



Environmental
Protection Agency

Ted Strickland, Governor
Lee Fisher, Lt. Governor
Chris Korleski, Director

11/1/2010

Edward Ewbank
LITTLE MIAMI, WWTP
C/O DIV OF WASTEWATER TREATMENT-MSD
1600 GEST ST
CINCINNATI, OH 45204

RE: DRAFT AIR POLLUTION PERMIT-TO-INSTALL AND OPERATE

Facility ID: 1431072069
Permit Number: P0106736
Permit Type: Renewal
County: Hamilton

Certified Mail

No	TOXIC REVIEW
No	PSD
No	SYNTHETIC MINOR TO AVOID MAJOR NSR
No	CEMS
No	MACT/GACT
No	NSPS
No	NESHAPS
No	NETTING
No	MAJOR NON-ATTAINMENT
No	MODELING SUBMITTED
Yes	SYNTHETIC MINOR TO AVOID TITLE V
Yes	FEDERALLY ENFORCABLE PTIO (FEPTIO)

Dear Permit Holder:

A draft of the Ohio Administrative Code (OAC) Chapter 3745-31 Air Pollution Permit-to-Install and Operate (PTIO) 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 Cincinnati Enquirer. A copy of the public notice and the draft permit are enclosed. This permit can be accessed electronically on the Division of Air Pollution Control (DAPC) Web page, www.epa.ohio.gov/dapc by clicking the "Issued Air Pollution Control Permits" link. 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 Hamilton County Dept. of Environmental Services
250 William Howard Taft Pkwy.
Cincinnati, OH 45219-2660

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 Hamilton County Dept. of Environmental Services at (513)946-7777.

Sincerely,

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

Cc: U.S. EPA Region 5 *Via E-Mail Notification*
HCDOES; Indiana; Kentucky



Permit Strategy Write-Up

1. Check all that apply:

- Synthetic Minor Determination
- Netting Determination

2. Source Description:

The emission unit is a 72 ton per day fluidized bed sewage sludge incinerator operated by the Metropolitan Sewer District. Emissions are controlled by venturi and impingement scrubbers in series.

3. Facility Emissions and Attainment Status:

MSD – Little Miami WWTP is a synthetic minor facility located in Hamilton County Ohio. Hamilton County is an attainment area for all criteria pollutants except fine particulates.

4. Source Emissions:

Potential emissions of Nickel are greater than 10 TPY, which would make MSD – Little Miami WWTP a Title V facility for HAPs. On 10/24/2002, a final modification to PTI 14-03931 was issued limiting Ni emissions to 9.9 TPY.

5. Conclusion:

Approval of a renewal of the FEPTIO for this source is recommended.

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

<u>Pollutant</u>	<u>Tons Per Year</u>
PE	17.1
PM10	5.8
SO2	97.2
VOC	36.1
NOx	65.7
CO	124.8
Arsenic	0.3
Beryllium	0.004
Cadmium	0.7
Chromium	8.3
Lead	1.9

Mercury	1.3
Nickel	9.9

PUBLIC NOTICE
Issuance of Draft Air Pollution Permit-To-Install and Operate
LITTLE MIAMI, WWTP

Issue Date: 11/1/2010

Permit Number: P0106736

Permit Type: Renewal

Permit Description: PTIO renewal for 72 ton per day fluidized bed sewage sludge incinerator first permitted under PTI 14- 03931 issued 10/24/02.

Facility ID: 1431072069

Facility Location: LITTLE MIAMI, WWTP
225 WILMER RD,
CINCINNATI, OH 45226

Facility Description: Sewage Treatment Facilities

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, federally enforceable permit-to-install and operate (PTIO) for the facility at the location identified above on the date indicated. 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 Mike Kramer at Hamilton County Dept. of Environmental Services, 250 William Howard Taft Pkwy., Cincinnati, OH 45219-2660 or (513)946-7777. The permit can be downloaded from the Web page: www.epa.ohio.gov/dapc

Ohio

**Environmental
Protection Agency**

DRAFT

**Division of Air Pollution Control
Permit-to-Install and Operate
for
LITTLE MIAMI, WWTP**

Facility ID: 1431072069
Permit Number: P0106736
Permit Type: Renewal
Issued: 11/1/2010
Effective: To be entered upon final issuance
Expiration: To be entered upon final issuance



Division of Air Pollution Control
Permit-to-Install and Operate
for
LITTLE MIAMI, WWTP

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Authorization

Facility ID: 1431072069
Application Number(s): A0040036
Permit Number: P0106736
Permit Description: PTIO renewal for 72 ton per day fluidized bed sewage sludge incinerator first permitted under PTI 14- 03931 issued 10/24/02.
Permit Type: Renewal
Permit Fee: \$0.00 *DO NOT send payment at this time, subject to change before final issuance*
Issue Date: 11/1/2010
Effective Date: To be entered upon final issuance
Expiration Date: To be entered upon final issuance
Permit Evaluation Report (PER) Annual Date: To be entered upon final issuance

This document constitutes issuance to:

LITTLE MIAMI, WWTP
225 WILMER RD
CINCINNATI, OH 45226

of a Permit-to-Install and Operate 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:

Hamilton County Dept. of Environmental Services
250 William Howard Taft Pkwy.
Cincinnati, OH 45219-2660
(513)946-7777

The above named entity is hereby granted this Permit-to-Install and Operate for the air contaminant source(s) (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 described emissions unit(s) will operate in compliance with applicable State and Federal laws and regulations.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Chris Korleski
Director



Authorization (continued)

Permit Number: P0106736

Permit Description: PTIO renewal for 72 ton per day fluidized bed sewage sludge incinerator first permitted under PTI 14- 03931 issued 10/24/02.

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

Emissions Unit ID:	N003
Company Equipment ID:	Incinerator#3
Superseded Permit Number:	P0098467
General Permit Category and Type:	Not Applicable



A. Standard Terms and Conditions

1. What does this permit-to-install and operate ("PTIO") allow me to do?

This permit allows you to install and operate the emissions unit(s) identified in this PTIO. You must install and operate the unit(s) in accordance with the application you submitted and all the terms and conditions contained in this PTIO, including emission limits and those terms that ensure compliance with the emission limits (for example, operating, recordkeeping and monitoring requirements).

2. Who is responsible for complying with this permit?

The person identified on the "Authorization" page, above, is responsible for complying with this permit until the permit is revoked, terminated, or transferred. "Person" means a person, firm, corporation, association, or partnership. The words "you," "your," or "permittee" refer to the "person" identified on the "Authorization" page above.

The permit applies only to the emissions unit(s) identified in the permit. If you install or modify any other equipment that requires an air permit, you must apply for an additional PTIO(s) for these sources.

3. What records must I keep under this permit?

You must keep all records required by this permit, including monitoring data, test results, strip-chart recordings, calibration data, maintenance records, and any other record required by this permit for five years from the date the record was created. You can keep these records electronically, provided they can be made available to Ohio EPA during an inspection at the facility. Failure to make requested records available to Ohio EPA upon request is a violation of this permit requirement.

4. What are my permit fees and when do I pay them?

There are two fees associated with permitted air contaminant sources in Ohio:

- PTIO fee. This one-time fee is based on a fee schedule in accordance with Ohio Revised Code (ORC) section 3745.11, or based on a time and materials charge for permit application review and permit processing if required by the Director.

You will be sent an invoice for this fee after you receive this PTIO and payment is due within 30 days of the invoice date. You are required to pay the fee for this PTIO even if you do not install or modify your operations as authorized by this permit.

- Annual emissions fee. Ohio EPA will assess a separate fee based on the total annual emissions from your facility. You self-report your emissions in accordance with Ohio Administrative Code (OAC) Chapter 3745-78. This fee assessed is based on a fee schedule in ORC section 3745.11 and funds Ohio EPA's permit compliance oversight activities. Unless otherwise specified, facilities subject to one or more synthetic minor restrictions must use Ohio EPA's "Air Services" to submit annual emissions associated with this permit requirement. Ohio EPA will notify you when it is time to report your emissions and to pay your annual emission fees.

5. When does my PTIO expire, and when do I need to submit my renewal application?

This permit expires on the date identified at the beginning of this permit document (see "Authorization" page above) and you must submit a renewal application to renew the permit. Ohio EPA will send a renewal notice to you approximately six months prior to the expiration date of this permit. However, it is very important that you submit a complete renewal permit application (postmarked prior to expiration of this permit) even if you do not receive the renewal notice.

If a complete renewal application is submitted before the expiration date, Ohio EPA considers this a timely application for purposes of ORC section 119.06, and you are authorized to continue operating the emissions unit(s) covered by this permit beyond the expiration date of this permit until final action is taken by Ohio EPA on the renewal application.

6. What happens to this permit if my project is delayed or I do not install or modify my source?

This PTIO expires 18 months after the issue date identified on the "Authorization" page above unless otherwise specified if you have not (1) started constructing the new or modified emission sources identified in this permit, or (2) entered into a binding contract to undertake such construction. This deadline can be extended by up to 12 months, provided you apply to Ohio EPA for this extension within a reasonable time before the 18-month period has ended and you can show good cause for any such extension.

7. What reports must I submit under this permit?

An annual permit evaluation report (PER) is required in addition to any malfunction reporting required by OAC rule 3745-15-06 or other specific rule-based reporting requirement identified in this permit. Your PER due date is identified in the Authorization section of this permit.

8. If I am required to obtain a Title V operating permit in the future, what happens to the operating provisions and PER obligations under this permit?

If you are required to obtain a Title V permit under OAC Chapter 3745-77 in the future, the permit-to-operate portion of this permit will be superseded by the issued Title V permit. From the effective date of the Title V permit forward, this PTIO will effectively become a PTI (permit-to-install) in accordance with OAC rule 3745-31-02(B). The following terms and conditions will no longer be applicable after issuance of the Title V permit: Section B, Term 1.b) and Section C, for each emissions unit, Term a)(2).

The PER requirements in this permit remain effective until the date the Title V permit is issued and is effective, and cease to apply after the effective date of the Title V permit. The final PER obligation will cover operations up to the effective date of the Title V permit and must be submitted on or before the submission deadline identified in this permit on the last day prior to the effective date of the Title V permit.

9. What are my obligations when I perform scheduled maintenance on air pollution control equipment?

You must perform scheduled maintenance of air pollution control equipment in accordance with OAC rule 3745-15-06(A). If scheduled maintenance requires shutting down or bypassing any air pollution control equipment, you must also shut down the emissions unit(s) served by the air pollution control equipment during maintenance, unless the conditions of OAC rule 3745-15-06(A)(3) are met. Any emissions that exceed permitted amount(s) under this permit (unless specifically exempted by rule) must be reported as deviations in the annual permit evaluation report (PER), including nonexempt excess emissions that occur during approved scheduled maintenance.

10. Do I have to report malfunctions of emissions units or air pollution control equipment? If so, how must I report?

If you have a reportable malfunction of any emissions unit(s) or any associated air pollution control system, you must report this to the Hamilton County Dept. of Environmental Services in accordance with OAC rule 3745-15-06(B). Malfunctions that must be reported are those that result in emissions that exceed permitted emission levels. It is your responsibility to evaluate control equipment breakdowns and operational upsets to determine if a reportable malfunction has occurred.

If you have a malfunction, but determine that it is not a reportable malfunction under OAC rule 3745-15-06(B), it is recommended that you maintain records associated with control equipment breakdown or process upsets. Although it is not a requirement of this permit, Ohio EPA recommends that you maintain records for non-reportable malfunctions.

11. Can Ohio EPA or my local air agency inspect the facility where the emission unit(s) is/are located?

Yes. Under Ohio law, the Director or his authorized representative may inspect the facility, conduct tests, examine records or reports to determine compliance with air pollution laws and regulations and the terms and conditions of this permit. You must provide, within a reasonable time, any information Ohio EPA requests either verbally or in writing.

12. What happens if one or more emissions units operated under this permit is/are shut down permanently?

Ohio EPA can terminate the permit terms associated with any permanently shut down emissions unit. "Shut down" means 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.

You should notify Ohio EPA of any emissions unit that is permanently shut down by submitting¹ a certification that identifies the date on which the emissions unit was permanently shut down. The certification must be submitted by an authorized official from the facility. You cannot continue to operate an emissions unit once the certification has been submitted to Ohio EPA by the authorized official.

You must comply with all recordkeeping and reporting for any permanently shut down emissions unit in accordance with the provisions of the permit, regulations or laws that were enforceable during the period of operation, such as the requirement to submit a PER, air fee emission report, or malfunction report. You must also keep all records relating to any permanently shutdown emissions unit, generated

¹ Permittees that use Ohio EPA's "Air Services" can mark the affected emissions unit(s) as "permanently shutdown" in the facility profile along with the date the emissions unit(s) was permanently removed and/or disabled. Submitting the facility profile update will constitute notifying of the permanent shutdown of the affected emissions unit(s).



while the emissions unit was in operation, for at least five years from the date the record was generated.

Again, you cannot resume operation of any emissions unit certified by the authorized official as being permanently shut down without first applying for and obtaining a permit pursuant to OAC Chapter 3745-31.

13. Can I transfer this permit to a new owner or operator?

You can transfer this permit to a new owner or operator. If you transfer the permit, you must follow the procedures in OAC Chapter 3745-31, including notifying Ohio EPA or the local air agency of the change in ownership or operator. Any transferee of this permit must assume the responsibilities of the transferor permit holder.

14. Does compliance with this permit constitute compliance with OAC rule 3745-15-07, "air pollution nuisance"?

This permit and OAC rule 3745-15-07 prohibit operation of the air contaminant source(s) regulated under this permit in a manner that causes a nuisance. Ohio EPA can require additional controls or modification of the requirements of this permit through enforcement orders or judicial enforcement action if, upon investigation, Ohio EPA determines existing operations are causing a nuisance.

15. What happens if a portion of this permit is determined to be invalid?

If a portion of this permit is determined to be invalid, the remainder of the terms and conditions remain valid and enforceable. The exception is where the enforceability of terms and conditions are dependent on the term or condition that was declared invalid.

B. Facility-Wide Terms and Conditions

1. This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).
 - a) For the purpose of a permit-to-install document, the facility-wide terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
 - (1) None.
 - b) For the purpose of a permit-to-operate document, the facility-wide terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.
 - (1) None.

C. Emissions Unit Terms and Conditions



1. N003, Incinerator#3

Operations, Property and/or Equipment Description:

72 dry ton-per-day fluidized bed incinerator for sewage sludge with venturi and impingment tray scrubbers

a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

(1) For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.

a. None.

(2) For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.

a. None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operation(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 are identified below. 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.	40 Code of Federal Regulations (CFR) Part 60, Subpart O	1.30 lbs of PE/ton of dry sludge input. See b)(2)b.
b.	40 CFR, Part 61, Subpart E	Mercury (Hg) emissions shall not exceed 3200 grams of Hg per 24-hour period.
c.	Ohio Administrative Code (OAC) rule 3745-31-05(A)(3)	Particulate emissions (PE) shall not exceed 93.6 pounds per day and 17.1 TPY. Particulate matter emissions 10 microns and less in diameter (PM10) shall not exceed 31.7 pounds per day and 5.8 TPY. Sulfur Dioxide (SO2) emissions shall not exceed 532.8 pounds per day and 97.2 TPY. Organic Compound (OC) emissions shall



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		<p>not exceed 198.0 pounds per day and 36.1 TPY.</p> <p>Nitrogen Oxide (NOx) emissions shall not exceed 360.0 pounds per day and 65.7 TPY.</p> <p>Carbon Monoxide (CO) emissions shall not exceed 684.0 pounds per day and 124.8 TPY.</p> <p>Arsenic emissions shall not exceed 1.6 pounds per day and 0.3 TPY.</p> <p>Cadmium emissions shall not exceed 4.0 lbs/day and 0.7 TPY.</p> <p>Chromium emissions shall not exceed 45.7 lbs/day and 8.3 TPY.</p> <p>Lead emissions shall not exceed 10.6 pounds per day and 1.9 TPY.</p> <p>Nickel emissions shall not exceed 141.1 pounds per day.</p> <p>Mercury emissions shall not exceed 1.3 TPY.</p> <p>The requirements of this rule also include compliance with the requirements of OAC rule 3745-31-05(D), 40 CFR Part 60, Subpart O, 40 CFR Part 61, Subpart E.</p>
d.	OAC rule 3745-31-05(D)	<p>Nickel emissions shall not exceed 9.9 TPY, based on a rolling, 12-month summation.</p> <p>See d)(6) and e)(1).</p>
e.	OAC rule 3745-17-07	<p>The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to 40 CFR Part 60 Subpart O.</p>
f.	OAC rule 3745-17-09	<p>The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to 40 CFR Part 60 Subpart O.</p>

- (2) Additional Terms and Conditions
- a. The emissions from this emissions unit shall not exceed the following:
 - i. The maximum allowable emissions for particulate matter shall not exceed 1.30 pounds of particulate matter per ton of dry sludge input according to 40 CFR 60.152. Compliance shall be determined using the test methods and equations specified in 40 CFR 60.154.
 - ii. Mercury emissions from this emission unit shall not exceed 3200 grams of mercury per 24-hour period according to 40 CFR 61.52(b).
 - b. The permittee shall not discharge into the atmosphere any gases which exhibit twenty percent (20%) opacity or greater according to 40 CFR 60.152.
 - c. Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by the use of venture and impingement tray scrubbers and compliance with all applicable emission limitations.
 - d. This emissions unit is not subject to the beryllium NESHAP (40 CFR Part 61, Subpart C) because the sewage sludge processed in this emissions unit does not contain any "beryllium containing waste". As defined in 40 CFR 61.31(g), "beryllium containing waste" means material contaminated with beryllium and/or beryllium compounds used or generated during any process or operation performed by a source subject to this subpart (40 CFR Part 61, Subpart C).
- c) Operational Restrictions
- (1) The combined scrubber system operating parameters shall be based on results of the most recent performance test which demonstrated compliance. The total pressure drop of the gas flow and the scrubber liquid flow rate range through the combined scrubber system shall be determined during the most recent performance test in which compliance is demonstrated.
 - (2) The average oxygen content of the incinerator exhaust gas for each one-hour incinerator operation period, shall not exceed the oxygen content measured during the most recent performance test by more than 3 percent.
 - (3) The bed of the fluidized bed incinerator shall be maintained at a temperature to be determined during a performance test in which compliance is demonstrated. The operation of the sewage sludge incinerator shall not exceed the maximum or minimum combustion temperatures (averaged over each one-hour incinerator operation period) as determined during the performance test of the sewage sludge incinerator.
 - (4) The permittee shall provide access to the sludge charged so that a well-mixed representative grab sample of the sludge can be obtained. Except as provided in paragraph 40 CFR 60.153(d), the permittee shall collect a representative grab sample of the sludge fed to the fluidized bed incinerator once per day. The permittee shall analyze the sample for volatile solids content and dry sludge content once per day. The grab sample shall be analyzed according to the method specified under 40 CFR 60.154(b)

- (5), except that the determination of volatile solids, step 3(b) of the method may not be deleted.
- (5) If the particulate matter emission rate measured during the performance test required under 40 CFR 60.154 (d) is less than 0.75 lb/ton, the permittee shall be required to comply with the requirements of paragraphs (a), (b), and (c), except for not being required to operate continuous monitoring devices for the mass or volume of sludge charged to the incinerator, the temperature of the incinerator bed, and the fuel flow to the incinerator. If exempt from continuous monitoring of the mass or volume of sludge, then the permittee shall maintain daily records of the amount of sludge charged.
- (6) Mercury shall be monitored as specified under 40 CFR 61 Subpart E.
- (7) The following quality assurance/quality control requirements shall apply:
- a. Fuel flow continuous monitoring - quarterly calibration error checks.
 - b. Temperature continuous monitoring - quarterly calibration error checks.
 - c. Rate of sludge charged to the incinerator continuous monitoring - quarterly calibration error check.
- (8) The incinerator, including all associated equipment and grounds, shall be designed, operated and maintained so as to prevent the emission of objectionable odors.
- d) Monitoring and/or Recordkeeping Requirements
- (1) The permittee shall calibrate, maintain, and operate the following monitoring devices:
- a. A flow measuring device which can be used to continuously determine either the mass or volume of sludge charged to the incinerator. The flow measuring device shall be certified by the manufacturer to have an accuracy of plus or minus 5 percent over its operating range. The amount of sludge charged shall be recorded during all periods of operation.
 - b. A monitoring device that continuously monitors and records the pressure drop of the gas flow through the combined wet scrubber system. This device shall be certified by the manufacturer to be accurate within plus or minus 1 inch water gauge and shall be calibrated on an annual basis in accordance with the manufacturer's instructions.
 - c. An oxygen content monitoring device that continuously measures and records the oxygen content of the incinerator exhaust gas. The oxygen monitor shall be located upstream of any rabble shaft cooling air inlet into the incinerator exhaust gas stream, fan, ambient air recirculation damper, or any other source of dilution air.
- The oxygen monitoring device shall be certified by the manufacturer to have a relative accuracy of plus or minus 5 percent over its operating range and shall be calibrated according to the methods prescribed by the manufacturer at least once each 24 hour operating period.

- d. A monitoring device that monitors the water flow rate through the scrubber so that proper operation of the scrubber can be verified.
 - e. Continuous temperature measuring devices to measure and record temperatures in the bed and outlet of the fluidized bed incinerator. Each temperature measuring device shall be certified by the manufacturer to have an accuracy of plus or minus 5 percent over its operating range.
 - f. Continuous measuring device for measuring fuel flow to the incinerator. Each fuel flow measuring device shall be certified by the manufacturer to have an accuracy of plus or minus 5 percent over its operating range.
 - g. An instrument that continuously measures and records the total hydrocarbons concentration in the sewage sludge incinerator stack exit gas.

The total hydrocarbons instrument shall employ a flame ionization detector; shall have a heated sampling line maintained at a temperature of 150 degrees Celsius or higher at all times; and shall be calibrated at least once every 24-hour operating period using propane.
 - h. An instrument that continuously measures and records information used to determine the moisture content in the sewage sludge incinerator stack exit gas.
 - i. An instrument that continuously measures and records combustion temperatures.
 - j. Operation of a sewage sludge incinerator shall not cause the operating combustion temperature for the sewage sludge incinerator to exceed the performance test combustion temperature by more than 20 percent.
- (2) The permittee shall maintain the following monitoring records and retain the following information in its files for a period of not less than five (5) years:
- a. A continuous or daily record of the pressure drop of the gas flow through the combined scrubber and the 15 minute average of the pressure drop.
 - b. A continuous or daily record of the rate of sludge charged to the incinerator.
 - c. A daily record of the sludge sampling, dry sludge content, and the volatile solids content of the sludge charged to the incinerator*.
 - d. A continuous record of the fuel flow to the incinerator*.
 - e. A continuous record of the temperatures in the bed and outlet of the fluidized bed incinerator*.
 - f. A continuous record of the oxygen content of the exhaust gas.
 - g. Records of any information that indicates the requirements of the 40 CFR 61 Part E has been met.

- h. Daily records identifying the maximum and minimum value of each operating parameter (e.g. temperature of the incinerator bed and outlet, combined scrubber pressure drop, scrubber liquid flow range, oxygen content of the incinerator exhaust gas) that is not to be exceeded. These levels are based on the results of the performance test during which compliance was demonstrated.
- i. The concentration of lead, arsenic, cadmium, chromium, and nickel in the sewage sludge incinerator.
- j. The total hydrocarbons concentrations in the exit gas from the sewage sludge incinerator stack.
- k. The oxygen concentration and information used to measure moisture content in the exit gas from the sewage sludge incinerator stack.
- l. The stack height for the sewage sludge incinerator.
- m. The dispersion factor for the site where the sewage sludge incinerator is located.
- n. The control efficiency for lead, arsenic, cadmium, chromium, and nickel for each sewage sludge incinerator.
- o. The risk specific concentration for chromium calculated using equation (6) in g), if applicable.
- p. A calibration and maintenance log for the instruments used to measure the total hydrocarbons concentration and oxygen concentration in the exit gas from the sewage sludge incinerator stack, the information needed to determine moisture content in the exit gas, and the combustion temperatures.

The information shall be made available to the Director or any authorized representative of the Director, for review during normal business hours.

* A record and report of the fuel flow, total solids and volatile solids content of the sludge charged to the incinerator, and incinerator bed temperature is not required if emissions tests of the incinerator demonstrate that particulate matter (PM) emissions are less than 0.75 pound of PM per ton of dry sludge input.

- (3) The frequency of monitoring for mercury shall be as required in Subpart E of 40 CFR part 61.
- (4) The total hydrocarbons concentration and oxygen concentration in the exit gas from a sewage sludge incinerator stack, the information used to moisture content in the exit gas, and the combustion temperatures for the sewage sludge incinerator shall be monitored continuously.
- (5) For sewage sludge incinerators subject to the requirements in subpart O of 40 CFR part 60, the frequency of monitoring for the appropriate air pollution control device operating parameters shall be the frequency of monitoring in subpart O of 40 CFR part 60. For all other sewage sludge incinerators, the appropriate air pollution control device operating parameters shall be at least daily.

- (6) The permittee shall keep a record of the rolling, 12-month nickel emissions. This amount shall be calculated by multiplying the emission rate documented at the most recent stack test for nickel in pounds of nickel/ton of dry sludge by the actual monthly amount of sludge fed to the incinerator. Compliance with the annual nickel (Ni) limitation shall be based on a rolling, 12-month summation.
- (7) The permittee shall maintain monthly records of the following information for this emissions unit in order to monitor compliance with the annual emission limitation:
 - a. The total emissions, in tons, of PM for each month.
 - b. The total emissions, in tons, of PM10 for each month.
 - c. The total emissions, in tons, of SO2 for each month.
 - d. The total emissions, in tons, of OC for each month.
 - e. The total emissions, in tons, of NOx for each month.
 - f. The total emissions, in tons, of CO for each month.

e) Reporting Requirements

- (1) The permittee shall submit quarterly deviation (excursion) reports for the following emissions unit(s) that identify:
 - a. all deviations (excursions) of the following emission limitations, operational restrictions and/or control device operating parameter limitations that restrict the potential to emit (PTE) of any regulated air pollutant and have been detected by the monitoring, record keeping and/or testing requirements in this permit:

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- b. the probable cause of each deviation (excursion);
- c. any corrective actions that were taken to remedy the deviations (excursions) or prevent future deviations (excursions); and
- d. the magnitude and duration of each deviation (excursion).

If no deviations (excursions) occurred during a calendar quarter, the permittee shall submit a report that states that no deviations (excursions) occurred during the quarter.

The quarterly reports shall be submitted, electronically through Ohio EPA Air Services, each year by January 31 (covering October to December), April 30 (covering January to March), July 31 (covering April to June), and October 31 (covering July to September), unless an alternative schedule has been established and approved by the Director (the appropriate District Office or local air agency).

- (2) The permittee shall submit semiannual reports which contain a record of average scrubber pressure drop measurements for each period of 15 minutes duration or more during which the pressure drop of the scrubber was less than, by a percentage calculated specified in 40 CFR 60.155(a)(1), the average scrubber pressure drop measured during the most recent performance test.
- (3) This permittee shall submit semi-annual exceedance reports which provide records of the operating conditions of the fluidized bed incinerator for each calendar day when:
 - a. For each period of 15 minute duration or more, the total pressure drop across the combined scrubber system is less than, by a percentage specified in 40 CFR 60.155 and as calculated in 40 CFR 60.155(a), the average scrubber pressure drop measured during the most recent performance test.
 - b. The incinerator bed and outlet temperature falls below a minimum temperature, determined during the most recent performance test in which compliance was demonstrated.
 - c. The oxygen content of incinerator exhaust gas exceeds the average oxygen content measured during the most recent performance test by more than three (3) percent for any 1-hour period.
- (4) The semi-annual exceedance report referred to in e)(3) shall include records, for each calendar day that the scrubber pressure drop, incinerator bed temperature, or oxygen content of the exhaust gas is outside the allowable limits specified above, of the following:
 - a. The scrubber pressure drop average over each 1-hour incinerator operation period.
 - b. The oxygen content in the incinerator exhaust average over each 1-hour incinerator operation period.
 - c. The temperature of the bed and outlet of the fluidized bed incinerator, averaged over each 1-hour incinerator operating period.
 - d. The rate of sludge charged to the incinerator averaged over each 1-hour incinerator operating period.
 - e. The incinerator fuel use averaged over each 8-hour incinerator operating period.
 - f. The moisture and volatile solids content of the daily grab sample of sludge charged to the incinerator.

These semi-annual reports shall be submitted by January 30 and July 30 of each year and shall cover the previous six calendar months (January through June and July through December, respectively).
- (5) The permittee shall submit annual reports which specify the total nickel, PM, CO, SO₂, NO_x and OC emissions from this emissions unit for the previous calendar year. These reports shall be submitted January 31 of each year.

- (6) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.
 - (7) The permittee shall submit an annual statement that, to the best of its knowledge, the sewage sludge processed in this emissions unit does not contain any "beryllium containing waste". As a basis for this statement, the permittee shall annually review the latest version of the Ohio Toxic Release Inventory to confirm that there is no facility located within the permittee's service area or the service area of any sludge brought into this facility that reported a release of beryllium or beryllium containing compounds and discharged its wastewater to the facility.
 - (8) 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.
- f) Testing Requirements
- (1) Compliance with the emission limitations in (b)(1) and b)(2) of these terms and conditions shall be determined in accordance with the following methods:
 - a. Emission Limitation:

Particulate Emissions (PE) shall not exceed 1.30 lbs/ton of dry sludge input, 93.6 lbs of PE/day and 17.1 TPY.

Applicable Compliance Method:

Compliance with the 1.30 lbs/ton of dry sludge input shall be demonstrated based upon the emission testing requirements specified in f)(2).

The emission limitation of 93.6 lbs/day of PE was calculated by multiplying the allowable particulate emission rate from 40 CFR Part 60, Subpart O of 1.3 lbs of PM/ton of dry sludge input by the maximum sludge feed rate of 72 tons per day.

The emission limitation of 17.1 TPY PE was calculated by multiplying the daily emission rate of 93.6 lbs/day of PE by 365 days per year and dividing by 2000 lbs/ton.
 - b. Emission Limitation:

PM10 emissions shall not exceed 31.7 lbs/day and 5.8 TPY.

Applicable Compliance Method:

The emission limitation of 31.7 lbs/day of PM10 was calculated by multiplying the emission factor from application A0040036 submitted August 12, 2010, of 0.44 lb of PM10/dry ton of dry sludge input by the maximum sludge feed rate of 72 tons per day.

The emission limitation of 5.8 TPY of PM10 was calculated by multiplying the daily emission rate of 31.7 lbs/day of PM10 by 365 days per year and dividing by 2000 lbs/ton.

c. Emission Limitation:

SO2 emissions shall not exceed 532.8 lbs/day and 97.2 TPY.

Applicable Compliance Method:

The emission limitation of 532.8 lbs/day was calculated by multiplying the emission factor from application A0040036 submitted August 12, 2010, of 7.4 lbs of SO2/dry ton of dry sludge input by the maximum sludge feed rate of 72 tons per day.

The emission limitation of 97.2 TPY of SO2 was calculated by multiplying the daily emission rate of 532.8 lbs/day of SO2 by 365 days per year and dividing by 2000 lbs/ton.

d. Emission Limitation:

VOC emissions shall not exceed 198.0 lbs/day and 36.1 TPY.

Applicable Compliance Method:

The emission limitation of 198.0 lbs/day of VOC was calculated by multiplying the emission factor from application A0040036 submitted August 12, 2010, of 2.75 lbs of VOC/dry ton of dry sludge input by the maximum sludge feed rate of 72 tons per day.

The emission limitation of 36.1 TPY of VOC was calculated by multiplying the daily emission rate of 198.0 lbs/day of VOC by 365 days per year and dividing by 2000 lbs/ton.

e. Emission Limitation:

NOx emissions shall not exceed 360.0 lbs/day and 65.7 TPY.

Applicable Compliance Method:

The emission limitation of 360.0 lbs/day of NOx was calculated by multiplying the emission factor from application A0040036 submitted August 12, 2010, of 5.0 lbs of NOx/dry ton of dry sludge input by the maximum sludge feed rate of 72 tons per day.

The emission limitation of 65.7 TPY of NOx was calculated by multiplying the daily emission rate of 360.0 lbs/day of NOx by 365 days per year and dividing by 2000 lbs/ton.

f. Emission Limitation:

CO emissions shall not exceed 684.0 lbs/day and 124.8 TPY.

Applicable Compliance Method:

The emission limitation of 684.0 lbs/day of CO was calculated by multiplying the emission factor from application A0040036 submitted August 12, 2010 of 9.5 lbs of CO/dry ton of dry sludge input by the maximum sludge feed rate of 72 tons per day.

The emission limitation of 124.8 TPY of CO was calculated by multiplying the daily emission rate of 684.0 lbs/day of CO by 365 days per year and dividing by 2000 lbs/ton.

g. Emission Limitation:

Arsenic emissions shall not exceed 1.6 lbs/day and 0.3 TPY.

Applicable Compliance Method:

The emission limitation of 1.6 lbs/day of arsenic was calculated by multiplying the emission factor from application A0040036 submitted August 12, 2010, of 0.0225 lb of arsenic/ton of dry sludge input by the maximum sludge feed rate of 72 tons per day.

The emission limitation of 0.3 TPY of arsenic was calculated by multiplying the daily emission rate of 1.6 lbs/day of arsenic by 365 days per year and dividing by 2000 lbs/ton.

h. Emission Limitation:

Cadmium emissions shall not exceed 4.0 lbs/day and 0.7 TPY.

Applicable Compliance Method:

The emission limitation of 4.0 lbs/day of cadmium was calculated by multiplying the emission factor from application A0040036 submitted August 12, 2010 of 0.0557 lb of cadmium/ton of dry sludge input by the maximum sludge feed rate of 72 tons per day.

The emission limitation of 0.7 TPY of cadmium was calculated by multiplying the daily emission rate of 4.0 lbs/day of cadmium by 365 days per year and dividing by 2000 lbs/ton.

i. Emission Limitation:

Chromium emissions shall not exceed 45.7 lbs/day and 8.3 TPY.

Applicable Compliance Method:

The emission limitation of 45.7 lbs/day of chromium was calculated by multiplying the emission factor from application A0040036 submitted August 12, 2010 of 0.635 lb of chromium/ton of dry sludge input by the maximum sludge feed rate of 72 tons per day.

The emission limitation of 8.3 TPY of chromium was calculated by multiplying the daily emission rate of 45.7 lbs/day of chromium by 365 days per year and dividing by 2000 lbs/ton.

j. Emission Limitation:

Lead emissions shall not exceed 10.6 lbs/day and 1.9 TPY.

Applicable Compliance Method:

The emission limitation of 10.6 lbs/day of lead was calculated by multiplying the emission factor from application A0040036 submitted August 12, 2010 of 0.147 lb of lead/ton of dry sludge input by the maximum sludge feed rate of 72 tons per day.

The emission limitation of 1.9 TPY of lead was calculated by multiplying the daily emission rate of 10.6 lbs/day of lead by 365 days per year and dividing by 2000 lbs/ton.

k. Emission Limitation:

Nickel emissions shall not exceed 141.1 lbs/day and 9.9 TPY based on a rolling, 12-month summation.

Applicable Compliance Method:

The emission limitation of 141.1 lbs/day of nickel was calculated by multiplying the emission factor from application A0040036 submitted August 12, 2010 of 1.96 lbs of nickel/ton of dry sludge input by the maximum sludge feed rate of 72 tons per day.

Compliance with the rolling, 12-month emission limitation of 9.9 TPY nickel shall be demonstrated by the recordkeeping and annual report required d)(6) and e)(1), respectively.

l. Emission Limitation:

Emissions shall not exceed 3200 grams of mercury per 24-hour period, 1.3 TPY.

Applicable Compliance Method:

Compliance with the mercury emission limitation shall be based on the record keeping specified in d)(3) and the following:

- i. The sludge analysis shall be conducted annually.
- ii. The sludge analysis shall be conducted to demonstrate compliance with the allowable mass emission rate for mercury of 3200 grams per 24-hour period.
- iii. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate: 40 CFR, section



61.54. Alternative U.S. EPA- approved test methods may be used with prior approval from the Ohio EPA.

A comprehensive written report on the results of each annual sludge analysis for mercury shall be signed by the person or persons responsible for the tests and submitted to the Hamilton County Department of Environmental Services (HCDOES) within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the HCDOES.

The emission limitation of 1.3 TPY of mercury was calculated by multiplying the allowable daily emission rate of 7.1 lbs/day of mercury by 365 days per year and dividing by 2000 lbs/ton.

m. Emission Limitation:

Visible particulate emissions from any/the stack shall not exceed 20 percent opacity as a six-minute average, except as specified by rule.

Applicable Compliance Method:

Compliance shall be determined through visible emission observations performed in accordance with U.S. EPA Method 9.

(2) The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

- a. The emission testing shall be conducted "within 3 months after issuance of the permit and within 6 months prior to permit renewal".
- b. The emission testing shall be conducted to demonstrate compliance with the PE, CO, NOx and SO2 emission limitations.
- c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):

PE	Method 5	40 <u>CFR</u> Part 60, Appendix A
NO _x	Method 7	40 <u>CFR</u> Part 60, Appendix A
CO	Method 10	40 <u>CFR</u> Part 60, Appendix A
SO ₂	Method 6	40 <u>CFR</u> Part 60, Appendix A

Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

- d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

- e. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).
- f. Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

- (3) As specified in 40 CFR 60.8, each performance test shall consist of at least three separate runs at the same operating conditions. A control efficiency for a pollutant shall be based on the arithmetic mean of the results from the three runs.
- (4) All continuous monitoring systems and monitoring devices shall be operational, and calibrated prior to conducting performance tests.
- (5) This permittee shall test emissions from emissions unit N003 for mercury to comply with 40 CFR 61, Subpart E by conduction:
 - a. An annual stack test using Method 101A or 104 in Appendix B and paragraph 61.54 of 40 CFR 61 or Method 29; or
 - b. An annual sludge sampling test using Method 105 in Appendix B and paragraph 61.54 of 40 CFR 61.

Samples shall be taken over such a period as necessary to determine accurately the maximum emissions which will occur in a 24-hour period. Samples shall be analyzed and emissions determined within 30 days after the emissions unit performance stack test.

If test results show that mercury emissions do not exceed 1600 grams per 24-hour period, further testing for mercury emissions shall be done on a bi-annual basis. This future testing upon EPA approval may be performed using sludge analysis methods.

- (6) The emission limits for chromium and nickel were calculated using equation 5 in g).
The emission limit for lead was calculated using equation 4 in g).

The emission limit for mercury was based on 40 CFR 61.52(b).

- (7) Emission factors for PM, SO₂, NO_x, CO and OC were determined after considering permit information from data collected by HCDOES on other fluidized bed incinerators, AP-42 Tables 2.2-6 and 2.2-8 and emission factors proposed by the permittee.

g) Miscellaneous Requirements

In lieu of the above limitations, the following procedures shall not be exceeded:

(1) Pollutant limit—lead.

- a. The average daily concentration for lead in sewage sludge fed to a sewage sludge incinerator shall not exceed the concentration calculated using Equation (4).

$$C = \frac{0.1 \times NAAQS \times 86,400}{DF \times (1 - CE) \times SF} \quad \text{Eq. (4)}$$

Where:

C = Average daily concentration of lead in sewage sludge.

NAAQS = National Ambient Air Quality Standard for lead in micrograms per cubic meter.

DF = Dispersion factor in micrograms per cubic meter per gram per second.

CE = Sewage sludge incinerator control efficiency for lead in hundredths.

SF = Sewage sludge feed rate in metric tons per day (dry weight basis).

- b. The dispersion factor (DF) in equation (4) shall be determined from an air dispersion model in accordance with g)(3).
- i. When the sewage sludge stack height is 65 meters or less, the actual sewage sludge incinerator stack height shall be used in the air dispersion model to determine the dispersion factor (DF) for equation (4).
- ii. When the sewage sludge incinerator stack height exceeds 65 meters, the creditable stack height shall be determined in accordance with 40 CFR 51.100(ii) and the creditable stack height shall be used in the air dispersion model to determine the dispersion factor (DF) for equation (4).
- c. The control efficiency (CE) for equation (4) shall be determined from a performance test of the sewage sludge incinerator in accordance with g)(3).

(2) *Pollutant limit—arsenic, cadmium, chromium, and nickel.*

- a. The average daily concentration for arsenic, cadmium, chromium, and nickel in sewage sludge fed to a sewage sludge incinerator each shall not exceed the concentration calculated using equation (5).

$$C = \frac{RSC \times 86,400}{DF \times (1 - CE) \times SF} \quad \text{Eq. (5)}$$

Where:

C = Average daily concentration of arsenic, cadmium, chromium, or nickel in sewage sludge.

CE = Sewage sludge incinerator control efficiency for arsenic, cadmium, chromium, or nickel in hundredths.

DF = Dispersion factor in micrograms per cubic meter per gram per second.

RSC = Risk specific concentration for arsenic, cadmium, chromium, or nickel in micrograms per cubic meter.

SF = Sewage sludge feed rate in metric tons per day (dry weight basis).

- b. The risk specific concentrations for arsenic, cadmium, and nickel used in equation (5) shall be obtained from Table 1.

Table 1—Risk Specific Concentration for Arsenic, Cadmium, and Nickel

Pollutant	Risk specific concentration (micrograms per cubic meter)
Arsenic	0.023
Cadmium	0.057
Nickel	2.0

- c. The risk specific concentration for chromium used in equation (5) shall be obtained from Table 2 or shall be calculated using equation (6).

Table 2—Risk Specific Concentration For Chromium

Type of Incinerator	Risk specific concentration (micrograms per cubic meter)
Fluidized bed with wet scrubber	0.65
Fluidized bed with wet scrubber and wet	0.23

electrostatic precipitator	
Other types with wet scrubber	0.064
Other types with wet scrubber and wet electrostatic precipitator	0.016

$$RSC = \frac{0.0085}{r} \quad \text{Eq. (6)}$$

Where:

RSC = risk specific concentration for chromium in micrograms per cubic meter used in equation (5).

R = decimal fraction of the hexavalent chromium concentration in the total chromium concentration measured in the exit gas from the sewage sludge incinerator stack in hundredths.

- d. The dispersion factor (DF) in equation (5) shall be determined from an air dispersion model in accordance with g)(3).
 - i. When the sewage sludge incinerator stack height is equal to or less than 65 meters, the actual sewage sludge incinerator stack height shall be used in the air dispersion model to determine the dispersion factor (DF) for equation (5).
 - ii. When the sewage sludge incinerator stack height is greater than 65 meters, the creditable stack height shall be determined in accordance with 40 CFR 51.100(ii) and the creditable stack height shall be used in the air dispersion model to determine the dispersion factor (DF) for equation (5).
- e. The control efficiency (CE) for equation (5) shall be determined from a performance test of the sewage sludge incinerator in accordance with g)(3).

(3) *Air dispersion modeling and performance testing.*

- a. The air dispersion model used to determine the dispersion factor in g(1)b. and g)(2)d. shall be appropriate for the geographical, physical, and population characteristics at the sewage sludge incinerator site. The performance test used to determine the control efficiencies in g(1)c. and g)(2)e. shall be appropriate for the type of sewage sludge incinerator.
- b. For air dispersion modeling initiated after September 3, 1999, the modeling results shall be submitted to the permitting authority 30 days after completion of the modeling. In addition to the modeling results, the submission shall include a

description of the air dispersion model and the values used for the model parameters.

- c. The following procedures, at a minimum, shall apply in conducting performance tests to determine the control efficiencies in g(1)c. and g(2)e. after September 3, 1999:
 - i. The performance test shall be conducted under representative sewage sludge incinerator conditions at the highest expected sewage sludge feed rate within the design capacity of the sewage sludge incinerator.
 - ii. The permitting authority shall be notified at least 30 days prior to any performance test so the permitting authority may have the opportunity to observe the test. The notice shall include a test protocol with incinerator operating conditions and a list of test methods to be used.
 - iii. Each performance test shall consist of three separate runs using the applicable test method. The control efficiency for a pollutant shall be the arithmetic mean of the control efficiencies for the pollutant from the three runs.
- d. The pollutant limitations in g(1) and (2) shall be submitted to the permitting authority no later than 30 days after completion of the air dispersion modeling and performance test.
- e. Significant changes in geographic or physical characteristics at the incinerator site or in incinerator operating conditions require new air dispersion modeling or performance testing to determine a new dispersion factor or a new control efficiency that will be used to calculate revised pollutant limits.