



State of Ohio Environmental Protection Agency

STREET ADDRESS:

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50 W. Town St., Suite 700
Columbus, Ohio 43215

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P.O. Box 1049
Columbus, OH 43216-1049

3/10/2009

Certified Mail

Dean Posekany
Columbus Southerly Wastewater Treatment Plant
Department of Public Utilities
6977 South High Street, Box 95C, Rt#3
Lockbourne, OH 43137-9702

RE: DRAFT AIR POLLUTION PERMIT-TO-INSTALL
Facility ID: 0125040420
Permit Number: 01-12153
Permit Type: Initial Installation
County: Franklin

Yes	TOXIC REVIEW
No	PSD
No	SYNTHETIC MINOR
No	CEMS
No	MACT
No	NSPS
No	NESHAPS
No	NETTING
No	MAJOR NON-ATTAINMENT
Yes	MODELING SUBMITTED

Dear Permit Holder:

A draft of the Ohio Administrative Code (OAC) Chapter 3745-31 Air Pollution Permit-to-Install for the referenced facility has been issued for the emissions unit(s) listed in the Authorization section of the enclosed draft permit. This draft action is not an authorization to begin construction or modification of your emissions unit(s). The purpose of this draft is to solicit public comments on the permit. A public notice will appear in the Ohio EPA Weekly Review and the local newspaper, The Columbus Dispatch. A copy of the public notice and the draft permit are enclosed. This permit has been posted to the Division of Air Pollution Control (DAPC) Web page <http://www.epa.state.oh.us/dapc> in Microsoft Word and Adobe Acrobat format. Comments will be accepted as a marked-up copy of the draft permit or in narrative format. Any comments must be sent to the following:

Andrew Hall
Permit Review/Development Section
Ohio EPA, DAPC
122 South Front Street
Columbus, Ohio 43215

and Ohio EPA DAPC, Central District Office
50 West Town Street, 6th Floor
P.O. Box 1049
Columbus, OH 43216-1049

Comments and/or a request for a public hearing will be accepted within 30 days of the date the notice is published in the newspaper. You will be notified in writing if a public hearing is scheduled. A decision on issuing a final permit-to-install will be made after consideration of comments received and oral testimony if a public hearing is conducted. Any permit fee that will be due upon issuance of a final Permit-to-Install is indicated in the Authorization section. Please do not submit any payment now. If you have any questions, please contact Ohio EPA DAPC, Central District Office at (614)728-3778.

Sincerely,

Michael W. Ahern, Manager
Permit Issuance and Data Management Section, DAPC

Cc: U.S. EPA
Ohio EPA-CDO

Ted Strickland, Governor
Lee Fisher, Lieutenant Governor
Chris Korleski, Director

PUBLIC NOTICE
Issuance Of Draft Air Pollution Permit-To-Install
Columbus Southerly Wastewater Treatment Plant

Issue Date: 3/10/2009
Permit Number: 01-12153
Permit Type: Initial Installation
Permit Description: Sewage biosolids delivery and mixing.
Facility ID: 0125040420
Facility Location: Columbus Southerly Wastewater Treatment Plant
6977 South High Street, Box 95C, Rt#3
Lockbourne, OH 43137-9702
Facility Description: Oil and Gas Pipeline and Related Structures Construction

Chris Korleski, Director of the Ohio Environmental Protection Agency, 50 West Town Street, Columbus Ohio, has issued a draft action of an air pollution control permit-to-install (PTI) for an air contaminant source at the location identified above on the date indicated. Installation of the air contaminant source may proceed upon final issuance of the PTI. Comments concerning this draft action, or a request for a public meeting, must be sent in writing no later than thirty (30) days from the date this notice is published. All comments, questions, requests for permit applications or other pertinent documentation, and correspondence concerning this action must be directed to Richard Lindstrom at Ohio EPA DAPC, Central District Office, 50 West Town Street, 6th Floor P.O. Box 1049 or (614)728-3778. The permit can be downloaded from the Web page: www.epa.state.oh.us/dapc



Permit Strategy Write-Up

1. Check all that apply:

Synthetic Minor Determination

Netting Determination

2. **Source Description:**

The applicant, City of Columbus Compost Facility (Com-Til), is a facility designed to reuse sewage biosolids generated at the Southerly Waste Water Treatment Plant (Southerly WWTP) and as needed Jackson Pike WWTP. The compost facility is located adjacent to the Southerly Waste Water Treatment Plant. The facility initiated operations in 1980, therefore, is subject to best available technology (BAT). The facility is located at the following address:

7000 Jackson Pike South
Lockbourne, Ohio 43137

3. **Facility Emissions and Attainment Status:**

City of Columbus Compost Facility (Com-Til) is located in Franklin County, which is currently attainment for all criteria air pollutants, excluding PM₁₀ and ozone. The existing facility wide emissions are subject to the provisions of Title V program due to its relationship with the Southerly WWTP. The terms and conditions of this permit will be incorporated into the final Title V operating permit for Southerly WWTP.

Yearly potential emissions of volatile organic compounds from the aeration is 4.4 TPY, particulate emissions will be limited to 2.7 TPY, emissions of PM₁₀ is limited to 1.2 TPY, and air toxins are limited to 101.8 lbs/day for ammonia and 13.0 lbs/day for acetone.

4. **Source Emissions:**

F001- Aeration and Curing

The emission factor as submitted by the applicant. The emission limit of 1.0 lb/hr of VOC was obtained from testing performed in 1999 and 2006, as submitted with the PTI application dated May 2007, Appendix C, Table C-9.

The annual limit is based upon the hourly emissions limitation times the maximum operating schedule of 8,760 hours per year, divided by 2,000 lbs per ton.

$$(1.0 \text{ lb VOC/ hr}) \times (8760 \text{ hr/yr}) \times (1 \text{ ton} / 2000 \text{ lbs}) = 4.4 \text{ TPY}$$

This emissions unit is subject to the requirements air toxics rule. Modeling of ammonia and acetone was performed by the applicant. The results of the modeling can be found in the PTI application dated May 2007, Appendix E, Tables 2-1, and 2-2.



F002 - Paved Roadways and Parking Areas

The emission factor calculation for paved roadways and parking areas is found in AP-42 section 13.2.1 (November 2006) and shall be utilized to determine compliance. Initial compliance has been determined using inputs representing current conditions as follows:

$$E = k \frac{PM}{(sL/2)^{0.65} \times (W/3)^{1.5}}$$

Where:

- E = particulate emission factor (lbs PE/VMT),
- k = particle size multiplier for particle size range (0.082),
- sL = road surface silt loading (grams per square meter) (7.4 g/m²),
- W = average weight (tons) of the vehicles traveling the road (11.8 tons)

Therefore, E = 1.49 lbs particulate/VMT

Maximum travel = 72,000 VMT/year

(72,000 VMT/yr)(1.49 lbs PE/VMT) = 107,280 lbs of particulate/year
(107,280 lbs/year)(1 ton/2000 lbs) = 53.64 tons of particulate uncontrolled/year

Assume 95% control for roadway watering
(53.64 tons/year) (1- 0.95) = 2.68 tons of PM controlled/year

$$E = k \frac{PM10}{(sL/2)^{0.65} \times (W/3)^{1.5}}$$

Where:

- E = particulate emission factor (lbs PE/VMT),
- k = particle size multiplier for particle size range (0.016),
- sL = road surface silt loading (grams per square meter) (7.4 g/m²),
- W = average weight (tons) of the vehicles traveling the road (11.8 tons)

Therefore, E = 0.29 lb PM10/VMT

Maximum travel = 72,000 VMT/year

(72,000 VMT/yr)(0.29 lb PM10/VMT) = 20,880 lbs of PM10/year
(20,880 lbs PM10/year)(1 ton/2000 lbs) = 10.44 tons of PM10 uncontrolled/year

Assume 95% control for roadway watering
(10.44 tons/year) (1- 0.95) = 0.522 ton of PM10 controlled/year

F003 - Material Handling and Storage Piles

Material handling

The emissions for the material handling was derived from the emission factor calculation for material handling found in AP-42, Section 13.2.4 (November 2006). Initial compliance has been determined using inputs representing current conditions. The equation used is as follows:

$$E = k (0.0032)[(U/5)^{1.3}/(M/2)^{1.4}]$$



The current inputs to the equation and corresponding results can be found in the PTI application dated May 2007, Appendix C, Table C-5.

Storage Piles

The emissions for the storage piles was derived from the emission factor calculation for wind erosion from storage piles is from RACM, equation 2-12 (September, 1992) shall be utilized to determine compliance. Initial compliance has been determined using inputs representing current conditions as follows:

$$EF = 1.7(s/1.5)((365-p)/235)(f/15)$$

The current inputs to the equation and corresponding results can be found in the PTI application dated May 2007, Appendix C, Table C-4.

The final allowables were revised to reflect control efficiencies. The final allowables are as follows:

Assume 95% control for watering piles.

$$(7.6 \text{ tons PM}_{10}/\text{year})(1-.95) = \underline{0.38 \text{ ton of PM}_{10}/\text{year}}$$

$$(15.3 \text{ tons PM}/\text{year})(1-.95) = \underline{0.77 \text{ ton of PM}/\text{year}}$$

5. Conclusion:

None

6. Please provide additional notes or comments as necessary:

None

7. Total Permit Allowable Emissions Summary (for informational purposes only):

Pollutant	Tons Per Year
PM	3.45
PM ₁₀	1.2
VOC	4.4
Ammonia	18.6
Acetone	2.4



**State of Ohio Environmental Protection Agency
Division of Air Pollution Control**

DRAFT

Air Pollution Permit-to-Install
for
Columbus Southerly Wastewater Treatment Plant

Facility ID: 0125040420
Permit Number: 01-12153
Permit Type: Initial Installation
Issued: 3/10/2009
Effective: To be entered upon final issuance



State of Ohio Environmental Protection Agency
 Division of Air Pollution Control

Air Pollution Permit-to-Install
 for
 Columbus Southerly Wastewater Treatment Plant

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State of Ohio Environmental Protection Agency
Division of Air Pollution Control

Draft Permit-to-Install

Permit Number: 01-12153

Facility ID: 0125040420

Effective Date: To be entered upon final issuance

Authorization

Facility ID: 0125040420
Facility Description: Sewerage systems
Application Number(s): A0000590
Permit Number: 01-12153
Permit Description: Sewage biosolids delivery and mixing.
Permit Type: Initial Installation
Permit Fee: \$2,200.00 *DO NOT send payment at this time, subject to change before final issuance*
Issue Date: 3/10/2009
Effective Date: To be entered upon final issuance

This document constitutes issuance to:

Columbus Southerly Wastewater Treatment Plant
6977 South High Street
Box 95C, Rt#3
Lockbourne, OH 43137-9702

of a Permit-to-Install for the emissions unit(s) identified on the following page.

Ohio EPA District Office or local air agency responsible for processing and administering your permit:

Ohio EPA DAPC, Central District Office
50 West Town Street, 6th Floor
P.O. Box 1049
Columbus, OH 43216-1049
(614)728-3778

The above named entity is hereby granted a Permit-to-Install for the emissions unit(s) listed in this section pursuant to Chapter 3745-31 of the Ohio Administrative Code. Issuance of this permit does not constitute expressed or implied approval or agreement that, if constructed or modified in accordance with the plans included in the application, the emissions unit(s) of environmental pollutants will operate in compliance with applicable State and Federal laws and regulations, and does not constitute expressed or implied assurance that if constructed or modified in accordance with those plans and specifications, the above described emissions unit(s) of pollutants will be granted the necessary permits to operate (air) or NPDES permits as applicable.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Chris Korleski
Director



Authorization (continued)

Permit Number: 01-12153

Permit Description: Sewage biosolids delivery and mixing.

Permits for the following Emissions Unit(s) or groups of Emissions Units are in this document as indicated below:

Emissions Unit ID:	F001
Company Equipment ID:	Aeration with biofiltration and Curing.
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	F002
Company Equipment ID:	Paved roadways and Parking Areas.
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	F003
Company Equipment ID:	Material Handling and Storage Piles.
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable



State of Ohio Environmental Protection Agency
Division of Air Pollution Control

Draft Permit-to-Install

Permit Number: 01-12153

Facility ID: 0125040420

Effective Date: To be entered upon final issuance

A. Standard Terms and Conditions



1. Federally Enforceable Standard Terms and Conditions

- a) All Standard Terms and Conditions are federally enforceable, with the exception of those listed below which are enforceable under State law only:
 - (1) Standard Term and Condition A. 2.a), Severability Clause
 - (2) Standard Term and Condition A. 3.c) through A. 3.e) General Requirements
 - (3) Standard Term and Condition A. 6.c) and A. 6.d), Compliance Requirements
 - (4) Standard Term and Condition A. 9., Reporting Requirements
 - (5) Standard Term and Condition A. 10., Applicability
 - (6) Standard Term and Condition A. 11.b) through A. 11.e), Construction of New Source(s) and Authorization to Install
 - (7) Standard Term and Condition A. 14., Public Disclosure
 - (8) Standard Term and Condition A. 15., Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations
 - (9) Standard Term and Condition A. 16., Fees
 - (10) Standard Term and Condition A. 17., Permit Transfers

2. Severability Clause

- a) A determination that any term or condition of this permit is invalid shall not invalidate the force or effect of any other term or condition thereof, except to the extent that any other term or condition depends in whole or in part for its operation or implementation upon the term or condition declared invalid.
- b) All terms and conditions designated in parts B and C of this permit are federally enforceable as a practical matter, if they are required under the Act, or any its applicable requirements, including relevant provisions designed to limit the potential to emit of a source, are enforceable by the Administrator of the U.S. EPA and the State and by citizens (to the extent allowed by section 304 of the Act) under the Act. Terms and conditions in parts B and C of this permit shall not be federally enforceable and shall be enforceable under State law only, only if specifically identified in this permit as such.

3. General Requirements

- a) The permittee must comply with all terms and conditions of this permit. Any noncompliance with the federally enforceable terms and conditions of this permit constitutes a violation of the Act, and is grounds for enforcement action or for permit revocation, revocation and re-issuance, or modification.



- b) It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the federally enforceable terms and conditions of this permit.
- c) This permit may be modified, revoked, or revoked and reissued, for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or revocation, or of a notification of planned changes or anticipated noncompliance does not stay any term and condition of this permit.
- d) This permit does not convey any property rights of any sort, or any exclusive privilege.
- e) The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying or revoking this permit or to determine compliance with this permit. Upon request, the permittee shall also furnish to the Director or an authorized representative of the Director, copies of records required to be kept by this permit. For information claimed to be confidential in the submittal to the Director, if the Administrator of the U.S. EPA requests such information, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality.

4. Monitoring and Related Record Keeping and Reporting Requirements

- a) Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:
 - (1) The date, place (as defined in the permit), and time of sampling or measurements.
 - (2) The date(s) analyses were performed.
 - (3) The company or entity that performed the analyses.
 - (4) The analytical techniques or methods used.
 - (5) The results of such analyses.
 - (6) The operating conditions existing at the time of sampling or measurement.
- b) Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include, but not be limited to all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.
- c) Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall submit required reports in the following manner:
 - (1) Reports of any required monitoring and/or recordkeeping of federally enforceable information shall be submitted to the Ohio EPA DAPC, Central District Office.



(2) Quarterly written reports of (i) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, excluding deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06, that have been detected by the testing, monitoring and recordkeeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures taken, shall be made to the Ohio EPA DAPC, Central District Office. The written reports shall be submitted (i.e., postmarked) quarterly, by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. See A.15. below if no deviations occurred during the quarter.

(3) Written reports, which identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements contained in this permit shall be submitted (i.e., postmarked) to the Ohio EPA DAPC, Central District Office every six months, by January 31 and July 31 of each year for the previous six calendar months. If no deviations occurred during a six-month period, the permittee shall submit a semi-annual report, which states that no deviations occurred during that period.

(4) This permit is for an emissions unit located at a Title V facility. Each written report shall be signed by a responsible official certifying that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.

d) The permittee shall report actual emissions pursuant to OAC Chapter 3745-78 for the purpose of collecting Air Pollution Control Fees.

5. Scheduled Maintenance/Malfunction Reporting

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction, i.e., upset, of any emissions units or any associated air pollution control system(s) shall be reported to the Ohio EPA DAPC, Central District Office in accordance with paragraph (B) of OAC rule 3745-15-06. (The definition of an upset condition shall be the same as that used in OAC rule 3745-15-06(B)(1) for a malfunction.) The verbal and written reports shall be submitted pursuant to OAC rule 3745-15-06.

Except as provided in that rule, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emission unit(s) that is (are) served by such control system(s).

6. Compliance Requirements

a) The emissions unit(s) identified in this Permit shall remain in full compliance with all applicable State laws and regulations and the terms and conditions of this permit.

b) Any document (including reports) required to be submitted and required by a federally applicable requirement in this permit shall include a certification by a responsible official that, based on information and belief formed after reasonable inquiry, the statements in the document are true, accurate, and complete.

c) Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Director of the Ohio EPA or an authorized representative of the Director to:



- (1) At reasonable times, enter upon the permittee's premises where a source is located or the emissions-related activity is conducted, or where records must be kept under the conditions of this permit.
 - (2) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, subject to the protection from disclosure to the public of confidential information consistent with ORC section 3704.08.
 - (3) Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.
 - (4) As authorized by the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit and applicable requirements.
- d) The permittee shall submit progress reports to the Ohio EPA DAPC, Central District Office concerning any schedule of compliance for meeting an applicable requirement. Progress reports shall be submitted semiannually or more frequently if specified in the applicable requirement or by the Director of the Ohio EPA. Progress reports shall contain the following:
- (1) Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.
 - (2) An explanation of why any dates in any schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.

7. Best Available Technology

As specified in OAC Rule 3745-31-05, new sources that must employ Best Available Technology (BAT) shall comply with the Applicable Emission Limitations/Control Measures identified as BAT for each subject emissions unit.

8. Air Pollution Nuisance

The air contaminants emitted by the emissions units covered by this permit shall not cause a public nuisance, in violation of OAC rule 3745-15-07.

9. Reporting Requirements

The permittee shall submit required reports in the following manner:

- a) Reports of any required monitoring and/or recordkeeping of state-only enforceable information shall be submitted to the Ohio EPA DAPC, Central District Office.
- b) Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (a) any deviations (excursions) from state-only required emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and recordkeeping requirements specified in this permit, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the Ohio EPA DAPC, Central District Office. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted (i.e.,



postmarked) quarterly, by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

10. Applicability

This Permit-to-Install is applicable only to the emissions unit(s) identified in the Permit-to-Install. Separate application must be made to the Director for the installation or modification of any other emissions unit(s).

11. Construction of New Sources(s) and Authorization to Install

- a) This permit does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. This permit does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the application and terms and conditions of this permit. The action of beginning and/or completing construction prior to obtaining the Director's approval constitutes a violation of OAC rule 3745-31-02. Furthermore, issuance of this permit does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Issuance of this permit is not to be construed as a waiver of any rights that the Ohio Environmental Protection Agency (or other persons) may have against the applicant for starting construction prior to the effective date of the permit. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed facilities cannot meet the requirements of this permit or cannot meet applicable standards.
- b) If applicable, authorization to install any new emissions unit included in this permit shall terminate within eighteen months of the effective date of the permit if the owner or operator has not undertaken a continuing program of installation or has not entered into a binding contractual obligation to undertake and complete within a reasonable time a continuing program of installation. This deadline may be extended by up to 12 months if application is made to the Director within a reasonable time before the termination date and the party shows good cause for any such extension.
- c) The permittee may notify Ohio EPA of any emissions unit that is permanently shut down (i.e., the emissions unit has been physically removed from service or has been altered in such a way that it can no longer operate without a subsequent "modification" or "installation" as defined in OAC Chapter 3745-31) by submitting a certification from the authorized official that identifies the date on which the emissions unit was permanently shut down. Authorization to operate the affected emissions unit shall cease upon the date certified by the authorized official that the emissions unit was permanently shut down. At a minimum, notification of permanent shut down shall be made or confirmed through completion of the annual PER covering the last period of operation of the affected emissions unit(s).
- d) The provisions of this permit shall cease to be enforceable for each affected emissions unit after the date on which an emissions unit is permanently shut down (i.e., emissions unit has been physically removed from service or has been altered in such a way that it can no longer operate without a subsequent "modification" or "installation" as defined in OAC Chapter 3745-31). All records relating to any permanently shutdown emissions unit, generated while the emissions unit was in operation, must be maintained in accordance with law. All reports required by this permit must be submitted for any period an affected emissions unit operated prior to permanent shut down. At a minimum, the permit requirements must be evaluated as part of the PER covering the last period the emissions unit operated.



No emissions unit certified by the authorized official as being permanently shut down may resume operation without first applying for and obtaining a permit pursuant to OAC Chapter 3745-31.

- e) The permittee shall comply with any residual requirements related to this permit, such as the requirement to submit a PER, air fee emission report, or other any reporting required by this permit for the period the operating provisions of this permit were enforceable, or as required by regulation or law. All reports shall be submitted in a form and manner prescribed by the Director. All records relating to this permit must be maintained in accordance with law.

12. Permit-To-Operate Application

The permittee is required to apply for a Title V permit pursuant to OAC Chapter 3745-77. The permittee shall submit a complete Title V permit application or a complete Title V permit modification application within twelve (12) months after commencing operation of the emissions units covered by this permit. However, if the proposed new or modified source(s) would be prohibited by the terms and conditions of an existing Title V permit, a Title V permit modification must be obtained before the operation of such new or modified source(s) pursuant to OAC rule 3745-77-04(D) and OAC rule 3745-77-08(C)(3)(d).

13. Construction Compliance Certification

The applicant shall identify the following dates in the online facility profile for each new emissions unit identified in this permit.

- a) Completion of initial installation date shall be entered upon completion of construction and prior to start-up.
- b) Commence operation after installation or latest modification date shall be entered within 90 days after commencing operation of the applicable emissions unit.

14. Public Disclosure

The facility is hereby notified that this permit, and all agency records concerning the operation of this permitted source, are subject to public disclosure in accordance with OAC rule 3745-49-03.

15. Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations

If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly (i.e., postmarked), by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters.

16. Fees

The permittee shall pay fees to the Director of the Ohio EPA in accordance with ORC section 3745.11 and OAC Chapter 3745-78. The permittee shall pay all applicable permit-to-install fees within 30 days after the issuance of any permit-to-install. The permittee shall pay all applicable permit-to-operate fees within thirty days of the issuance of the invoice.



State of Ohio Environmental Protection Agency
Division of Air Pollution Control

Draft Permit-to-Install

Permit Number: 01-12153

Facility ID: 0125040420

Effective Date: To be entered upon final issuance

17. Permit Transfers

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The Ohio EPA DAPC, Central District Office must be notified in writing of any transfer of this permit.

18. Risk Management Plans

If the permittee is required to develop and register a risk management plan pursuant to section 112(r) of the Clean Air Act, as amended, 42 U.S.C. 7401 et seq. ("Act"), the permittee shall comply with the requirement to register such a plan.

19. Title IV Provisions

If the permittee is subject to the requirements of 40 CFR Part 72 concerning acid rain, the permittee shall ensure that any affected emissions unit complies with those requirements. Emissions exceeding any allowances that are lawfully held under Title IV of the Act, or any regulations adopted thereunder, are prohibited.



State of Ohio Environmental Protection Agency
Division of Air Pollution Control

Draft Permit-to-Install

Permit Number: 01-12153

Facility ID: 0125040420

Effective Date: To be entered upon final issuance

B. Facility-Wide Terms and Conditions



State of Ohio Environmental Protection Agency
Division of Air Pollution Control

Draft Permit-to-Install
Permit Number: 01-12153
Facility ID: 0125040420

Effective Date: To be entered upon final issuance

1. All the following facility-wide terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:
 - a) None.



State of Ohio Environmental Protection Agency
Division of Air Pollution Control

Draft Permit-to-Install

Permit Number: 01-12153

Facility ID: 0125040420

Effective Date: To be entered upon final issuance

C. Emissions Unit Terms and Conditions



1. F001, Aeration with biofiltration and Curing.

Operations, Property and/or Equipment Description:

Aeration with biofiltration and Curing.

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)	Emissions shall not exceed: 1.0 pound per hour (lb/hr) and 4.4 tons per year of volatile organic compounds (VOC). See b(2)a , b(2)b, and b(2)c below.
b.	ORC 3704.03(F) (Toxic Air Contaminants)	See d.(2),(3), (4) and (5) below.

(2) Additional Terms and Conditions

a. The hourly and yearly emissions limitation for this emissions unit were established to reflect the potential to emit. Therefore, it is not necessary to develop additional monitoring, record keeping, and/or reporting requirements to ensure compliance with these limits.

b. The permittee shall vent the emissions from the aeration operation to a biofiltration system unit while operating this emissions unit. The system shall minimize odors during the aeration operation.

c. The daily sewage biosolids volume shall not exceed 200 wet tons per day.

d. In order to demonstrate compliance with the "Toxic Air Contaminant Statute", the Director has established, per ORC 3704.03(F)(4)(c), a limit for ammonia and acetone, which shall not exceed 89.4 pounds per day for ammonia or 13.0



pounds per day of acetone. This daily allowable emissions rate was calculated by multiplying the approved daily operating schedule submitted in the permit application, by the emission rate modeled (to determine the ground level concentration).

- e. The permittee will operate the facility consistent with the Odor Impact Minimization Plan, as submitted to Ohio EPA, DAPC, CDO on August 2008.
- c) Operational Restrictions
- (1) None.
- d) Monitoring and/or Recordkeeping Requirements
- (1) The permittee shall maintain records of the following information:
 - a. any day when either booster fan for a biofilter is not operated;
 - b. the reason for not operating the biofiltration system;
 - c. corrective measures taken to repair or resume operation of the biofiltration system;
 - d. the time, in hours, the biofiltration system was not operating; and
 - e. those days the daily sewage biosolids volume exceeded 200 wet tons per day.
 - (2) The permit to install for this/these emissions unit F001 was evaluated based on the actual materials and the design parameters of the emissions unit's(s') exhaust system, as specified by the permittee in the permit application. The "Toxic Air Contaminant Statute", ORC 3704.03(F), was applied to this/these emissions unit(s) for each toxic air contaminant listed in OAC rule 3745-114-01, using data from the permit application; and modeling was performed for each toxic air contaminant(s) emitted using an air dispersion model such as SCREEN 3.0, AERMOD, or ISCST3, or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the approved air dispersion model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as described in the Ohio EPA guidance document entitled "Review of New Sources of Air Toxic Emissions, Option A", as follows:
 - a. the exposure limit, expressed as a time-weighted average concentration for a conventional 8-hour workday and a 40-hour workweek, for each toxic compound(s) emitted from the emissions unit(s), (as determined from the raw materials processed and/or coatings or other materials applied) has been documented from one of the following sources and in the following order of preference (TLV was and shall be used, if the chemical is listed):
 - i. threshold limit value (TLV) from the American Conference of Governmental Industrial Hygienists' (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices";
 - or



- ii. STEL (short term exposure limit) or the ceiling value from the American Conference of Governmental Industrial Hygienists' (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; the STEL or ceiling value is multiplied by 0.737 to convert the 15-minute exposure limit to an equivalent 8-hour TLV.
- b. The TLV is divided by ten to adjust the standard from the working population to the general public (TLV/10).
- c. This standard is/was then adjusted to account for the duration of the exposure or the operating hours of the emissions unit(s), i.e., "X" hours per day and "Y" days per week, from that of 8 hours per day and 5 days per week. The resulting calculation was (and shall be) used to determine the Maximum Acceptable Ground-Level Concentration (MAGLC):

$$TLV/10 \times 8/X \times 5/Y = 4 TLV/XY = MAGLC$$

- d. The following summarizes the results of dispersion modeling for the significant toxic contaminants or "worst case" toxic contaminants:

Toxic Contaminant: ammonia

TLV (mg/m3): 17.4

Maximum Hourly Emission Rate (lbs/hr): 3.72

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 360.4

MAGLC (ug/m3): 415

Toxic Contaminant: acetone

TLV (mg/m3): 1,187.12

Maximum Hourly Emission Rate (lbs/hr): 0.58

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 91.66

MAGLC (ug/m3): 28,265

The permittee, having demonstrated that emissions of ammonia and acetone, from emissions unit F001, is estimated to be equal or greater than eighty per cent, but less than 100 per cent of the maximum acceptable ground level concentration (MAGLC), shall not operate the emissions unit(s) at a rate that would exceed the daily emissions rate, process weight rate, and/or restricted hours of operations, as allowed in this permit; and any new raw material or processing agent shall not be applied without evaluating each component toxic air contaminant in accordance with the "Toxic Air Contaminant Statute", ORC 3704.03(F).

- (3) Prior to making any physical changes to or changes in the method of operation of the emissions unit(s), that could impact the parameters or values that were used in the



predicted 1-hour maximum ground-level concentration”, the permittee shall re-model the change(s) to demonstrate that the MAGLC has not been exceeded. Changes that can affect the parameters/values used in determining the 1-hour maximum ground-level concentration include, but are not limited to, the following:

- a. changes in the composition of the materials used or the use of new materials, that would result in the emission of a new toxic air contaminant with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled;
- b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any toxic air contaminant listed in OAC rule 3745-114-01, that was modeled from the initial (or last) application; and
- c. physical changes to the emissions unit(s) or its/their exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the “Toxic Air Contaminant Statute”, ORC 3704.03(F), will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01 solely due to a non-restrictive change to a parameter or process operation, where compliance with the “Toxic Air Contaminant Statute”, ORC 3704.03(F), has been documented. If the change(s) meet(s) the definition of a “modification”, or if a new toxic is emitted, or the modeled toxic(s) is/are expected to exceed the previous modeled level(s), then the permittee shall apply for and obtain a final permit-to-install prior to the change. The Director may consider any significant departure from the operations of the emissions unit, described in the permit-to-install application, as a modification that results in greater emissions than the emissions rate modeled to determine the ground level concentration; and may require the permittee to submit a permit-to-install application for the increased emissions.

[ORC 3704.03(F)(3)(c) and F(4)], [OAC rule 3745-114-01], Option A, Engineering Guide #70

- (4) The permittee shall collect, record, and retain the following information for each toxic evaluation conducted to determine compliance with the “Toxic Air Contaminant Statute”:
 - a. a description of the parameters/values used in each compliance demonstration and the parameters or values changed for any re-evaluation of the toxic(s) modeled (the composition of materials, new toxic contaminants emitted, change in stack/exhaust parameters, etc.);
 - b. the Maximum Acceptable Ground-Level Concentration (MAGLC) for each significant toxic contaminant or worst-case contaminant, calculated in accordance with the “Toxic Air Contaminant Statute”, ORC 3704.03(F);
 - c. a copy of the computer model run(s), that established the predicted 1-hour maximum ground-level concentration that demonstrated the emissions unit(s) to be in compliance with the “Toxic Air Contaminant Statute”, ORC 3704.03(F), initially and for each change that requires re-evaluation of the toxic air contaminant emissions; and



- d. the documentation of the initial evaluation of compliance with the “Toxic Air Contaminant Statute”, ORC 3704.03(F), and documentation of any determination that was conducted to re-evaluate compliance due to a change made to the emissions unit(s) or the materials applied.

[ORC 3704.03(F)(3)(c) and F(4)], [OAC rule 3745-114-01], Option A, Engineering Guide #70

- (5) The permittee shall maintain a record of any change made to a parameter or value used in the dispersion model, used to demonstrate compliance with the “Toxic Air Contaminant Statute”, ORC 3704.03(F), through the predicted 1-hour maximum ground-level concentration. The record shall include the date and reason(s) for the change and if the change would increase the ground-level concentration.

[ORC 3704.03(F)(3)(c) and F(4)], [OAC rule 3745-114-01], Option A, Engineering Guide #70

e) Reporting Requirements

- (1) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.

[OAC rule 3745-15-03(B)(2)] and [OAC rule 3745-15-03(D)]

- (2) The permittee shall submit quarterly deviation reports, to the appropriate Ohio EPA District Office or local air agency, documenting any exceedance of the daily limitation on toxic air emissions or any deviation from a restriction on the process or hours of operation, as established by the Director in order to maintain any toxic air contaminant below its MAGLC. The permittee shall also report any changes made, during the calendar quarter, to a parameter or value entered into the dispersion model that demonstrate compliance with the “Toxic Air Contaminant Statute”, ORC 3704.03(F). These quarterly reports shall be submitted by April 30, July 31, October 31, and January 31, and shall cover the records for the previous calendar quarters.

[ORC 3704.03(F)(3)(c) and F(4)], [OAC rule 3745-114-01], Option A, Engineering Guide #70

f) Testing Requirements

- (1) Compliance with the emission limitations established in section A.I.1 of this permit shall be determined in accordance with the following methods:

a. Emission Limitation:

1.0 pound per hour (lb/hr) and 4.4 ton per year of volatile organic compounds (VOC)

Applicable Compliance Method:



Compliance may be demonstrated with the emission factor as submitted by the applicant. The emission limit of 1.0 lb/hr of VOC was obtained from testing performed in 1999 and 2006, as submitted with the permit to install application.

The annual limit is based upon the hourly emissions limitation times the maximum operating schedule of 8,760 hours per year, divided by 2,000 lbs per ton.

$$(1.0 \text{ lb VOC/ hr}) \times (8760 \text{ hr/yr}) \times (1 \text{ ton} / 2000 \text{ lbs}) = 4.4 \text{ TPY}$$

g) Miscellaneous Requirements

- (1) None.



2. F002, Paved roadways and Parking Areas.

Operations, Property and/or Equipment Description:

Paved roadways and Parking Areas.

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)	0.52 ton/year of fugitive particulate matter of 10 microns or less (PM10) 2.68 tons/year of fugitive particulate emissions (PE) no visible PE except for one minute during any 60-minute period best available control measures that are sufficient to minimize or eliminate visible PE of fugitive dust (See b(2)a through b(2)f below.)
b.	OAC rule 3745-17-07(B)(5) (emissions unit is located in an area identified in Appendix A of OAC rule 3745-17-08)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
c.	OAC rule 3745-17-08(B) (emissions unit is located in an area identified in Appendix A of OAC rule 3745-17-08)	See b(2)a through b(2)f below.

(2) Additional Terms and Conditions

a. The permittee shall employ best available control measures on all paved roadways and parking areas for the purpose of ensuring compliance with the above-mentioned applicable requirements. Accordingly, the permittee will treat the paved roadways and parking areas by the application of chemical stabilization/dust suppressants and/or watering at sufficient treatment



frequencies to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

- b. The needed frequencies of implementation of the control measures shall be determined by the permittee's inspections pursuant to the monitoring section of this permit. Implementation of the control measures shall not be necessary for paved roadways and parking areas that are covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Implementation of any control measure may be suspended if unsafe or hazardous driving conditions would be created by its use.
- c. The permittee shall promptly remove, in such a manner as to minimize or prevent resuspension, earth and/or other material from paved streets onto which such material has been deposited by trucking or earth moving equipment or erosion by water or other means.
- d. Open-bodied vehicles transporting materials likely to become airborne shall have such materials covered at all times if the control measure is necessary for the materials being transported.
- e. The delivery of biosolids from a wastewater treatment plant shall be transported in a manner so as to minimize odors.
- f. Implementation of the above-mentioned control measures in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the best available technology requirements of OAC rule 3745-31-05.

c) Operational Restrictions

- (1) None.

d) Monitoring and/or Recordkeeping Requirements

- (1) Except as otherwise provided in this section, the permittee shall perform inspections of each of the roadway segments and parking areas in accordance with the following frequencies:

<u>paved roadways and parking areas</u>	<u>minimum inspection frequency</u>
all roads and parking areas	daily

- (2) The purpose of the inspections is to determine the need for implementing the above-mentioned control measures. The inspections shall be performed during representative, normal traffic conditions. No inspection shall be necessary for a roadway or parking area that is covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Any required inspection that is not performed due to any of the above-identified events shall be performed as soon as such event(s) has (have) ended, except if the next required inspection is within one week.



- (3) The permittee shall maintain records of the following information:
 - a. the date and reason any required inspection was not performed, including those inspections that were not performed due to snow and/or ice cover or precipitation;
 - b. the date of each inspection where it was determined by the permittee that it was necessary to implement the control measures;
 - c. the dates the control measures were implemented; and
 - d. on a calendar quarter basis, the total number of days the control measures were implemented and the total number of days where snow and/or ice cover or precipitation were sufficient to not require the control measures.

The information required in 3.d. shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

e) Reporting Requirements

- (1) The permittee shall submit deviation reports that identify any of the following occurrences:
 - a. each day during which an inspection was not performed by the required frequency, excluding an inspection which was not performed due to an exemption for snow and/or ice cover or precipitation; and
 - b. each instance when a control measure, that was to be implemented as a result of an inspection, was not implemented.
- (2) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.

[OAC rule 3745-15-03(B)(2)] and [OAC rule 3745-15-03(D)]

f) Testing Requirements

- (1) Compliance with the emission limitations in section A.I.1. of the terms and conditions of this permit shall be determined in accordance with the following methods:
 - a. Emission Limitations:
 - 0.52 ton/year of fugitive PM10
 - 2.68 tons/year of fugitive PE



Applicable Compliance Method:

Compliance with fugitive PE and PM10 limitations shall be determined by using the emission factor equations in Section 13.2.1, in Compilation of Air Pollutant Emission Factors, AP-42, Fifth Edition, Volume 1 (revised 12/03) for paved roadways. Should further updates in AP-42 occur, the most current equations for paved roads shall be used. Assume 95% control efficiency for roadway and parking area watering.

b. Emission Limitation:

No visible PE from paved roadways and parking areas except for a period of time not to exceed one minute during any 60-minute observation period.

Applicable Compliance Method:

If required, compliance with the visible PE limitation listed above shall be determined in accordance with Test Method 22 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 1996, and the modifications listed in paragraphs (B)(4)(a) through (B)(4)(d) of OAC rule 3745-17-03.

g) Miscellaneous Requirements

- (1) None.



3. F003, Material Handling and Storage Piles.

Operations, Property and/or Equipment Description:

Material Handling and Storage Piles.

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)	0.4 ton/year of fugitive particulate matter of 10 microns or less (PM10) 0.8 ton/year of fugitive particulate emissions (PE) no visible PE except for one minute during any 60-minute period best available control measures that are sufficient to minimize or eliminate visible PE of fugitive dust (See b(2)a through b(2)e below.)
b.	OAC rule 3745-17-07(B)(6) (emissions unit is located in an area identified in Appendix A of OAC rule 3745-17-08)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
c.	OAC rule 3745-17-08(B) (emissions unit is located in an area identified in Appendix A of OAC rule 3745-17-08)	See b(2)a through b(2)e below.
d.	ORC 3704.03(F) (Toxic Air Contaminants)	See d.(7),(8), (9) and (10) below.

(2) Additional Terms and Conditions

a. The permittee shall employ best available control measures on all load-in and load-out operations associated with the storage piles for the purpose of ensuring compliance with the above-mentioned applicable requirements. Accordingly, the permittee will maintain minimal drop heights for stackers and front-loaders, and



apply watering/sprinkling systems at sufficient treatment frequencies to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

- b. The above-mentioned control measure(s) shall be employed for each load-in and load-out operation of each storage pile if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) are necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measure(s) shall continue during any such operation until further observation confirms that use of the measure(s) is unnecessary.
- c. The permittee shall employ best available control measures for wind erosion from the surfaces of all storage piles for the purpose of ensuring compliance with the above-mentioned applicable requirements. Accordingly, the permittee has committed to perform one or more of the following: (watering/sprinkling systems/hoses, covering the storage piles) to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.
- d. The above-mentioned control measure(s) shall be employed for wind erosion from each pile if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) are necessary to ensure compliance with the above-mentioned applicable requirements. Implementation of the control measure(s) shall not be necessary for a storage pile that is covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements.
- e. Implementation of the above-mentioned control measures in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the requirements of OAC rule 3745-31-05(A)(3).
- f. The permittee will operate the facility consistent with the Odor Impact Minimization Plan, as submitted to Ohio EPA, DAPC, CDO on August 2008.
- g. In order to demonstrate compliance with the "Toxic Air Contaminant Statute", the Director has established, per ORC 3704.03(F)(4)(c), a limit for ammonia, which shall not exceed 12.4 pounds per day from the finished product storage piles. This daily allowable emissions rate was calculated by multiplying the approved daily operating schedule submitted in the permit application, by the emission rate modeled (to determine the ground level concentration).

[ORC 3704.03(F)(3)(c) and F(4)], [OAC rule 3745-114-01], Option A, Engineering Guide #70

c) Operational Restrictions

- (1) None.



d) Monitoring and/or Recordkeeping Requirements

(1) Except as otherwise provided in this section, the permittee shall perform inspections of each load-in operation at each storage pile in accordance with the following frequencies:

<u>storage pile identification</u>	<u>minimum load-in inspection frequency</u>
all	daily

(2) Except as otherwise provided in this section, the permittee shall perform inspections of each load-out operation at each storage pile in accordance with the following frequencies:

<u>storage pile identification</u>	<u>minimum load-out inspection frequency</u>
all	daily

(3) Except as otherwise provided in this section, the permittee shall perform inspections of the wind erosion from pile surfaces associated with each storage pile in accordance with the following frequencies:

<u>storage pile identification</u>	<u>minimum wind erosion inspection frequency</u>
all	daily

(4) No inspection shall be necessary for wind erosion from the surface of a storage pile when the pile is covered with snow and/or ice and for any storage pile activity if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Any required inspection that is not performed due to any of the above identified events shall be performed as soon as such event(s) has (have) ended, except if the next required inspection is within one week.

(5) The purpose of the inspections is to determine the need for implementing the control measures specified in this permit for load-in and load-out of a storage pile, and wind erosion from the surface of a storage pile. The inspections shall be performed during representative, normal storage pile operating conditions.

(6) The permittee shall maintain records of the following information:

- a. the date and reason any required inspection was not performed, including those inspections that were not performed due to snow and/or ice cover or precipitation;
- b. the date of each inspection where it was determined by the permittee that it was necessary to implement the control measures;
- c. the dates the control measures were implemented; and
- d. on a calendar quarter basis, the total number of days the control measures were implemented and, for wind erosion from pile surfaces, the total number of days where snow and/or ice cover or precipitation were sufficient to not require the control measure(s).



The information required in 6.d. shall be kept separately for (i) the load-in operations, (ii) the load-out operations, and (iii) the pile surfaces (wind erosion), and shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

(7) The permit to install for this/these emissions unit F003 was evaluated based on the actual materials and the design parameters of the emissions unit's(s') exhaust system, as specified by the permittee in the permit application. The "Toxic Air Contaminant Statute", ORC 3704.03(F), was applied to this/these emissions unit(s) for each toxic air contaminant listed in OAC rule 3745-114-01, using data from the permit application; and modeling was performed for each toxic air contaminant(s) emitted using an air dispersion model such as SCREEN 3.0, AERMOD, or ISCST3, or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the approved air dispersion model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as described in the Ohio EPA guidance document entitled "Review of New Sources of Air Toxic Emissions, Option A", as follows:

a. the exposure limit, expressed as a time-weighted average concentration for a conventional 8-hour workday and a 40-hour workweek, for each toxic compound(s) emitted from the emissions unit(s), (as determined from the raw materials processed and/or coatings or other materials applied) has been documented from one of the following sources and in the following order of preference (TLV was and shall be used, if the chemical is listed):

i. threshold limit value (TLV) from the American Conference of Governmental Industrial Hygienists' (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; or

ii. STEL (short term exposure limit) or the ceiling value from the American Conference of Governmental Industrial Hygienists' (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; the STEL or ceiling value is multiplied by 0.737 to convert the 15-minute exposure limit to an equivalent 8-hour TLV.

b. The TLV is divided by ten to adjust the standard from the working population to the general public (TLV/10).

c. This standard is/was then adjusted to account for the duration of the exposure or the operating hours of the emissions unit(s), i.e., "X" hours per day and "Y" days per week, from that of 8 hours per day and 5 days per week. The resulting calculation was (and shall be) used to determine the Maximum Acceptable Ground-Level Concentration (MAGLC):

$$TLV/10 \times 8/X \times 5/Y = 4 TLV/XY = MAGLC$$

d. The following summarizes the results of dispersion modeling for the significant toxic contaminants or "worst case" toxic contaminants:

Toxic Contaminant: ammonia

TLV (mg/m3): 17.4



Maximum Hourly Emission Rate (lbs/hr): 0.52

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 360.4

MAGLC (ug/m3): 415

The permittee, having demonstrated that emissions of ammonia and acetone, from emissions unit F003, is estimated to be equal or greater than eighty per cent, but less than 100 per cent of the maximum acceptable ground level concentration (MAGLC), shall not operate the emissions unit(s) at a rate that would exceed the daily emissions rate, process weight rate, and/or restricted hours of operations, as allowed in this permit; and any new raw material or processing agent shall not be applied without evaluating each component toxic air contaminant in accordance with the "Toxic Air Contaminant Statute", ORC 3704.03(F).

- (8) Prior to making any physical changes to or changes in the method of operation of the emissions unit(s), that could impact the parameters or values that were used in the predicted 1-hour maximum ground-level concentration", the permittee shall re-model the change(s) to demonstrate that the MAGLC has not been exceeded. Changes that can affect the parameters/values used in determining the 1-hour maximum ground-level concentration include, but are not limited to, the following:
 - a. changes in the composition of the materials used or the use of new materials, that would result in the emission of a new toxic air contaminant with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled;
 - b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any toxic air contaminant listed in OAC rule 3745-114-01, that was modeled from the initial (or last) application; and
 - c. physical changes to the emissions unit(s) or its/their exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Toxic Air Contaminant Statute", ORC 3704.03(F), will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01 solely due to a non-restrictive change to a parameter or process operation, where compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), has been documented. If the change(s) meet(s) the definition of a "modification", or if a new toxic is emitted, or the modeled toxic(s) is/are expected to exceed the previous modeled level(s), then the permittee shall apply for and obtain a final permit-to-install prior to the change. The Director may consider any significant departure from the operations of the emissions unit, described in the permit-to-install application, as a modification that results in greater emissions than the emissions rate modeled to determine the ground level concentration; and may require the permittee to submit a permit-to-install application for the increased emissions.

[ORC 3704.03(F)(3)(c) and F(4)], [OAC rule 3745-114-01], Option A, Engineering Guide #70

- (9) The permittee shall collect, record, and retain the following information for each toxic evaluation conducted to determine compliance with the "Toxic Air Contaminant Statute":



- a. a description of the parameters/values used in each compliance demonstration and the parameters or values changed for any re-evaluation of the toxic(s) modeled (the composition of materials, new toxic contaminants emitted, change in stack/exhaust parameters, etc.);
- b. the Maximum Acceptable Ground-Level Concentration (MAGLC) for each significant toxic contaminant or worst-case contaminant, calculated in accordance with the “Toxic Air Contaminant Statute”, ORC 3704.03(F);
- c. a copy of the computer model run(s), that established the predicted 1-hour maximum ground-level concentration that demonstrated the emissions unit(s) to be in compliance with the “Toxic Air Contaminant Statute”, ORC 3704.03(F), initially and for each change that requires re-evaluation of the toxic air contaminant emissions; and
- d. the documentation of the initial evaluation of compliance with the “Toxic Air Contaminant Statute”, ORC 3704.03(F), and documentation of any determination that was conducted to re-evaluate compliance due to a change made to the emissions unit(s) or the materials applied.

[ORC 3704.03(F)(3)(c) and F(4)], [OAC rule 3745-114-01], Option A, Engineering Guide #70

- (10) The permittee shall maintain a record of any change made to a parameter or value used in the dispersion model, used to demonstrate compliance with the “Toxic Air Contaminant Statute”, ORC 3704.03(F), through the predicted 1-hour maximum ground-level concentration. The record shall include the date and reason(s) for the change and if the change would increase the ground-level concentration.

[ORC 3704.03(F)(3)(c) and F(4)], [OAC rule 3745-114-01], Option A, Engineering Guide #70

e) Reporting Requirements

- (1) The permittee shall submit deviation reports that identify any of the following occurrences:
 - a. each day during which an inspection was not performed by the required frequency, excluding an inspection which was not performed due to an exemption for snow and/or ice cover or precipitation; and
 - b. each instance when a control measure, that was to be implemented as a result of an inspection, was not implemented.
- (2) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.

[OAC rule 3745-15-03(B)(2)] and [OAC rule 3745-15-03(D)]



f) Testing Requirements

(1) Compliance with the emission limitations in section A.I.1. of the terms and conditions of this permit shall be determined in accordance with the following methods:

a. Emissions Limitations:

0.4 ton/year of fugitive PM10

0.8 ton/year of fugitive PE

Applicable Compliance Method:

Compliance with fugitive PE limitations shall be determined by using the emission factor equations in Sections 13.2.4 and 13.2.5, in Compilation of Air Pollutant Emission Factors, AP-42, Fifth Edition, Volume 1 (revised 1/95), for load-in operations, load-out operations, and wind erosion. Assume 95 % overall control efficiency for watering.

b. Emission Limitation:

There shall be no visible PE except for a period of time not to exceed one minute in any 60-minute observation period.

Applicable Compliance Method:

Compliance with the visible PE limitations for the storage piles identified above shall be determined in accordance with Test Method 22 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources").

g) Miscellaneous Requirements

(1) None.