(s) grown on each field;

(iii) the total quantity of waste applied on each field;

(iv) calculations showing the hydraulic loading and nutrient loading for the fields used for land application;

(v) all analytical results required by this Subpart, including copies of all laboratory reports;

(vi) monitoring data and information to demonstrate compliance with the pathogen and vector attraction reduction requirements of this

Subpart, if required;

(vii) for biosolids land application, the following certification statement:

"I certify, under penalty of law, that the information that will be used to determine compliance with Subpart 361-2 of 6 NYCRR Part 361 has been prepared under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate this information. I am aware that false statements made herein are punishable pursuant to section 210.45 of the penal law."

This statement must be signed by the permit holder or an authorized agent and indicate the name and title of the individual signing;

(viii) a description of any difficulties encountered during land application, any complaints arising as a result of the land application operation and the corrective measures taken; and

(ix) a revised management plan for land application for the next year based on previous application rates and crop planting patterns for the next year. The plan must include an identification of the crops to be grown, fields to be used, and revised nutrient and hydraulic loading rates. All calculations must be included.

(c) Biosolids application. In addition to the requirements identified in subdivisions 361-2.5(a) through (c) of this Subpart, a land application facility including biosolids must comply with the following criteria.

(1) Land application criteria.

(i) Soil pH must be adjusted to 6.0 standard units or higher before land application unless lime-stabilized biosolids is used. If lime-stabilized biosolids is used, the soil pH must be 6.0 standard units or higher after waste application.

(ii) Land application must not adversely affect a threatened or endangered species or its designated critical habitat.

(iii) The annual cadmium application rate must not exceed 0.45 pounds per acre.

(2) Pathogen and vector attraction reduction.

(i) One of the following Class B pathogen reduction alternatives must be satisfied.

(a) Class B - Alternative 1. The biosolids must be treated by one of the following processes:

(1) Aerobic digestion. Biosolids is agitated with air or oxygen to maintain aerobic conditions for a mean cell residence time of at least 40 days at 20 degrees Celsius or greater or at least 60 days if the temperature is less than 20 degrees Celsius but greater than or equal to 15 degrees Celsius.

(2) Air drying. Biosolids is dried on sand beds or on paved or unpaved basins, at a maximum depth of nine inches. The biosolids must dry for a minimum of three months. During at least two of the three months, the ambient average daily temperature must be above zero degrees Celsius.

(3) Anaerobic digestion. Biosolids is treated in the absence of air for a mean cell residence time of at least 15 days at 35 degrees Celsius or greater or at least 60 days at less than 35 degrees Celsius but greater than or equal to 20 degrees Celsius.

(4) Composting. Using the within-vessel, aerated static pile or windrow composting methods, the temperature of the biosolids is raised to 40 degrees Celsius or higher and remains at 40 degrees Celsius or higher for five consecutive days. For at least 4 consecutive hours during the five days, the temperature in the compost pile must exceed 55 degrees Celsius.

(5) Lime stabilization. Sufficient lime must be added to the biosolids to raise the pH of the biosolids to 12 standard units and maintain this pH for a period of at least two hours.

(6) Other methods. Other methods or operating conditions may be acceptable if pathogens are reduced to an extent equivalent to the reduction achieved by any of the above methods and must be approved by the department; or

(b) Class B - Alternative 2. The geometric mean of the density of fecal coliform of seven analyses representative of the biosolids to be land-applied must be less than either 2,000,000 Most Probable Number per gram of total solids (dry weight basis) or 2,000,000 Colony Forming Units per gram of total solids (dry weight basis).

(ii) One of the following vector attraction reduction requirements must be satisfied:

(a) the mass of volatile solids in the biosolids is reduced by a minimum of 38 percent;

(b) if the volatile solids reduction requirement cannot be met for anaerobically digested biosolids, vector attraction reduction can be demonstrated by anaerobically digesting a portion of the previously digested waste in a laboratory bench-scale unit for 40 additional days at a temperature between 30 and 37 degrees Celsius. Vector attraction reduction is achieved if the bench-scale digestion produces less than a 17 percent reduction in volatile solids content;

(c) if the volatile solids reduction requirement cannot be met for aerobically digested biosolids, vector attraction reduction can be demonstrated by aerobically digesting a portion of the previously digested waste that has a percent solids of two percent or less in a laboratory bench-scale unit for an additional 30 days at 20 degrees Celsius. Vector attraction reduction is achieved if the bench scale digestion produces less than a 15 percent

reduction in volatile solids content;

(d) the specific oxygen uptake rate (SOUR) for biosolids treated in an aerobic process must be equal to or less than 1.5 milligrams of oxygen per hour per gram of total solids (dry weight basis) at a temperature of 20 degrees Celsius;

(e) biosolids is treated by an aerobic process for a minimum of 14 consecutive days. Throughout that treatment time, the temperature of the waste must remain higher than 40 degrees Celsius and the average temperature of the waste must be higher than 45 degrees Celsius;

(f) the pH of the biosolids must be raised to 12 standard units or higher by alkali addition and, without the addition of more alkali, must remain at 12 standard units or higher for two hours and then remain at 11.5 standard units or higher for an additional 22 hours;

(g) for biosolids that does not contain untreated solids generated in a primary wastewater treatment process, the percent solids of the waste must be equal to or greater than 75 percent, before mixing with other materials, until land application;

(h) for biosolids that contains untreated solids generated in a primary wastewater treatment process, the percent solids of the waste must be equal to or greater than 90 percent, before mixing with other materials, until land application;

(i) biosolids must be injected below the surface of the land. No significant amount of waste can be present on the land surface within one hour after the waste is applied; or

(j) biosolids must be incorporated into the soil within six hours after application on the land.

(iii) Access and crop restrictions:

(a) public access to land must be restricted during land application and for at least one

year after land application. Access must be controlled during that period by the use of posted signs, the use of fences and gates or other appropriate means;

(b) food crops with harvested parts that touch the biosolids/soil mixture and are totally above the land surface must not be grown for at least 14 months after land application. Food crops with harvested parts below the surface of the land must not be grown for at least 38 months after land application;

(c) food crops grown above the soil with harvested parts that do not touch the biosolids/soil mixture, feed crops and fiber crops must not be grown for at least 30 days after land application;

(d) animals must not be grazed on the land for at least 30 days after land application; and

(e) turf grown on land where biosolids has been applied must not be grown for one year after land application when the harvested turf will be placed on either land with a high potential for public exposure or a lawn.

(3) Monitoring, recordkeeping and reporting.

(i) Each biosolids source must be analyzed annually in accordance with the following:

(a) the parameters for analysis are found in Table 1 in section 361-3.9 of this Part;

(b) the minimum number of analyses, for each biosolids source, is dependent upon the amount of waste that was land applied, as indicated in Table 3 in section 361-3.9 of this Part;

(c) with the exception of pH and total solids, all results must be reported on a dry weight basis. The analyses must comply with the criteria found in clauses 361-2.4(e)(1)(ii)(f), (g); and (j) of this Subpart. After the waste has been monitored for two years at the frequency outlined in this paragraph,

the department can reduce the annual number of analyses required if the quality is consistently significantly below the quality standards; and

(d) wastewater and partially treated biosolids that are generated at one facility and treated at another wastewater treatment facility before land application are not considered separate sources subject to the criteria in this paragraph. The resultant biosolids generated for land application are subject to this paragraph.

(ii) Sufficient monitoring data and other information must be obtained and retained to demonstrate compliance with the requirements of this Subpart. The frequency and type of monitoring necessary to demonstrate compliance with pathogen and vector attraction reduction criteria will depend on the methods used, and will be determined by the department.

(iii) Annual soil sampling is required. Criteria applicable to annual soil sampling are found in paragraph 361-2.4(e)(5) of this Subpart.

(e) Land application of other waste. In addition to the requirements identified in subdivisions 361-2.5(a) through (c) of this Subpart, a facility for waste other than biosolids or septage must comply with the following criteria:

(1) Domestic sewage or septage content. If there is any domestic sewage or septage contribution to the treatment facility generating the waste, the waste treatment process must satisfy the pathogen and vector attraction reduction requirements of this Subpart unless it can be demonstrated that the sanitary waste is a minor portion of the waste stream and that *Salmonella* sp. bacteria, enteric viruses, and viable helminth ova are below detectable levels.

(2) Nutrient or lime content. The waste must contain at least one percent total Kjeldahl nitrogen or at least 50 percent calcium carbonate equivalence, or provide sufficient documentation to demonstrate that the material is a benefit to the soil or plant grown.

(3) Monitoring, recordkeeping, and reporting. Annual waste monitoring can be required, depending on the characteristics of the waste. The parameters for analysis and the frequency will be determined by the department depending on the quantity and quality of the waste.

Section 361-2.6 Permit application requirements for storage facilities

A storage facility for waste destined for land application, that is not an exempt facility or subject to the registration provisions of section 361-2.3 of this Subpart, must obtain a permit and must submit an application that includes the requirements identified in this section and section 360.16. The application must include:

(a) For surface impoundments, a construction plan for the facility including a construction quality assurance/construction quality control plan.

(b) For surface impoundments, a hydrogeologic report that is consistent with the applicable provisions of Part 363 and that identifies or characterizes the depth to groundwater and bedrock, the critical stratigraphic section and the direction of groundwater flow. The report must also discuss the monitorability of the facility, location of any recharge areas for primary or principal aquifers and the location of any unstable areas.

(c) A description of how the facility will comply with the operating requirements in Part 360 of this Title and section 361-2.7 of this Subpart.

Section 361-2.7 Design and operating requirements for storage facilities

A storage facility required to obtain a permit must, in addition to the requirements identified in Part 360 of this Title, design, construct, maintain, and operate the facility in compliance with the following criteria.

(a) The minimum horizontal separation distances from the perimeter of the storage facility must be, at a minimum, 50 feet to the property line, 100 feet to a surface water body or potable water well, and 500 feet (1,500 feet for a surface impoundment or open tank) to a residence, place of business, or public contact area. The separation requirement does not apply to the landowner's or operator's residence.

(b) All samples obtained from the storage facility must be representative of the waste stored. The number of samples necessary will be determined by the department based on the waste type and quantity of waste stored.

(c) All storage facilities must be completely emptied, cleaned, and inspected at least once every 12 months. The department must be notified at least five business days before the cleaning operation is begun. Any damage or deterioration revealed by the inspection must be repaired before the storage facility again receives waste.

(d) Surface impoundments must be constructed above the special flood hazard area and must be constructed with a liner system to minimize percolation. The liner system must consist of either a minimum of two feet of compacted soil having a maximum remolded hydraulic conductivity of 1×10^{-7} centimeters per second or a geomembrane material approved by the department. The soil material particles must be able to pass through a one-inch screen.

(e) For surface impoundments, the facility must be monitorable and must not be located within the recharge area of a primary or principal aquifer or in an unstable area.

(f) If soil is used for a liner, the construction criteria in subparagraphs 363-6.7(b)(2)(ii) and (iii) of this Title apply.

(g) Surface impoundments must maintain a minimum of two feet of freeboard. The bottom of

the impoundment liner system must be a minimum of five feet above both seasonal high groundwater and bedrock.

(h) A minimum of one upgradient and two downgradient monitoring wells, or more as determined by the department, must be installed at a surface impoundment facility. If multiple surface impoundments are used and are not in close proximity to each other, then each impoundment must have separate monitoring well arrays.

(i) Existing water quality must be established before placement of any waste in a surface impoundment.

(j) Storage facilities other than surface impoundments can be constructed of concrete, steel, or other material approved by the department. The storage facility must be designed to maintain a minimum of two feet of freeboard.

(k) Quarterly sampling of the wells at surface impoundments must be conducted for the following parameters: chloride, nitrate, ammonia, sulfate, specific conductivity, total hardness, alkalinity, total organic carbon and chemical oxygen demand. In addition, for biosolids storage facilities, annual sampling is required for the following parameters: arsenic, cadmium, copper, lead, mercury, molybdenum, nickel, selenium, zinc, boron, barium, beryllium, cyanide, turbidity and volatile organic compounds. All samples must be representative of the material sampled. All analyses must be performed by a laboratory certified by the Department of Health, using methods acceptable to the department, unless use of an alternate laboratory or method is authorized by the department.

(1) The department can require sampling for additional parameters based on the type of waste stored and past monitoring results.

(2) Sampling results reported to the department must include a copy of the laboratory results, sampling methods, sampling personnel, dates and times samples were taken, purge volumes, field

parameters and other relevant information.

(3) The department must be notified at least five business days before each sampling event.

Section 361-3.9 Tables

Table 1
Parameters for Analysis

| | | |
|-------------------------|-----------------------|---|
| Total Kjeldahl Nitrogen | Arsenic (As) | Products must also analyze for: |
| Ammonia | Cadmium (Cd) | |
| Nitrate | Chromium (total) (Cr) | Fecal coliform or Salmonella sp. bacteria |
| Total Phosphorous | Copper (Cu) | |
| Total Potassium | Lead (Pb) | |
| pH | Mercury (Hg) | |
| Total Solids | Molybdenum (Mo) | |
| Total Volatile Solids | Nickel (Ni) | |
| | Selenium (Se) | |
| | Zinc (Zn) | |

Table 2
Analyses Required with Permit Application

| Biosolids/Sludge Used (dry tons/year) | Minimum Number of Analyses |
|---------------------------------------|----------------------------|
| >15,000 | 12 |
| >2,500 to 15,000 | 6 |
| 200 to 2,500 | 3 |
| 25 to 199 | 2 |
| <25 | 1 |

Table 3
Analyses Required During Operation - Biosolids

| Biosolids Used (dry tons/year) | Minimum Number of Analyses | Reduced Frequency for Low Pollutants* |
|--------------------------------|----------------------------|---------------------------------------|
| >15,000 | 24 | 12 |
| >2,500 to 15,000 | 12 | 6 |
| 200 to 2,500 | 6 | 4 |
| 25 to 199 | 4 | 2 |
| <25 | 2 | 1 |

*Applies to facilities where two consecutive years of biosolids pollutant levels are all at or below one-half of the limits found in Table 6 if approved by the department.

Table 4
Annual Product Testing Frequency - Biosolids/Sludge/MSW

| Average Product Generated (cubic yards per day) | Number of Analyses |
|--|--------------------|
| >50 | 52 |
| 5-50 | 12 |
| <5 | 6 |

Table 5
Annual Product Testing Frequency - SSO

| Average Product Generated (cubic yards per day) | Number of Analyses |
|--|--------------------|
| >50 | 12 |
| 5-50 | 4 |
| <5 | 2 |

Table 6
Pollutant Limits

| Parameter | Maximum Concentration mg/kg, dry weight |
|---------------------|--|
| Arsenic (As) | 41 |
| Cadmium (Cd) | 10 |
| Chromium (Cr-total) | 1,000 |
| Copper (Cu) | 1,500 |
| Lead (Pb) | 300 |
| Mercury (Hg) | 10 |
| Molybdenum (Mo) | 40 |
| Nickel (Ni) | 200 |
| Selenium (Se) | 100 |
| Zinc (Zn) | 2,500 |