INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
We Protect Hoosiers and Our Environment.

Mitchell E. Daniels Jr.
Governor

Thomas W. Easterly
Commissioner

100 North Senate Avenue
Indianapolis, Indiana 46204
(317) 232-8603
Toll Free (800) 451-6027
www.idem.IN.gov

TO: Interested Parties / Applicant

DATE: September 20, 2012

RE: Hammond Group, Inc. / 089-32182-00219

FROM: Matthew Stuckey, Branch Chief
Permits Branch
Office of Air Quality

Notice of Decision – Approval

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to 326 IAC 2, this approval was effective immediately upon submittal of the application.

If you wish to challenge this decision, IC 4-21.5-3-7 requires that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Suite N 501E, Indianapolis, IN 46204, **within eighteen (18) calendar days from the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

(1) the date the document is delivered to the Office of Environmental Adjudication (OEA);
(2) the date of the postmark on the envelope containing the document, if the document is mailed to OEA by U.S. mail; or
(3) The date on which the document is deposited with a private carrier, as shown by receipt issued by the carrier, if the document is sent to the OEA by private carrier.

The petition must include facts demonstrating that you are either the applicant, a person aggrieved or adversely affected by the decision or otherwise entitled to review by law. Please identify the permit, decision, or other order for which you seek review by permit number, name of the applicant, location, date of this notice and all of the following:

(1) the name and address of the person making the request;
(2) the interest of the person making the request;
(3) identification of any persons represented by the person making the request;
(4) the reasons, with particularity, for the request;
(5) the issues, with particularity, proposed for considerations at any hearing; and
(6) identification of the terms and conditions which, in the judgment of the person making the request, would be appropriate in the case in question to satisfy the requirements of the law governing documents of the type issued by the Commissioner.

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178. Callers from within Indiana may call toll-free at 1-800-451-6027, ext. 3-0178.

Enclosures
FNPER-AM.dot12/3/07

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Ms. Jean Ziga
Hammond Group, Inc.
2323 165th Street
Hammond, IN 46320

September 20, 2012

Re: 089-32182-00219
Seventh Administrative Amendment to
F089-14165-00219

Dear Ms. Ziga:

Hammond Group, Inc. was issued a Federally Enforceable State Operating Permit (FESOP) Renewal No. F089-14165-00219 on September 11, 2008 for a stationary industrial inorganic chemicals and inorganic pigments manufactuirng plant located at 2308 165th Street, Hammond, Indiana. On August 6, 2012, the Office of Air Quality (OAQ) received an application from the source requesting the following changes:

1. Hammond Group, Inc. requested to modify the direct car loading system (Unit ID 56-7) to handle a different grade of product. The Direct Car Loading System consists of two storage silos, two weigh hoppers, a loading spout, a bin dump station, and interconnecting conveyors. Material is conveyed to one of two storage silos from where it can be loaded into a rail car, bulk truck, or tote bin. This system is currently controlled by a baghouse and HEPA system (Filter ID 56-25 of the 400 Y Control System). To prevent cross-contamination to the 400Y control system, Hammond Group, Inc. has requested to install a bin vent filter on the storage silos. As a result, the storage silos will now be drafted through a bin vent filter prior to going to the baghouse and HEPA system (Filter ID 56-25 of the 400 Y Control System). The process rate of the Direct Car Loading System and unlimited potential to emit will not increase due to these changes, since the source can only process one product at a time. Pursuant to 326 IAC 2-8-10(a)(2)(B), this change to the permit is considered an administrative amendment because the permit is amended to change the descriptive information concerning the source of emissions unit, where the revision will not trigger a new application requirement.

2. In FESOP Administrative Amendment No. 089-31419-000219, issued on March 23, 2012, Hammond Group, Inc. requested that the No. 1 Furnace System be removed from the permit because the source intended to remove it from the source. As a result, IDEM removed the unit from the permit. However, Hammond Group, Inc. never removed the unit from the source because the source determined that they want to repair and re-activate the unit. Therefore, Hammond Group, Inc. is requesting that the No. 1 Furnace System be permitted again. Pursuant to 326 IAC 2-8-10(a)(10), this change to the permit is considered an administrative amendment because the permit is amended to incorporate a modification that adds an emissions unit of the same type that are already permitted and that will comply with the same applicable requirements and permit terms and conditions as the existing emission unit, except if the modification would result in a potential to emit greater than the thresholds in 326 IAC 2-2 (PSD) or 326 IAC 2-3 (Emission Offset) (See PTE of Proposed Modification Below).

The following is the emission unit:

Stack ID 1-S-52

This stack is identified as the Main Control System. This control system is comprised of four (4) units in parallel. Each unit includes a baghouse and a HEPA. Each unit is rated at 99.9998% control efficiency according to the company. The following units are controlled by the Main Control System control equipment, except when otherwise specified.

a. Unit ID 52-2: Furnace System No. 1 (Insignificant Activities)

This Furnace System consists of feed hoppers, batch furnace, and interconnecting conveyors. This furnace is an indirectly heated, natural gas or propane fired, batch furnace which completes the oxidation of the lead oxide.

Emission units associated with Unit ID 52-2 were originally installed in 1930. This unit was approved for repair and re-activation in 2012.

Under 40 CFR 63, Subpart VVVVVV these units are considered chemical manufacturing process units.

The PTE of the modification is as follows:

Process/ Emission Unit	PTE of Proposed Modification (tons/year)									
	PM	PM10	PM2.5	SO_2	NOx	VOC	CO	GHGs as CO_2e	Total HAPs	Worst Single HAP
No. 1 Calcining Furnace (Unit ID 52-2)	0.16	0.18	0.18	0.004	0.51	0.04	0.30	504.83	0.15	0.15 Lead
Total PTE of Proposed Modification	0.16	0.18	0.18	0.004	0.51	0.04	0.30	504.83	0.15	0.15 Lead

(a) No new state rules are applicable to this source due to the addition of the emission unit.

(b) There are no New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60) included in this administrative amendment.

(c) This source is subject to the National Emission Standards for Hazardous Air Pollutants for Chemical Manufacturing Area Sources, 40 CFR 63, Subpart VVVVVV, because this source operates chemical manufacturing process units (CMPU) that use feedstocks and generate products that contain concentrations of lead greater than 0.1 percent by weight at an area source of HAPs emissions. A CMPU includes all process vessels, equipment, and activities necessary to operate a chemical manufacturing process that produces a material or a family of materials described by North American Industry Classification System (NAICS) code 325. A CMPU consists of one or more unit operations and any associated recovery devices. A CMPU also includes each storage tank, transfer operation, surge control vessel, and bottoms receiver associated with the production of such NAICS code 325 materials. The affected source is the facility-wide collection of CMPUs and each heat exchange system and wastewater system associated with a CMPU. Under 40 CFR 63, Subpart VVVVVV this is an existing affected source because it commenced construction or reconstruction of the affected source before October 6, 2008.

The No. 1 Furnace System is subject to the following applicable portions of the NESHAP:

(1) 40 CFR 63.11494(a), (b), (d), (f), and (h)
(2) 40 CFR 63.11495(a)(1), (a)(3), and (a)(4)
(3) 40 CFR 63.11496(f)(1), (f)(2), (f)(3), and (f)(4)
(4) 40 CFR 63.11501(a), (b)(1), (c)(1)(i), (c)(1)(v), (d)(1), and (d)(4)
(5) 40 CFR 63.11502
(6) 40 CFR 63.11503
(7) Tables 1 and 9

The requirements of 40 CFR Part 63, Subpart A – General Provisions, which are incorporated as 326 IAC 20-1-1, apply to the source except as otherwise specified in 40 CFR 63, Subpart VVVVVV.

(d) There are no other National Emission Standards for Hazardous Air Pollutants (NESHAPs) (326 IAC 14, 326 IAC 20 and 40 CFR Part 63) included in this administrative amendment.

Pursuant to the provisions of 326 IAC 2-8-10, the permit is hereby administratively amended as follows with the deleted language as ~~strikeouts~~ and new language **bolded**:

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-8-3(c)(3)]

This stationary source consists of the following emission units and pollution control devices:

...

Stack ID 1-S-52

...

2. Unit IDs 52-~~3~~**2** through 52-10: Furnace Systems No. **1,** 2, 10, 3, 4, 5, 6, 8, & 9 (Insignificant Activities)

...

Emission units associated with Unit ID 52-2 were originally installed in 1930. This unit was approved for repair and re-activation in 2012.

...

Stack ID 16-S-56

...

4. Unit ID 56-7: Direct Car Loading System

The Direct Car Loading System consists of two storage silos, two weigh hoppers, a loading spout, a bin dump station, and interconnecting conveyors. Material is conveyed to one of two storage silos from where it can be loaded into a rail car, bulk truck, or tote bin.

Emission units associated with Unit 56-7 were installed in June, 1999 **and approved for modification in 2012**.

This unit is controlled by a baghouse & HEPA system. **The two storage silos are equipped with a bin vent filter, which exhausts to the baghouse & HEPA system.**

...

SECTION D.1 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)]:

...

2. Unit IDs 52-~~3~~**2** through 52-10: Furnace Systems No. **1,** 2, 10, 3, 4, 5, 6, 8, & 9 (Insignificant Activities)

...

Emission units associated with Unit ID 52-2 were originally installed in 1930. This unit was approved for repair and re-activation in 2012.

...

...

D.1.10 Baghouse and HEPA Parametric Monitoring

...

Control Unit ID	**Pressure Drop** (inches of water)
...	
(Main Control System) (Unit IDs 52-~~3~~**2** through 52-13, 52-15, 52-17, 52-19 through 52-20)	
...	

...

SECTION D.3 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)]:

...

4. Unit ID 56-7: Direct Car Loading System

The Direct Car Loading System consists of two storage silos, two weigh hoppers, a loading spout, a bin dump station, and interconnecting conveyors. Material is conveyed to one of two storage silos from where it can be loaded into a rail car, bulk truck, or tote bin.

Emission units associated with Unit 56-7 were installed in June, 1999 **and approved for modification in 2012**.

This unit is controlled by a baghouse & HEPA system. **The two storage silos are equipped with a bin vent filter, which exhausts to the baghouse & HEPA system.**

...

...

SECTION E.1 EMISSIONS UNIT OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)]:

...

2. Unit IDs 52-~~3~~**2** through 52-10: Furnace Systems No. **1,** 2, 10, 3, 4, 5, 6, 8, & 9 (Insignificant Activities)

...

Emission units associated with Unit ID 52-2 were originally installed in 1930. This unit was approved for repair and re-activation in 2012.

...

<u>Stack ID 16-S-56</u>

4. Unit ID 56-7: Direct Car Loading System

The Direct Car Loading System consists of two storage silos, two weigh hoppers, a loading spout, a bin dump station, and interconnecting conveyors. Material is conveyed to one of two storage silos from where it can be loaded into a rail car, bulk truck, or tote bin.

Emission units associated with Unit 56-7 were installed in June, 1999 **and approved for modification in 2012**.

This unit is controlled by a baghouse & HEPA system. **The two storage silos are equipped with a bin vent filter, which exhausts to the baghouse & HEPA system.**

....

Additional Changes

IDEM, OAQ has decided to make additional revisions to the permit as described below in order to update the language to match the most current version of the applicable rule, to eliminate redundancy within the permit, and to provide clarification regarding the requirements of these conditions.

1. U.S. EPA, in the Federal Register Notice 77 FR 112 dated June 11, 2012, has designated Lake County as nonattainment for ozone. On August 1, 2012 the air pollution control board issued an emergency rule adopting the U.S. EPA's designation. This rule became effective, August 9, 2012. IDEM does not agree with U.S. EPA's designation of nonattainment. IDEM filed a suit against US EPA in the US Court of Appeals for the DC Circuit on July 19, 2012. However, in order to ensure that sources are not potentially liable for a violation of the Clean Air Act, the OAQ is following the U.S. EPA's designation. Volatile organic compounds (VOC) and Nitrogen Oxides (NOx) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC and NOx emissions are considered when evaluating the rule applicability relating to ozone. Therefore, VOC and NOx emissions were evaluated pursuant to the requirements of Emission Offset, 326 IAC 2-3. Section A.1 has been revised to indicate that Lake County is now in nonattainment for the ozone standard.

...

A.1 General Information [326 IAC 2-8-3(b)]

The Permittee owns and operates a stationary Industrial Inorganic Chemicals and Inorganic Pigments Manufacturing Plant.

...

County Status: **Nonattainment for 8-hour ozone standard**
Attainment for all **other** criteria pollutants

...

All other conditions of the permit shall remain unchanged and in effect. Attached please find the entire revised permit.

A copy of the permit is available on the Internet at: http://www.in.gov/ai/appfiles/idem-caats/. For additional information about air permits and how the public and interested parties can participate, refer to the IDEM's Guide for Citizen Participation and Permit Guide on the Internet at: www.idem.in.gov

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter, please contact Brian Williams, of my staff, at 317-234-5375 or 1-800-451-6027, and ask for extension 4-5375.

Sincerely,

Iryn Calilung, Section Chief
Permits Branch
Office of Air Quality

Attachments: Updated Permit and Calculations

IC/BMW

cc: File - Lake County
Lake County Health Department
U.S. EPA, Region V
Compliance and Enforcement Branch
Billing, Licensing and Training Section

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Federally Enforceable State Operating Permit Renewal
OFFICE OF AIR QUALITY

Hammond Group, Inc. (HGI)
2308 – 165th Street
Hammond, Indiana 46320

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

The Permittee must comply with all conditions of this permit. Noncompliance with any provisions of this permit is grounds for enforcement action; permit termination, revocation and reissuance, or modification; or denial of a permit renewal application. 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 conditions of this permit. An emergency does constitute an affirmative defense in an enforcement action provided the Permittee complies with the applicable requirements set forth in Section B, Emergency Provisions.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-8 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Indiana statutes from IC 13 and rules from 326 IAC, quoted in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a FESOP under 326 IAC 2-8.

Operation Permit No.: F089-14165-00219	
Issued by: Original signed by: Ronald L. Novak, Director Hammond Department of Environmental Management	Issuance Date: September 11, 2008 Expiration Date: September 11, 2018

First Administrative Amendment No.: 089-28377-00219, issued on September 9, 2009.
Significant Permit Revision No.: 089-29891-00219, issued on March 1, 2011.
Second Administrative Amendment No.: 089-30288-00219, issued on March 17, 2011.
Third Administrative Amendment No.: 089-30655-00219, issued on July 19, 2011.
Fourth Administrative Amendment No.: 089-30840-00219, issued on November 1, 2011.
Fifth Administrative Amendment No.: 089-31419-00219, issued on March 23, 2012.
Sixth Administrative Amendment No.: 089-32008-00219, issued on June 21, 2012.

Seventh Administrative Amendment No.: 089-32182-00219	
Issued by: Iryn Calilung, Section Chief Permits Branch Office of Air Quality	Issuance Date: September 20, 2012 Expiration Date: September 11, 2018

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D.4.4 Lead (Pb) [326 IAC 15-1-2] [326 IAC 2-8-4] [326 IAC 2-2]
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D.4.7 Particulate Matter less than 10 microns in diameter (PM10) [326 2-8-5(4)]
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D.5.1 Particulate Matter less than 10 microns in diameter (PM10) [326 IAC 6.8-2-13(a)] [326 IAC 2-8-4] [326 IAC 2-2]
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D.5.3 Particulate Matter less than 2.5 microns in diameter (PM2.5) [326 IAC 2-1.1-5] [326 IAC 2-8-4]
D.5.4 Lead (Pb) [326 IAC 15-1-2] [326 IAC 2-8-4] [326 IAC 2-2]
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Compliance Determination Requirements
D.5.6 Particulate Matter less than 10 microns in diameter (PM10) [326 IAC 2-8-5(4)]
D.5.7 Lead (Pb) [326 IAC 2-8-5(4)]

Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]
D.5.8 Visible Emissions Notations
D.5.9 Baghouse and HEPA Parametric Monitoring
D.5.10 Broken or Failed Bag Detection [326 IAC 2-8-5(1)] [326 IAC 2-8-4(1)]

Record Keeping Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-16]
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D.6.2 Particulate Matter (PM) [326 IAC 2-2]
D.6.3 Particulate Matter less than 2.5 microns in diameter (PM2.5) [326 IAC 2-1.1-5] [326 IAC 2-8-4]
D.6.4 Lead (Pb) [326 IAC 15-1-2] [326 IAC 2-8-4] [326 IAC 2-2]
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D.6.6 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

Compliance Determination Requirements
D.6.7 Testing Requirements [326 IAC 2-8-5(a)(1), (4)] [326 IAC 2-1.1-11]
D.6.8 Particulate Matter [326 IAC 2-8-5(4)]
D.6.9 Lead (Pb) [326 IAC 2-8-5(4)]

Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]
D.6.10 Visible Emissions Notations
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Record Keeping Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-16]
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SECTION D.7 FACILITY OPERATION CONDITIONS
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D.7.1 Particulate Matter less than 10 microns in diameter (PM10) [326 IAC 6.8-2-13(a)] [326 IAC 2-8-4] [326 IAC 2-2]
D.7.2 Particulate Matter (PM) [326 IAC 2-2]
D.7.3 Particulate Matter less than 2.5 microns in diameter (PM2.5) [326 IAC 2-1.1-5] [326 IAC 2-8-4]

D.7.4 Lead (Pb) [326 IAC 15-1-2] [326 IAC 2-8-4] [326 IAC 2-2]
D.7.5 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

Compliance Determination Requirements
D.7.6 Testing Requirements [326 IAC 2-8-5(a)(1), (4)] [326 IAC 2-1.1-11]
D.7.7 Particulate Matter less than 10 microns in diameter (PM10) [326 IAC 2-8-5(4)]
D.7.8 Lead (Pb) [326 IAC 2-8-5(4)]

Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]
D.7.9 Visible Emissions Notations
D.7.10 Baghouse and HEPA Parametric Monitoring
D.7.11 Broken or Failed Bag Detection [326 IAC 2-8-5(1)] [326 IAC 2-8-4(1)]

Record Keeping Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-16]
D.7.12 Record Keeping Requirements

SECTION D.8 FACILITY OPERATION CONDITIONS
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Emission Limitations and Standards [326 IAC 2-8-4(1)]
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D.8.2 Lead (Pb) [326 IAC 15-1-2]

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D.9.1 Particulate Matter less than 10 microns in diameter (PM10) [326 IAC 6.8-2-13(a)] [326 IAC 2-8-4] [326 IAC 2-2]
D.9.2 Particulate Matter (PM) [326 IAC 2-2]
D.9.3 Particulate Matter less than 2.5 microns in diameter (PM2.5) [326 IAC 2-1.1-5] [326 IAC 2-8-4]
D.9.4 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

Compliance Determination Requirements
D.9.5 Particulate Matter less than 10 microns in diameter (PM10) [326 IAC 2-8-5(4)]

Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]
D.9.6 Visible Emissions Notations
D.9.7 Dust Collector Parametric Monitoring
D.9.8 Broken or Failed Bag Detection [326 IAC 2-8-5(1)] [326 IAC 2-8-4(1)]

Record Keeping Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-16]
D.9.9 Record Keeping Requirements

SECTION D.18 FACILITY OPERATION CONDITIONS – TRIVIAL ACTIVITY
Stack ID V-1 General Building Ventilation Control System 69

Emission Limitations and Standards [326 IAC 2-8-4(1)]
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D.10.2 Particulate Matter (PM) [326 IAC 2-2]
D.10.3 Particulate Matter less than 2.5 microns in diameter (PM2.5) [326 IAC 2-1.1-5] [326 IAC 2-8-4]
D.10.4 Lead (Pb) [326 IAC 15-1-2] [326 IAC 2-8-4] [326 IAC 2-2]
D.10.5 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

Compliance Determination Requirements
D.10.6 Particulate Matter less than 10 microns in diameter (PM10) [326 IAC 2-8-5(4)]
D.10.7 Lead (Pb) [326 IAC 2-8-5(4)]

Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]
D.10.8 Visible Emissions Notations
D.10.9 HEPA Parametric Monitoring
D.10.10 Failed HEPA Filter Detection [326 IAC 2-8-5(1)] [326 IAC 2-8-4(1)]

Record Keeping Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-16]
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SECTION E.1 FACILITY OPERATION CONDITIONS
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National Emission Standards for Hazardous Air Pollutants (NESHAP) Requirements
E.1.1 General Provisions Relating to NESHAP [326 IAC 20-1][40 CFR Part 63, Subpart A]
E.1.2 National Emission Standards for Hazardous Air Pollutants (NESHAP) for Chemical Manufacturing Area Sources [40 CFR Part 63, Subpart VVVVVV]

Certification Form 78
Emergency Occurrence Report Form 79
Quarterly Deviation and Compliance Monitoring Report Form 81

Attachment A: NESHAP Subpart VVVVVV - Standards for Hazardous Air Pollutants for Chemical Manufacturing Area Sources

SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-8-3(b)]

The Permittee owns and operates a stationary Industrial Inorganic Chemicals and Inorganic Pigments Manufacturing Plant.

Source Address:	2308 – 165th Street, Hammond, Indiana 46320
General Source Phone:	(219) 845-0031
SIC Code:	2819 – Industrial Inorganic Chemicals, nec 2869 – Industrial Organic Chemicals, nec 2816 – Inorganic Pigments
Source Location Status:	Lake County
County Status:	Nonattainment for 8-hour ozone standard Attainment for all other criteria pollutants
Source Status:	Federally Enforceable State Operating Permit Program Minor Source, under PSD and Emission Offset Rules; Minor Source, Section 112 of the Clean Air Act 1 of 28 Source Categories

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-8-3(c)(3)]

This stationary source consists of the following emission units and pollution control devices:

Note: Bin vent filters and bag filters located at HGI are the same as or equivalent to baghouses. All of the baghouses are the reverse jet air pulse type and contain filter bags supported by wire cages.

Stack ID 1-S-52

This stack is identified as the Main Control System. This control system is comprised of four (4) units in parallel. Each unit includes a baghouse and a HEPA. Each unit is rated at 99.9998% control efficiency according to the company. The following units are controlled by the Main Control System control equipment, except when otherwise specified.

Stack I-S-52 is used to vent the control device exhausts from various processes.

1. Unit ID 52-1: No. 1 Barton System

The Barton System consists of a melt kettle, barton reactor, settling device, and interconnecting conveyors. Lead ingots are charged into an enclosed melt kettle which is indirectly heated by either natural gas or propane burners. The molten lead is continuously fed into the barton reactor where it is atomized and oxidized into lead oxide. The oxide is drawn through a settling device and then conveyed to further processing.

Emission units associated with Unit ID 52-1 were installed in 1930.

Unit 52-1 is not controlled by the Main Control System. It is controlled by one baghouse followed by a HEPA system which exhausts through stack 1-S-52.

2. Unit IDs 52-2 through 52-10: Furnace Systems No. 1, 2, 10, 3, 4, 5, 6, 8, & 9 (Insignificant Activities)

Each Furnace System consists of feed hoppers, batch furnace, and interconnecting conveyors. Each furnace is an indirectly heated, natural gas or propane fired, batch furnace which completes the oxidation of the lead oxide.

Emission units associated with Unit ID 52-2 were originally installed in 1930. This unit was approved for repair and re-activation in 2012.
Emission units associated with Unit IDs 52-3, 52-6, and 52-7 were installed in 1930.
Emission units associated with Unit ID 52-4 were installed in 1980.
Emission units associated with Unit IDs 52-5 were installed in 1971.
Emission units associated with Unit IDs 52-8 were installed in 1955.
Emission units associated with Unit IDs 52-9 were installed in 1957.
Emission units associated with Unit IDs 52-10 were installed in 1972.

3. Unit IDs 52-11 through 52-13: Mills Systems (Insignificant Activities: 52-12 & 52-13)

Each Mill System consists of a feed hopper, mill, cyclone (Unit IDs 52-11 and 52-12 only), and interconnecting conveyors. Lead Oxide is conveyed to the mill feed hopper from where it is metered into the mill. The air and product from the mill are conveyed to a cyclone. Air from the cyclone is returned to the mill. The oxide is conveyed to the packing station, the North bulk loading storage hopper or for further processing.

Emission units associated with Unit IDs 52-11 and 52-12 were installed in 1930.
Emission units associated with Unit ID 52-13 were installed in 1957.

4. Unit ID 52-14: Air Conveying System (Trivial Activity)

The Air Conveying System consists of a hopper, pressure blowers, and pipes. For the blower 1 system, lead oxide is conveyed to a hopper from which the material is fed through an air lock rotary valve into the pipe. Pressurized air from the blower conveys the material to storage silos. Blower 2 is used to blow material from the 6 Barton mill to storage silos. Material can also be blown from the 4 Barton mill to storage silos.

Emission units associated with Unit ID 52-14 were installed in 1983.

Unit 52-14 is not controlled by the Main Control System. It is controlled by two baghouses followed by a HEPA system which exhausts through stack 1-S-52.

5. Unit ID 52-15, 16 & 19: Lead Oxide Bulk Loading, Bulk Loading System, & Lead Oxide Bulk Loading – North (Insignificant Activities: 52-15 & 52-16)

Each Bulk Loading System consists of a bulk storage silo, conveyors, and a loading spout. A pneumatic bulk trailer is spotted under the telescopic loading spout. The spout is lowered to the trailer hatch. Material is fed from a bulk storage silo through sealed conveyors into the trailer.

Emission units associated with Unit ID 52-15 were installed in 1960.
Emission units associated with Unit ID 52-16 were installed in 1983.
Emission units associated with Unit ID 52-19 were installed in September, 1995.

Unit ID 52-16 is not controlled by the Main Control System. It is controlled by two baghouses followed by a HEPA system which exhausts through stack 1-S-52.

6. Unit ID 52-17: Mykro Mill (Insignificant Activity)

The Mykro Mill consists of two high efficiency cyclones that separate lead oxide into a fine lead oxide product and a coarse lead oxide product. Lead oxide from a barton is conveyed to the feed hopper from which it is fed through an air lock rotary valve into the Mykro Mill. The fine lead oxide is packed into containers and the coarse lead oxide can either be recycled or packed into containers.

Emission units associated with Unit ID 52-17 were installed in November, 1989.

7. Unit ID 52-20: Rail Car Loading

The Rail Car Loading operation consists of a covered railroad hopper car, loading device, and a dust collection device. A rail car is spotted at the loading area and the loading device and dust collection device are put in place. Tote bins containing material are then lifted above the loading device and discharged into the car.

Emission units associated with Unit 52-20 were installed in 1960.

Under 40 CFR 63, Subpart VVVVVV these units are considered chemical manufacturing process units.

Stack IDs 4A-S-8, 14-S-16, 1-S-2, & 1-S-26

1. Unit IDs 8-1, 16-1, 2-1, & 26-1: No. 2, 3, 4, & 5 Barton Systems

Each Barton System consists of a melt kettle, barton reactor, settling device, and interconnecting conveyors. Lead ingots are charged into an enclosed melt kettle which is indirectly heated by either natural gas or propane burners. The molten lead is continuously fed into the barton reactor where it is atomized and oxidized into lead oxide. The oxide is drawn through a settling device and then conveyed to further processing.

Emission units associated with Unit ID 8-1 were installed in 1958.
Emission units associated with Unit ID 16-1 were installed in 1972.
Emission units associated with Unit ID 2-1 were installed in 1974.
Emission units associated with Unit ID 26-1 were installed in 1977.

Each system is controlled by a baghouse & HEPA system.

2. Unit ID 26-2: No. 6 Barton System

This Barton System consists of a melt kettle, barton reactor, cyclone, and interconnecting conveyors. Lead ingots are charged into an enclosed melt kettle which is indirectly heated by either natural gas or propane burners. The molten lead is continuously fed into the barton reactor where it is atomized and oxidized into lead oxide. The oxide is drawn through a sealed conductor into a cyclone and then mechanically conveyed to further processing.

Emission units associated with Unit ID 26-2 were installed in July 1995.

The No. 6 Barton system is controlled by a baghouse & HEPA system.

Under 40 CFR 63, Subpart VVVVVV these units are considered chemical manufacturing process units.

Stack ID 16-S-56

1. Unit ID 56-1: 400Y Furnace System

The 400Y Furnace System is a direct, natural gas or propane fired reverberatory type furnace. The lead oxide is melted in this furnace and then converted to pelletized lead oxide. After appropriate classification, the finished product is screw conveyed to the packing hopper and packed.

Emission units associated with Unit ID 56-1 were installed in 1971.

This unit is controlled by the 16-S-56 Control System which includes four (4) baghouse & HEPA systems.

2. Unit ID 56-3: Lead Oxide Pneumatic Conveyor System

The Pneumatic Conveyor System consists of a hopper, pressure blower, and a pipe. Lead oxide is conveyed to a hopper from which the material is fed through an air lock rotary valve and into the pipe. Pressurized air from the blower conveys the material to a storage silo.

Emission units associated with Unit ID 56-3 were installed in 1977.

This unit is controlled by a baghouse & HEPA system.

3. Unit ID 56-4: Lead Oxide Bulk Loading System

The Bulk Loading System consists of a bulk storage silo, conveyors, and a loading spout. A pneumatic bulk trailer is spotted under the telescopic loading spout. The spout is lowered to the trailer hatch. Material is fed from a bulk storage silo through sealed conveyors into the trailer.

Emission units associated with Unit ID 56-4 were installed in 1977.

This unit is controlled by a baghouse & HEPA system.

4. Unit ID 56-7: Direct Car Loading System

The Direct Car Loading System consists of two storage silos, two weigh hoppers, a loading spout, a bin dump station, and interconnecting conveyors. Material is conveyed to one of two storage silos from where it can be loaded into a rail car, bulk truck, or tote bin.

Emission units associated with Unit 56-7 were installed in June, 1999 and approved for modification in 2012.

This unit is controlled by a baghouse & HEPA system. The two storage silos are equipped with a bin vent filter, which exhausts to the baghouse & HEPA system.

5. Unit ID 56-9: Flash Calciner System

The Flash Calciner system consists of a feed hopper, natural gas (propane alternative) calciner, process bag filter, Sweco separator, packer and interconnecting conveyors. Lead oxide from the bartons or tote bins is fed into a heated air stream. The material then passes through a process bag filter, a rotary valve and to either the 400Y furnace or through a Sweco separator. Following the Sweco, the material is either packed out or sent to storage tanks.

Emission units associated with Unit ID 56-9 were installed in May, 2006.

This unit is controlled by a baghouse & HEPA system.

6. Unit ID 56-10: Non-Lead Glass Process

The Non-Lead Glass Process consists of a natural gas (propane alternative) fired furnace, wet ball mill, wet sweco, mixing tank, and interconnecting conveyors. Glass frit from the furnace is milled, separated, and sent to a mix tank. The mix tank feeds the glass product spray dryer.

Emission units associated with Unit ID 56-10 were installed in May, 2006. The natural gas fired furnace was approved for construction in 2011.

This unit is controlled by a cartridge filter.

7. Unit ID 56-11: XS Furnace System

The XS Furnace System consists of a mixer, natural gas (propane alternative) fired furnace, wet ball mill, wet sweco, mixing tank, and interconnecting conveyors. Lead oxide and other raw materials are batch mixed in the mixer then charged into the furnace. As the raw materials melt, they react to form a material, which then flows to a fritting device. The glass frit is milled, separated, and sent to a mix tank. The mix tank feeds the glass product spray dryer.

Emissions units associated with Unit 56-11 were installed in May, 2006 and approved for modification in 2011.

This unit is controlled by a baghouse & HEPA system.

8. Unit ID 56-12: Glass Additive Drying Process

The Glass Additive Drying Process consists of a bin unloading station, drying screw, heated mixer, bin packing station, and interconnecting conveyors. The mixer is an indirectly heated natural gas fired (with propane as an alternative fuel), unit used to remove the water from the glass additive. The dried glass additive is then packed.

Emission units associated with Unit ID 56-12 were installed in 2002.

This unit is controlled by a baghouse & HEPA system.

9. Unit ID 56-13: Blending System

The blender is a paddle type mixer. The material from the blender will be packed out.

Emission units associated with Unit ID 56-13 were installed in 2001.

This system is controlled by a baghouse & HEPA system.

Under 40 CFR 63, Subpart VVVVVV these units are considered chemical manufacturing process units.

Stack ID 4-S-35

1. Unit ID 35-1: B-Furnace Drying System

The B-Furnace Drying System consists of a mixer, drying screw, sizing screen, oversize material crusher, and packing system. The mixer blends raw materials used for feedstock for the furnace. Material from the furnace is continuously conveyed from the fritting device through a natural gas or propane heated drying screw to remove excess moisture. The dried material is then conveyed to a classifying screen. The screened material is then conveyed to packing.

Emission units associated with Unit ID 35-1 were installed in 1955.

This unit is controlled by a baghouse & HEPA system.

Under 40 CFR 63, Subpart VVVVVV these units are considered chemical manufacturing process units.

Stack ID 1-S-27

1. Unit ID 27-1: Lead Oxide Mill

The Lead Oxide Mill consists of a mill feed hopper, impact mill, cyclone, source bin, packing hopper, and packing station. Lead oxide is conveyed to the mill feed hopper from where it is metered into the mill for grinding. The mill is an impact, air swept type grinding mill. The air and product from the mill are conveyed to a cyclone. Air from the cyclone is returned to the mill.

Emission units associated with Unit ID 27-1 were installed in October, 1987.

This unit is controlled by a baghouse & HEPA system.

Under 40 CFR 63, Subpart VVVVVV these units are considered chemical manufacturing process units.

Stack ID 6-S-33

1. Unit ID 33-1: B-Furnace System

The B-Furnace System consists of feed hoppers, rework system, furnace, fritting device, and interconnecting conveyors. Lead-oxide and other raw materials are batch-mixed in a mixer and conveyed to a stoker hopper. This mixture is then fed to the furnace. The furnace is a direct, natural gas or propane fired reverberatory type furnace. The raw materials are melted to form a molten material which then flows by gravity to the fritting device. The fritted material is conveyed to the drying system.

Emission units associated with Unit ID 33-1 were installed in 1988.

This system is controlled by a baghouse & HEPA system.

Under 40 CFR 63, Subpart VVVVVV these units are considered chemical manufacturing process units.

2. Unit ID 33-2: S-Furnace Operation

The S-Furnace Operation consists of a mixer, furnace, fritting device, drying screw, sizing screen, packers, and interconnecting conveyors. Non-lead raw materials are batch-mixed and then charged into the furnace. The furnace is a direct, natural gas or propane fired reverberatory-type furnace. As the raw materials melt, they react to form a material which then flows to a fritting device. The fritted material is continuously conveyed through a natural gas heated drying screw that removes excess moisture. The dried material is conveyed to a classifying screen and then conveyed to packing.

Emission units associated with Unit ID 33-2 (formerly Unit ID 47-1) were installed in February, 1995 and approved for modification to exhaust to stack 6-S-33 in 2011.

The emissions from this operation are vented to a baghouse & HEPA system.

Stack ID 4B-S-34

1. Unit ID 34-1: B-Furnace Mill

The mill feed hopper receives material produced by the B-Furnace. The hopper then charges the mill, which is an air impact air swept type that air conveys the milled material to a cyclone. The air leaving the cyclone is returned to the mill. The material from the cyclone discharges to a packing hopper.

Emission units associated with Unit ID 34-1 were installed in 1955.

This unit is controlled by a baghouse & HEPA system.

2. Unit ID 34-3: Glass Concepts Process

The Glass Concepts Process includes wet ball mills, a holding tank, spray dryers, process baghouses, and interconnecting conveyors. A slurry mixture is batch milled in ball mills and conveyed to a holding tank where it is continuously mixed to keep the material from separating out. The material is then dried in one of two atomizing spray dryers which are natural gas fired with propane as an alternative fuel. The dried product is conveyed through a process baghouse and packed out into containers. This system is drafted to pollution control equipment.

Emission units associated with Unit ID 34-3 were installed in 2005, modified in May, 2006 and October, 2007.

This process is controlled by baghouses & HEPA systems.

Under 40 CFR 63, Subpart VVVVVV these units are considered chemical manufacturing process units.

Stack ID 6-S-47

Reserved

Various Stack IDs associated with the Expander Operation (previously Stack ID 14-S-15)

1. Expander Operation: Unit IDs 15-1, 15-2, and 15-3 – Alpha BM Line, Beta BM Line, and Mixer Line.

Stack IDs associated with each unit are as follows:

a) Unit ID 15-1: Alpha BM Line – RB-1000, R-1000, DC-4001, T-1000, R-1002, and DC-4000 (Trivial Activities except for RB-1000 and DC-4000 which are classified as Insignificant Activities)
b) Unit ID 15-2: Beta BM Line – RB-2000, R-2000, DC-3003, T-2000, R-2001, and DC-3002 (Trivial Activities except for RB-2000 and DC-3002 which are classified as Insignificant Activities)
c) Unit ID 15-3: Mixer Line - DC-3000 and DC-2000 (Insignificant Activities)

The Expander Operation consists of three (3) lines. Lines 15-1 and 15-2 each consists of a blender, mill receiver, mill, silo, packing receiver, and a bag packer. Various raw materials are charged into the blender, fed to the ball mill, and milled. The blended material is then air conveyed to storage hoppers and/or packed into bags. Line 15-3 consists of a mixer and packer. Blended material from the mixer is mechanically conveyed into bulk containers to be packed out into bags.

Emission units associated with Unit IDs 15-1 and 15-2 were installed in June, 2002 and modified in October, 2006, June and September, 2007, and approved for modification in 2011.

Emission units associated with Unit ID 15-3 were installed in August, 2005 and modified in October, 2006, and September, 2007.

The emissions from these units are controlled by cartridge filters.

A.3 Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-8-3(c)(3)]

This stationary source also includes the following insignificant activities, as defined in 326 IAC 2-7-1(21):

(a) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) Btu per hour.

(b) Propane or liquefied petroleum gas, or butane-fired combustion sources with heat input equal to or less than six million (6,000,000) Btu per hour.

(c) Combustion source flame safety purging on startup.

(d) Storage tanks with capacity less than or equal to 1,000 gallons and annual throughputs less than 12,000 gallons.

(e) Vessels storing lubricating oils, hydraulic oils, machining oils, and machining fluids.

(f) Application of oils, greases, lubricants or other nonvolatile materials applied as temporary protective coatings.

(g) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6.

(h) Cleaners and solvents characterized as follows:

(1) having a vapor pressure equal to or less than 2 kPa; 15 mm Hg; or 0.3 psi measured at 38 degrees C (100 °F) or;

(2) having a vapor pressure equal to or less than 0.7 kPa; 5 mm Hg; or 0.1 psi measured at 20 °C (68 °F); the use of which for all cleaners and solvents combined does not exceed 145 gallons per 12 months.

(i) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment. [326 IAC 6.8-1-1]

(j) Closed loop heating and cooling systems.

(k) Activities associated with the treatment of wastewater streams with an oil and grease content less than or equal to 1 % by volume.

(l) Any operation using aqueous solutions containing less than 1 % by weight of VOCs excluding HAPs.

(m) Water based adhesives that are less than or equal to 5% by volume of VOCs excluding HAPs.

(n) Replacement or repair of bags or baghouses and filters in other air filtration equipment.

(o) Heat exchanger cleaning and repair.

(p) Process vessel degassing and cleaning to prepare for internal repairs.

(q) Paved and unpaved roads and parking lots with public access. [326 IAC 6.8-10-1] [326 IAC 6-4]

(r) Purging of gas lines and vessels that is related to routine maintenance and repair of buildings, structures, or vehicles at the source where air emissions from those activities would not be associated with any production process.

(s) Equipment used to collect any material that might be released during a malfunction, process upset, or spill cleanup, including catch tanks, temporary liquid separators, tanks, and fluid handling equipment.

(t) Blowdown for any of the following: sight glass; boilers; compressors; pumps; and cooling tower.

(u) On-site fire and emergency response training approved by the department.

(v) Purge double block and bleed valves.

(w) Filter or coalescer media changeout.

(x) A laboratory as defined in 326 IAC 2-7-1(21)(D).

(y) Research and development activities as defined in 326 IAC 2-7-1(21)(E).

Trivial Activities

The source also consists of the following trivial activities, as defined in 326 IAC 2-7-1(40):

(a) Stack ID V-1

1. Unit ID 1-1: General Building Ventilation Control System

The General Building Ventilation Control System consists of a fan and three (3) HEPA filter units which are connected in parallel to the collection ductwork. The system captures potential fugitive emissions which may escape from processing equipment in the lead chemical manufacturing areas.

Emission units associated with Unit ID 1-1 were installed in May, 1990.
[326 IAC 6.8-2-13(a)]

A.4 FESOP Applicability [326 IAC 2-8-2]

This stationary source, otherwise required to have a Part 70 permit as described in 326 IAC 2-7-2(a), has applied to the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) to renew a Federally Enforceable State Operating Permit (FESOP).

SECTION B GENERAL CONDITIONS

B.1 Definitions [326 IAC 2-8-1]

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations (IC 13-11, 326 IAC 1-2 and 326 IAC 2-7) shall prevail.

B.2 Permit Term [326 IAC 2-8-4(2)][326 IAC 2-1.1-9.5][IC 13-15-3-6(a)]

(a) This permit, F089-14165-00219, is issued for a fixed term of ten (10) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date of this permit.

(b) If IDEM, OAQ, upon receiving a timely and complete renewal permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, until the renewal permit has been issued or denied.

B.3 Term of Conditions [326 IAC 2-1.1-9.5]

Notwithstanding the permit term of a permit to construct, a permit to operate, or a permit modification, any condition established in a permit issued pursuant to a permitting program approved in the state implementation plan shall remain in effect until:

(a) the condition is modified in a subsequent permit action pursuant to Title I of the Clean Air Act; or

(b) the emission unit to which the condition pertains permanently ceases operation.

B.4 Enforceability [326 IAC 2-8-6] [IC 13-17-12]

Unless otherwise stated, all terms and conditions in this permit, including any provisions designed to limit the source's potential to emit, are enforceable by IDEM, the United States Environmental Protection Agency (U.S. EPA) and by citizens in accordance with the Clean Air Act.

B.5 Severability [326 IAC 2-8-4(4)]

The provisions of this permit are severable; a determination that any portion of this permit is invalid shall not affect the validity of the remainder of the permit.

B.6 Property Rights or Exclusive Privilege [326 IAC 2-8-4(5)(D)]

This permit does not convey any property rights of any sort or any exclusive privilege.

B.7 Duty to Provide Information [326 IAC 2-8-4(5)(E)]

(a) The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that IDEM, OAQ may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. Upon request, the Permittee shall also furnish to IDEM, OAQ copies of records required to be kept by this permit.

(b) For information furnished by the Permittee to IDEM, OAQ, the Permittee may include a claim of confidentiality in accordance with 326 IAC 17.1. When furnishing copies of requested records directly to U. S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.

B.8 Certification [326 IAC 2-8-3(d)][326 IAC 2-8-4(3)(C)(i)][326 IAC 2-8-5(1)]

(a) A certification required by this permit meets the requirements of 326 IAC 2-8-5(a)(1) if:

(1) it contains a certification by an "authorized individual", as defined by 326 IAC 2-1.1-1(1), and

(2) the certification states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

(b) The Permittee may use the attached Certification Form, or its equivalent with each submittal requiring certification. One (1) certification may cover multiple forms in one (1) submittal.

(c) An "authorized individual" is defined at 326 IAC 2-1.1-1(1).

B.9 Annual Compliance Certification [326 IAC 2-8-5(a)(1)]

(a) The Permittee shall annually submit a compliance certification report which addresses the status of the source's compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. All certifications shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted no later than April 15 of each year to:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

(b) The annual compliance certification report required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.

(c) The annual compliance certification report shall include the following:

(1) The appropriate identification of each term or condition of this permit that is the basis of the certification;

(2) The compliance status;

(3) Whether compliance was continuous or intermittent;

(4) The methods used for determining the compliance status of the source, currently and over the reporting period consistent with 326 IAC 2-8-4(3); and

(5) Such other facts, as specified in Sections D of this permit, as IDEM, OAQ may require to determine the compliance status of the source.

The submittal by the Permittee does require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

B.10 Compliance Order Issuance [326 IAC 2-8-5(b)]

IDEM, OAQ may issue a compliance order to this Permittee upon discovery that this permit is in nonconformance with an applicable requirement. The order may require immediate compliance or contain a schedule for expeditious compliance with the applicable requirement.

B.11 Preventive Maintenance Plan [326 IAC 1-6-3][326 IAC 2-8-4(9)]

(a) A Preventive Maintenance Plan meets the requirements of 326 IAC 1-6-3 if it includes, at a minimum:

(1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;

(2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and

(3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

The Permittee shall implement the PMPs.

(b) If required by specific condition(s) in Section D of this permit where no PMP was previously required, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) no later than ninety (90) days after issuance of this permit or ninety (90) days after initial start-up, whichever is later, including the following information on each facility:

(1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;

(2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and

(3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If, due to circumstances beyond the Permittee's control, the PMPs cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

The PMP extension notification does not require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

The Permittee shall implement the PMPs.

(c) A copy of the PMPs shall be submitted to IDEM, OAQ upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions. The PMPs and their submittal do not require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(d) To the extent the Permittee is required by 40 CFR Part 60/63 to have an Operation Maintenance, and Monitoring (OMM) Plan for a unit, such Plan is deemed to satisfy the PMP requirements of 326 IAC 1-6-3 for that unit.

B.12 Emergency Provisions [326 IAC 2-8-12]

(a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation except as provided in 326 IAC 2-8-12.

(b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a health-based or technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:

(1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;

(2) The permitted facility was at the time being properly operated;

(3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;

(4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, or Northwest Regional Office within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone Number: 1-800-451-6027 (ask for Office of Air Quality, Compliance and Enforcement Branch), or
Telephone Number: 317-233-0178 (ask for Office of Air Quality, Compliance and Enforcement Branch)
Facsimile Number: 317-233-6865
Northwest Regional Office phone: (219) 757-0265; fax: (219) 757-0267**.**

(5) For each emergency lasting one (1) hour or more, the Permittee submitted the attached Emergency Occurrence Report Form or its equivalent, either by mail or facsimile to:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-8-4(3)(C)(ii) and must contain the following:

(A) A description of the emergency;

(B) Any steps taken to mitigate the emissions; and

(C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(6) The Permittee immediately took all reasonable steps to correct the emergency.

(c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.

(d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.

(e) The Permittee seeking to establish the occurrence of an emergency shall make records available upon request to ensure that failure to implement a PMP did not cause or contribute to an exceedance of any limitations on emissions. However, IDEM, OAQ may require that the Preventive Maintenance Plans required under 326 IAC 2-8-3(c)(6) be revised in response to an emergency.

(f) Failure to notify IDEM, OAQ by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-8 and any other applicable rules.

(g) Operations may continue during an emergency only if the following conditions are met:

(1) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.

(2) If an emergency situation causes a deviation from a health-based limit, the Permittee may not continue to operate the affected emissions facilities unless:

(A) The Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and

(B) Continued operation of the facilities is necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw material of substantial economic value.

Any operations shall continue no longer than the minimum time required to prevent the situations identified in (g)(2)(B) of this condition.

B.13 Prior Permits Superseded [326 IAC 2-1.1-9.5]

(a) All terms and conditions of permits established prior to F089-14165-00219 and issued pursuant to permitting programs approved into the state implementation plan have been either:

(1) incorporated as originally stated,

(2) revised, or

(3) deleted.

(b) All previous registrations and permits are superseded by this permit.

B.14 Termination of Right to Operate [326 IAC 2-8-9][326 IAC 2-8-3(h)]

The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least nine (9) months prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-8-3(h) and 326 IAC 2-8-9.

B.15 Permit Modification, Reopening, Revocation and Reissuance, or Termination [326 IAC 2-8-4(5)(C)][326 IAC 2-8-7(a)][326 IAC 2-8-8]

(a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Federally Enforceable State Operating Permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-8-4(5)(C)] The notification by the Permittee does require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAQ determines any of the following:

(1) That this permit contains a material mistake.

(2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.

(3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-8-8(a)]

(c) Proceedings by IDEM, OAQ to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-8-8(b)]

(d) The reopening and revision of this permit, under 326 IAC 2-8-8(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAQ at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ may provide a shorter time period in the case of an emergency. [326 IAC 2-8-8(c)]

B.16 Permit Renewal [326 IAC 2-8-3(h)]

(a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ and shall include the information specified in 326 IAC 2-8-3. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40). The renewal application does require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management
Permit Administration and Support Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

(b) A timely renewal application is one that is:

(1) Submitted at least nine (9) months prior to the date of the expiration of this permit; and

(2) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.

(c) If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-8 until IDEM, OAQ takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified, pursuant to 326 IAC 2-8-3(g), in writing by IDEM, OAQ any additional information identified as being needed to process the application.

B.17 Permit Amendment or Revision [326 IAC 2-8-10][326 IAC 2-8-11.1]

(a) Permit amendments and revisions are governed by the requirements of 326 IAC 2-8-10 or 326 IAC 2-8-11.1 whenever the Permittee seeks to amend or modify this permit.

(b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management
Permit Administration and Support Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

Any such application does require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-10(b)(3)]

B.18 Operational Flexibility [326 IAC 2-8-15][326 IAC 2-8-11.1]

(a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-8-15(b) and (c) without a prior permit revision, if each of the following conditions is met:

(1) The changes are not modifications under any provision of Title I of the Clean Air Act;

(2) Any approval required by 326 IAC 2-8-11.1 has been obtained;

(3) The changes do not result in emissions which exceed the limitations provided in this permit (whether expressed herein as a rate of emissions or in terms of total emissions);

(4) The Permittee notifies the:

Indiana Department of Environmental Management
Permit Administration and Support Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

and

United States Environmental Protection Agency, Region V
Air and Radiation Division, Regulation Development Branch - Indiana (AR-18J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

in advance of the change by written notification at least ten (10) days in advance of the proposed change. The Permittee shall attach every such notice to the Permittee's copy of this permit; and

(5) The Permittee maintains records on-site, on a rolling five (5) year basis, which document all such changes and emission trades that are subject to 326 IAC 2-8-15(b)(1) and (c). The Permittee shall make such records available, upon reasonable request, for public review.

Such records shall consist of all information required to be submitted to IDEM, OAQ in the notices specified in 326 IAC 2-8-15(b)(1) and (c).

(b) Emission Trades [326 IAC 2-8-15(b)]
The Permittee may trade emissions increases and decreases at the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-8-15(b).

(c) Alternative Operating Scenarios [326 IAC 2-8-15(c)]
The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-8-4(7). No prior notification of IDEM, OAQ, or U.S. EPA is required.

(d) Backup fuel switches specifically addressed in, and limited under, Section D of this permit shall not be considered alternative operating scenarios. Therefore, the notification requirements of part (a) of this condition do not apply.

B.19 Source Modification Requirement [326 IAC 2-8-11.1]

A modification, construction, or reconstruction is governed by the requirements of 326 IAC 2.

B.20 Inspection and Entry [326 IAC 2-8-5(a)(2)][IC 13-14-2-2][IC 13-17-3-2][IC 13-30-3-1]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAQ, U.S. EPA, or an authorized representative to perform the following:

(a) Enter upon the Permittee's premises where a FESOP source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;

(b) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

(c) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;

(d) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and

(e) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

B.21 Transfer of Ownership or Operational Control [326 IAC 2-8-10]

(a) The Permittee must comply with the requirements of 326 IAC 2-8-10 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.

(b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:

Indiana Department of Environmental Management
Permit Administration and Support Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

Any such application does require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-10(b)(3)]

B.22 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-8-4(6)] [326 IAC 2-8-16][326 IAC 2-1.1-7]

(a) The Permittee shall pay annual fees to IDEM, OAQ no later than thirty (30) calendar days of receipt of a billing. Pursuant to 326 IAC 2-7-19(b), if the Permittee does not receive a bill from IDEM, OAQ the applicable fee is due April 1 of each year.

(b) Failure to pay may result in administrative enforcement action or revocation of this permit.

(c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-4230 (ask for OAQ, Billing, Licensing, and Training Section), to determine the appropriate permit fee.

B.23 Credible Evidence [326 IAC 2-8-4(3)][326 IAC 2-8-5][62 FR 8314] [326 IAC 1-1-6]

For the purpose of submitting compliance certifications or establishing whether or not the Permittee has violated or is in violation of any condition of this permit, nothing in this permit shall preclude the use, including the exclusive use, of any credible evidence or information relevant to whether the Permittee would have been in compliance with the condition of this permit if the appropriate performance or compliance test or procedure had been performed.

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

Emission Limitations and Standards [326 IAC 2-8-4(1)]

C.1 Overall Source Limit [326 IAC 2-8]

The purpose of this permit is to limit this source's potential to emit to less than major source levels for the purpose of Section 502(a) of the Clean Air Act.

(a) Pursuant to 326 IAC 2-8:

(1) The potential to emit any regulated pollutant from the entire source, except particulate matter (PM) and greenhouse gases (GHGs), shall be limited to less than one hundred (100) tons per twelve (12) consecutive month period;

(2) The potential to emit any individual hazardous air pollutant (HAP) from the entire source shall be limited to less than ten (10) tons per twelve (12) consecutive month period; and

(3) The potential to emit any combination of HAPs from the entire source shall be limited to less than twenty-five (25) tons per twelve (12) consecutive month period.

(4) The potential to emit greenhouse gases (GHGs) from the entire source shall be limited to less than one hundred thousand (100,000) tons of CO_2 equivalent emissions (CO_2e) per twelve (12) consecutive month period.

(b) Pursuant to 326 IAC 2-2 (PSD), potential to emit particulate matter (PM) from the entire source shall be limited to less than one hundred (100) tons per twelve (12) consecutive month period.

(c) This condition shall include all emission points at this source including those that are insignificant as defined in 326 IAC 2-7-1(21). The source shall be allowed to add insignificant activities not already listed in this permit, provided the source's potential to emit does not exceed the above specified limits.

(d) Section D of this permit contains independently enforceable provisions to satisfy this requirement.

C.2 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-1 (Applicability) and 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

(a) Opacity shall not exceed an average of twenty percent (20%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.3 Open Burning [326 IAC 4-1] [IC 13-17-9]

The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1.

C.4 Incineration [326 IAC 4-2] [326 IAC 9-1-2]

The Permittee shall not operate an incinerator except as provided in 326 IAC 4-2 or in this permit. The Permittee shall not operate a refuse incinerator or refuse burning equipment except as provided in 326 IAC 9-1-2 or in this permit.

C.5 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions).

C.6 Lake County Particulate Matter Contingency Measures [326 IAC 6.8-11-1]

The Permittee shall comply with the applicable provisions of 326 IAC 6.8-11-1 (formerly 326 IAC 6-1-11.2) (Lake County Particulate Matter Contingency Measures).

C.7 Stack Height [326 IAC 1-7]

The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted.

C.8 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

(a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.

(b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:

(1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or

(2) If there is a change in the following:

(A) Asbestos removal or demolition start date;

(B) Removal or demolition contractor; or

(C) Waste disposal site.

(c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).

(d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(e) Procedures for Asbestos Emission Control
The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-1, emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.

(f) Demolition and Renovation
The Permittee shall thoroughly inspect the affected facility or part of the facility where the demolition or renovation will occur for the presence of asbestos pursuant to 40 CFR 61.145(a).

(g) Indiana Licensed Asbestos Inspector
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Licensed Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos.

Testing Requirements [326 IAC 2-8-4(3)]

C.9 Performance Testing [326 IAC 3-6]

(a) For performance testing required by this permit, a test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ if the Permittee submits to IDEM, OAQ a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

Compliance Requirements [326 IAC 2-1.1-11]

C.10 Compliance Requirements [326 IAC 2-1.1-11]

The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements by issuing an order under 326 IAC 2-1.1-11. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U. S. EPA.

Compliance Monitoring Requirements [326 IAC 2-8-4][326 IAC 2-8-5(a)(1)]

C.11 Compliance Monitoring [326 IAC 2-8-4(3)][326 IAC 2-8-5(a)(1)]

Unless otherwise specified in this permit, for all monitoring requirements not already legally required, the Permittee shall be allowed up to ninety (90) days from the date of permit issuance or of initial start-up, whichever is later, to begin such monitoring. If due to circumstances beyond the Permittee's control, any monitoring equipment required by this permit cannot be installed and operated no later than ninety (90) days after permit issuance or the date of initial startup, whichever is later, the Permittee may extend the compliance schedule related to the equipment for an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

in writing, prior to the end of the initial ninety (90) day compliance schedule, with full justification of the reasons for the inability to meet this date.

The notification which shall be submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Unless otherwise specified in the approval for the new emission unit(s), compliance monitoring for new emission units or emission units added through a permit revision shall be implemented when operation begins.

C.12 Continuous Compliance Plan [326 IAC 6.8-8-1] [326 IAC 6.8-8-8]

(a) Pursuant to 326 IAC 326 IAC 6.8-8-1, the Permittee shall submit to IDEM and maintain at source a copy of the Continuous Compliance Plan (CCP). The Permittee shall perform the inspections, monitoring and record keeping in accordance with the information in 326 IAC 6.8-8-5 through 326 IAC 6.8-8-7 or applicable procedures in the CCP.

(b) Pursuant to 326 IAC 6.8-8-8, the Permittee shall update the CCP, as needed, retain a copy of any changes and updates to the CCP at the source and make the updated CCP available for inspection by the department. The Permittee shall submit the updated CCP, if required to IDEM, OAQ within thirty (30) days of the update.

(c) Pursuant to 326 IAC 6.8-8, failure to submit a CCP, maintain all information required by the CCP at the source, or submit update to a CCP is a violation of 326 IAC 6.8-8.

C.13 Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-8-4(3)][326 IAC 2-8-5(1)]

(a) When required by any condition of this permit, an analog instrument used to measure a parameter related to the operation of an air pollution control device shall have a scale such that the expected maximum reading for the normal range shall be no less than twenty percent (20%) of full scale.

(b) The Permittee may request that the IDEM, OAQ approve the use of an instrument that does not meet the above specifications provided the Permittee can demonstrate that an alternative instrument specification will adequately ensure compliance with permit conditions requiring the measurement of the parameters.

Corrective Actions and Response Steps [326 IAC 2-8-4][326 IAC 2-8-5(a)(1)]

C.14 Risk Management Plan [326 IAC 2-8-4] [40 CFR 68]

If a regulated substance, as defined in 40 CFR 68, is present at a source in more than a threshold quantity, the Permittee must comply with the applicable requirements of 40 CFR 68.

C.15 Response to Excursions or Exceedances [326 IAC 2-8-4] [326 IAC 2-8-5]

Upon detecting an excursion where a response step is required by the D Section or an exceedance of a limitation in this permit:

(a) The Permittee shall take reasonable response steps to restore operation of the emissions unit (including any control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing excess emissions.

(b) The response shall include minimizing the period of any startup, shutdown or malfunction. The response may include, but is not limited to, the following:

(1) initial inspection and evaluation;

(2) recording that operations returned or are returning to normal without operator action (such as through response by a computerized distribution control system); or

(3) any necessary follow-up actions to return operation to normal or usual manner of operation.

(c) A determination of whether the Permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include, but is not limited to, the following:

(1) monitoring results;

(2) review of operation and maintenance procedures and records; and/or

(3) inspection of the control device, associated capture system, and the process.

(d) Failure to take reasonable response steps shall be considered a deviation from the permit.

(e) The Permittee shall record the reasonable response steps taken.

C.16 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-8-4][326 IAC 2-8-5]

(a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall submit a description of its response actions to IDEM, OAQ, no later than seventy-five (75) days after the date of the test.

(b) A retest to demonstrate compliance shall be performed no later than one hundred eighty (180) days after the date of the test. Should the Permittee demonstrate to IDEM, OAQ that retesting in one hundred eighty (180) days is not practicable, IDEM, OAQ may extend the retesting deadline.

(c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The response action documents submitted pursuant to this condition do require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]

C.17 General Record Keeping Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-5]

(a) Records of all required monitoring data, reports and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. Support information includes the following:

(AA) All calibration and maintenance records.
(BB) All original strip chart recordings for continuous monitoring instrumentation.
(CC) Copies of all reports required by the FESOP permit.

Records of required monitoring information include the following:

(AA) The date, place, as defined in this permit, and time of sampling or measurements.
(BB) The dates analyses were performed.
(CC) The company or entity that performed the analyses.
(DD) The analytical techniques or methods used.
(EE) The results of such analyses.
(FF) The operating conditions as existing at the time of sampling or measurement.

These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

(b) Unless otherwise specified in this permit, for all record keeping requirements not already legally required, the Permittee shall be allowed up to ninety (90) days from the date of permit issuance or the date of initial start-up, whichever is later, to begin such record keeping.

C.18 General Reporting Requirements [326 IAC 2-8-4(3)(C)] [326 IAC 2-1.1-11]

(a) The Permittee shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Proper notice submittal under Section B - Emergency Provisions satisfies the reporting requirements of this paragraph. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported except that a deviation required to be reported pursuant to an applicable requirement that exists independent of this permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report. This report shall be submitted not later than thirty (30) days after the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1). A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.

(b) The address for report submittal is:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

(c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or

certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.

(d) Reporting periods are based on calendar years, unless otherwise specified in this permit. For the purpose of this permit "calendar year" means the twelve (12) month period from January 1 to December 31 inclusive.

Stratospheric Ozone Protection

C.19 Compliance with 40 CFR 82 and 326 IAC 22-1

Pursuant to 40 CFR 82 (Protection of Stratospheric Ozone), Subpart F, except as provided for motor vehicle air conditioners in Subpart B, the Permittee shall comply with applicable standards for recycling and emissions reduction.

SECTION D.1 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)]:

Stack ID 1-S-52: Unit IDs 52-1 through 52-17 and 52-19 through 52-20. See facility descriptions below.

This stack is identified as the Main Control System. This control system is comprised of four (4) units in parallel. Each unit includes a baghouse and a HEPA. Each unit is rated at 99.9998% control efficiency according to the company. The following units are controlled by the Main Control System control equipment, except when otherwise specified.

Stack I-S-52 is used to vent the control device exhausts from various processes.

1. Unit ID 52-1: No. 1 Barton System

The Barton System consists of a melt kettle, barton reactor, settling device, and interconnecting conveyors. Lead ingots are charged into an enclosed melt kettle which is indirectly heated by either natural gas or propane burners. The molten lead is continuously fed into the barton reactor where it is atomized and oxidized into lead oxide. The oxide is drawn through a settling device and then conveyed to further processing.

Emission units associated with Unit ID 52-1 were installed in 1930.

Unit 52-1 is not controlled by the Main Control System. It is controlled by one baghouse followed by a HEPA system which exhausts through stack 1-S-52.

2. Unit IDs 52-2 through 52-10: Furnace Systems No. 1, 2, 10, 3, 4, 5, 6, 8, & 9 (Insignificant Activities)

Each Furnace System consists of feed hoppers, batch furnace, and interconnecting conveyors. Each furnace is an indirectly heated, natural gas or propane fired, batch furnace which completes the oxidation of the lead oxide.

Emission units associated with Unit ID 52-2 were originally installed in 1930. This unit was approved for repair and re-activation in 2012.
Emission units associated with Unit IDs 52-3, 52-6, and 52-7 were installed in 1930.
Emission units associated with Unit ID 52-4 were installed in 1980.
Emission units associated with Unit IDs 52-5 were installed in 1971.
Emission units associated with Unit IDs 52-8 were installed in 1955.
Emission units associated with Unit IDs 52-9 were installed in 1957.
Emission units associated with Unit IDs 52-10 were installed in 1972.

3. Unit IDs 52-11 through 52-13: Mills Systems (Insignificant Activities: 52-12 & 52-13)

Each Mill System consists of a feed hopper, mill, cyclone (Unit IDs 52-11 and 52-12 only), and interconnecting conveyors. Lead Oxide is conveyed to the mill feed hopper from where it is metered into the mill. The air and product from the mill are conveyed to a cyclone. Air from the cyclone is returned to the mill. The oxide is conveyed to the packing station, the North bulk loading storage hopper or for further processing.

Emission units associated with Unit IDs 52-11 and 52-12 were installed in 1930.
Emission units associated with Unit ID 52-13 were installed in 1957.

4. Unit ID 52-14: Air Conveying System (Trivial Activity)

The Air Conveying System consists of a hopper, pressure blowers, and pipes. For the blower 1 system, lead oxide is conveyed to a hopper from which the material is fed through an air lock rotary valve into the pipe. Pressurized air from the blower conveys the material to storage silos. Blower 2 is

used to blow material from the 6 Barton mill to storage silos. Material can also be blown from the 4 Barton mill to storage silos.

Emission units associated with Unit ID 52-14 were installed in 1983.

Unit 52-14 is not controlled by the Main Control System. It is controlled by two baghouses followed by a HEPA system which exhausts through stack 1-S-52.

5. Unit ID 52-15, 16 & 19: Lead Oxide Bulk Loading, Bulk Loading System, & Lead Oxide Bulk Loading – North (Insignificant Activities: 52-15 & 52-16)

Each Bulk Loading System consists of a bulk storage silo, conveyors, and a loading spout. A pneumatic bulk trailer is spotted under the telescopic loading spout. The spout is lowered to the trailer hatch. Material is fed from a bulk storage silo through sealed conveyors into the trailer.

Emission units associated with Unit ID 52-15 were installed in 1960.
Emission units associated with Unit ID 52-16 were installed in 1983.
Emission units associated with Unit ID 52-19 were installed in September, 1995.

Unit ID 52-16 is not controlled by the Main Control System. It is controlled by two baghouses followed by a HEPA system which exhausts through stack 1-S-52.

6. Unit ID 52-17: Mykro Mill (Insignificant Activity)

The Mykro Mill consists of two high efficiency cyclones that separate lead oxide into a fine lead oxide product and a coarse lead oxide product. Lead oxide from a barton is conveyed to the feed hopper from which it is fed through an air lock rotary valve into the Mykro Mill. The fine lead oxide is packed into containers and the coarse lead oxide can either be recycled or packed into containers.

Emission units associated with Unit ID 52-17 were installed in November, 1989.

7. Unit ID 52-20: Rail Car Loading

The Rail Car Loading operation consists of a covered railroad hopper car, loading device, and a dust collection device. A rail car is spotted at the loading area and the loading device and dust collection device are put in place. Tote bins containing material are then lifted above the loading device and discharged into the car.

Emission units associated with Unit 52-20 were installed in 1960.

Under 40 CFR 63, Subpart VVVVVV these units are considered chemical manufacturing process units.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emissions Limitations and Standards [326 IAC 2-8-4(1)]

D.1.1 Particulate Matter less than 10 microns in diameter (PM10) [326 IAC 6.8-2-13(a)] [326 IAC 2-8-4] [326 IAC 2-2]

Pursuant to 326 IAC 6.8-2-13(a) (formerly 326 IAC 6-1-10.1(d)) (Lake County PM10 emission requirements), the PM10 emissions from Stack ID 1-S-52 shall be limited to 0.022 gr/dscf and 1.000 lbs/hr. This requirement will ensure that the source total PM10 emissions stay below 100 tons/yr. Therefore, the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) and 326 IAC 2-7 (Part 70) do not apply.

D.1.2 Particulate Matter (PM) [326 IAC 2-2]

In order to render 326 IAC 2-2 not applicable, particulate matter emissions from Stack ID 1-S-52 shall be set equal to the PM10 emission limit, 0.022 gr/dscf and 1.000 lbs/hr. This requirement will ensure that the source total PM emissions stay below 100 tons/yr. Therefore, the requirements of 326 IAC 2-2 (PSD) do not apply.

D.1.3 Particulate Matter less than 2.5 microns in diameter (PM2.5) [326 IAC 2-1.1-5] [326 IAC 2-8-4]

Pursuant to 326 IAC 2-8-4, PM2.5 emissions from Stack ID 1-S-52 shall be set equal to the PM10 emission limit, 0.022 gr/dscf and 1.000 lbs/hr. This requirement will ensure that the source total PM2.5 emissions stay below 100 tons/yr. Therefore, the requirements of 326 IAC 2-1.1-5 (Nonattainment NSR) and 326 IAC 2-7 (Part 70 Permit Program) do not apply.

D.1.4 Lead (Pb) [326 IAC 15-1-2] [326 IAC 2-8-4] [326 IAC 2-2]

Pursuant to 326 IAC 15 (Lead Emission Limitations), the lead emissions from Stack ID 1-S-52, as specifically listed in 326 IAC 15-1-2(a)(6), shall be limited to 0.070 lbs/hr. This requirement will ensure that the source total lead emissions stay below 4 tons/yr. Therefore, the requirements of 326 IAC 2-2 (PSD) and 326 IAC 2-7 (Part 70) do not apply.

D.1.5 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan is required for these facilities and any control devices. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

Compliance Determination Requirements

D.1.6 Testing Requirements [326 IAC 2-8-5(a)(1), (4)] [326 IAC 2-1.1-11]

During the period between 30 and 36 months after issuance of FESOP Renewal No. 089-14165-00219, in order to demonstrate compliance with Condition D.1.4, the Permittee shall perform lead testing on Stack ID 1-S-52 utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of the most recent valid compliance demonstration. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C – Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition.

D.1.7 Particulate Matter less than 10 microns in diameter (PM10) [326 IAC 2-8-5(4)]

(a) Pursuant to FESOP No. F089-5200-00219, issued on December 12, 1996, and in order to comply with Condition D.1.1, the baghouses and HEPA systems shall be operated at all times when the associated facility is in operation.

(b) In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

D.1.8 Lead (Pb) [326 IAC 2-8-5(4)]

(a) Pursuant to FESOP No. F089-5200-00219, issued on December 12, 1996, and in order to comply with Condition D.1.4, the baghouses and HEPA systems shall be operated at all times when the associated facility is in operation.

(b) In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

D.1.9 Visible Emissions Notations

(a) Visible emission notations of the Stack ID 1-S-52 exhaust shall be performed once per day during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.

(b) For processes operated continuously, “normal” means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) If abnormal emissions are observed, the Permittee shall take reasonable response. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. An abnormal visible emission notation is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.

D.1.10 Baghouse and HEPA Parametric Monitoring

(a) The Permittee shall record the pressure drop across each baghouse and HEPA filter used in conjunction with the processes associated with Stack ID 1-S-52, at least once per day when the process is in operation. When for any one reading, the pressure drop across the baghouse or HEPA filter is outside the following normal range of the following:

(*Stack ID 1-S-52*)

Control Unit ID	**Pressure Drop** (inches of water)
(Unit ID 52-1)	
52-10 F (Baghouse)	1.0 - 9.0
52-10 H (HEPA)	0.1 - 4.5
(Main Control System) (Unit IDs 52-2 through 52-13, 52-15, 52-17, 52-19 through 52-20)	
52-1 F (Micro-Pul Baghouse)	1.0 - 9.0
52-1 H (HEPA)	0.1 - 4.5
52-2 F (Micro-Pul Baghouse)	1.0 - 9.0
52-2 H (HEPA)	0.1 - 4.5
52-3 F (Micro-Pul Baghouse)	1.0 - 9.0
52-3 H (HEPA)	0.1 - 4.5
52-4 F (Micro-Pul Baghouse)	1.0 - 9.0
52-4 H (HEPA)	0.1 - 4.5
52-5-H (Unit IDs 52-5, 6, 7, & 9 HEPA)	0.1 - 4.5
(Unit ID 52-14)	
52-7 F (Baghouse)	0.1 - 8.0
52-9 F (Baghouse)	0.1 - 8.0
52-5-H (HEPA)	0.1 - 4.5
(Unit ID 52-16)	
52-5 F (Baghouse)	0.1 - 8.0

Control Unit ID	Pressure Drop (inches of water)
52-6 F (Baghouse)	0.1 - 8.0
52-5-H (HEPA)	0.1 - 4.5

or a range established during the latest stack test, the Permittee shall take reasonable response. Section C- Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A pressure reading that is outside the above-mentioned range is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.

(b) The instrument used for determining the pressure shall comply with Section C – Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated or replaced at least once every six (6) months.

D.1.11 Broken or Failed Bag Detection [326 IAC 2-8-5(1)] [326 IAC 2-8-4(1)]

(a) For a single compartment baghouse controlling emissions from a process operated continuously, a failed unit and the associated process shall be shut down immediately until the failed unit has been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B – Emergency Provisions).

(b) For a single compartment baghouse controlling emissions from a batch process, the feed to the process shall be shut down immediately until the failed unit has been repaired or replaced. The emissions unit shall be shut down no later than the completion of the processing of the material in the emissions unit. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B – Emergency Provisions).

Bag failure can be indicated by a significant drop in the baghouse's pressure reading with abnormal visible emissions, by an opacity violation, or by other means such as gas temperature, flow rate, air infiltration, leaks, dust traces or triboflows.

Record Keeping Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-16]

D.1.12 Record Keeping Requirements

(a) To document the compliance status with Condition D.1.9, the Permittee shall maintain daily records of the visible emission notations of the Stack ID 1-S-52 exhaust. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation, (e.g. the process did not operate that day).

(b) To document the compliance status with Condition D.1.10, the Permittee shall maintain daily records of the pressure drop across each baghouse and HEPA. The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of a pressure drop reading, (e.g. the process did not operate that day).

(c) Section C - General Record Keeping Requirements, of this permit contains the Permittee's obligations with regard to the records required by this condition.

SECTION D.2 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)]:

Stack IDs 4A-S-8, 14-S-16, 1-S-2, & 1-S-26

1. Unit IDs 8-1, 16-1, 2-1, & 26-1: No. 2, 3, 4, & 5 Barton Systems

   Each Barton System consists of a melt kettle, barton reactor, settling device, and interconnecting conveyors. Lead ingots are charged into an enclosed melt kettle which is indirectly heated by either natural gas or propane burners. The molten lead is continuously fed into the barton reactor where it is atomized and oxidized into lead oxide. The oxide is drawn through a settling device and then conveyed to further processing.

   Emission units associated with Unit ID 8-1 were installed in 1958.
   Emission units associated with Unit ID 16-1 were installed in 1972.
   Emission units associated with Unit ID 2-1 were installed in 1974.
   Emission units associated with Unit ID 26-1 were installed in 1977.

   Each system is controlled by a baghouse & HEPA system.

2. Unit ID 26-2: No. 6 Barton System

   This Barton System consists of a melt kettle, barton reactor, cyclone, and interconnecting conveyors. Lead ingots are charged into an enclosed melt kettle which is indirectly heated by either natural gas or propane burners. The molten lead is continuously fed into the barton reactor where it is atomized and oxidized into lead oxide. The oxide is drawn through a sealed conductor into a cyclone and then mechanically conveyed to further processing.

   Emission units associated with Unit ID 26-2 were installed in July 1995.

   The No. 6 Barton system is controlled by a baghouse & HEPA system.

   Under 40 CFR 63, Subpart VVVVVV these units are considered chemical manufacturing process units.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emissions Limitations and Standards [326 IAC 2-8-4(1)]

D.2.1 Particulate Matter less than 10 microns in diameter (PM10) [326 IAC 6.8-2-13(a)] [326 IAC 2-8-4] [326 IAC 2-2]

Pursuant to 326 IAC 6.8-2-13(a) (formerly 326 IAC 6-1-10.1(d)) (Lake County PM10 emission requirements), the PM10 emissions from Stack IDs 4A-S-8, 14-S-16, 1-S-2, & 1-S-26 shall be limited to 0.022 gr/dscf and 0.250 lbs/hr, per stack. This requirement will ensure that the source total PM10 emissions stay below 100 tons/yr. Therefore, the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) and 326 IAC 2-7 (Part 70) do not apply.

D.2.2 Particulate Matter (PM) [326 IAC 2-2]

In order to render 326 IAC 2-2 not applicable, particulate matter emissions from Stack IDs 4A-S-8, 14-S-16, 1-S-2, & 1-S-26 shall be set equal to the PM10 emission limit, 0.022 gr/dscf and 0.250 lbs/hr, per stack. This requirement will ensure that the source total PM emissions stay below 100 tons/yr. Therefore, the requirements of 326 IAC 2-2 (PSD) do not apply.

D.2.3 Particulate Matter less than 2.5 microns in diameter (PM2.5) [326 IAC 2-1.1-5] [326 IAC 2-8-4]

Pursuant to 326 IAC 2-8-4, PM2.5 emissions from Stack IDs 4A-S-8, 14-S-16, 1-S-2, & 1-S-26 shall be set equal to the PM10 emission limit, 0.022 gr/dscf and 0.250 lbs/hr, per stack. This requirement will ensure that the source total PM2.5 emissions stay below 100 tons/yr. Therefore, the requirements of 326 IAC 2-1.1-5 (Nonattainment NSR) and 326 IAC 2-7 (Part 70 Permit Program) do not apply.

D.2.4 Lead (Pb) [326 IAC 15-1-2] [326 IAC 2-8-4] [326 IAC 2-2]

Pursuant to 326 IAC 15 (Lead Emission Limitations), the lead emissions from Stack IDs 4A-S-8, 14-S-16, 1-S-2, & 1-S-26, as specifically listed in 326 IAC 15-1-2(a)(6), shall be limited to 0.053 lbs/hr, per stack. This requirement will ensure that the source total lead emissions stay below 4 tons/yr. Therefore, the requirements of 326 IAC 2-2 (PSD) and 326 IAC 2-7 (Part 70) do not apply.

D.2.5 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan is required for these facilities and any control devices. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

Compliance Determination Requirements

D.2.6 Testing Requirements [326 IAC 2-8-5(a)(1), (4)] [326 IAC 2-1.1-11]

During the period between 30 and 36 months after issuance of FESOP Renewal No. 089-14165-00219, in order to demonstrate compliance with Condition D.2.4, the Permittee shall perform lead testing on one of the four (4) stacks, Stack IDs 4A-S-8, 14-S-16, 1-S-2, & 1-S-26, testing a different stack each time until all four (4) have been tested, utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of the most recent valid compliance demonstration. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C – Performance Testing contains the Permittee’s obligation with regard to the performance testing required by this condition.

D.2.7 Particulate Matter less than 10 microns in diameter (PM10) [326 IAC 2-8-5(4)]

(a) Pursuant to FESOP No. F089-5200-00219, issued on December 12, 1996, and in order to comply with Condition D.2.1, the baghouse and HEPA system shall be operated at all times when the associated facility is in operation.

(b) In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

D.2.8 Lead (Pb) [326 IAC 2-8-5(4)]

(a) Pursuant to FESOP No. F089-5200-00219, issued on December 12, 1996, and in order to comply with Condition D.2.4, the baghouse and HEPA system shall be operated at all times when the associated facility is in operation.

(b) In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

D.2.9 Visible Emissions Notations

(a) Visible emission notations of the Stack IDs 4A-S-8, 14-S-16, 1-S-2, & 1-S-26 exhaust shall be performed once per day during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.

(b) For processes operated continuously, “normal” means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) If abnormal emissions are observed, the Permittee shall take reasonable response. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. An abnormal visible emission notation is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.

D.2.10 Baghouse and HEPA Parametric Monitoring

(a) The Permittee shall record the pressure drop across the baghouse and HEPA filter used in conjunction with the process associated with Stack IDs 4A-S-8, 14-S-16, 1-S-2, & 1-S-26, at least once per day when the process is in operation. When for any one reading, the pressure drop across the baghouse or HEPA filter is outside the normal range of the following:

(*Stack IDs* 4A-S-8, 14-S-16, 1-S-2, & 1-S-26)

Control Unit ID	**Pressure Drop** (inches of water)
(Unit ID 8-1)	
8-7-F (Baghouse)	0.1 - 8.5
8-7-H (HEPA)	0.1 - 4.5
(Unit ID 16-1)	
16-8-F (Baghouse)	0.1 - 8.5
16-8-H (HEPA)	0.1 - 4.5
(Unit ID 2-1)	
2-9-F (Baghouse)	0.1 - 5.0
2-9-H (HEPA)	0.1 - 2.0
(Unit IDs 26-1 & 2)	
26-10-F & 26-11-F (Baghouse)	0.5 - 8.5
26-10-H & 26-11-H (HEPA)	0.1 - 4.5

or a range established during the latest stack test, the Permittee shall take reasonable response. Section C- Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A pressure reading that is outside the above-mentioned range is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.

(b) The instrument used for determining the pressure shall comply with Section C - Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated or replaced at least once every six (6) months.

D.2.11 Broken or Failed Bag Detection [326 IAC 2-8-5(1)] [326 IAC 2-8-4(1)]

(a) For a single compartment baghouse controlling emissions from a process operated continuously, a failed unit and the associated process shall be shut down immediately until the failed unit has been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B – Emergency Provisions).

(b) For a single compartment baghouse controlling emissions from a batch process, the feed to the process shall be shut down immediately until the failed unit has been repaired or replaced. The emissions unit shall be shut down no later than the completion of the processing of the material in the emissions unit. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B – Emergency Provisions).

Bag failure can be indicated by a significant drop in the baghouse's pressure reading with abnormal visible emissions, by an opacity violation, or by other means such as gas temperature, flow rate, air infiltration, leaks, dust traces or triboflows.

Record Keeping Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-16]

D.2.12 Record Keeping Requirements

(a) To document the compliance status with Condition D.2.9, the Permittee shall maintain daily records of the visible emission notations of the Stack IDs 4A-S-8, 14-S-16, 1-S-2, & 1-S-26 exhaust. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation, (e.g. the process did not operate that day).

(b) To document the compliance status with Condition D.2.10, the Permittee shall maintain daily records of the pressure drop across each baghouse and HEPA. The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of a pressure drop reading, (e.g. the process did not operate that day).

(c) Section C - General Record Keeping Requirements, of this permit contains the Permittee's obligations with regard to the records required by this condition.

SECTION D.3 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)]:

Stack ID 16-S-56

1. Unit ID 56-1: 400Y Furnace System

The 400Y Furnace System is a direct, natural gas or propane fired reverberatory type furnace. The lead oxide is melted in this furnace and then converted to pelletized lead oxide. After appropriate classification, the finished product is screw conveyed to the packing hopper and packed.

Emission units associated with Unit ID 56-1 were installed in 1971.

This unit is controlled by the 16-S-56 Control System which includes four (4) baghouse & HEPA systems.

2. Unit ID 56-3: Lead Oxide Pneumatic Conveyor System

The Pneumatic Conveyor System consists of a hopper, pressure blower, and a pipe. Lead oxide is conveyed to a hopper from which the material is fed through an air lock rotary valve and into the pipe. Pressurized air from the blower conveys the material to a storage silo.

Emission units associated with Unit ID 56-3 were installed in 1977.

This unit is controlled by a baghouse & HEPA system.

3. Unit ID 56-4: Lead Oxide Bulk Loading System

The Bulk Loading System consists of a bulk storage silo, conveyors, and a loading spout. A pneumatic bulk trailer is spotted under the telescopic loading spout. The spout is lowered to the trailer hatch. Material is fed from a bulk storage silo through sealed conveyors into the trailer.

Emission units associated with Unit ID 56-4 were installed in 1977.

This unit is controlled by a baghouse & HEPA system.

4. Unit ID 56-7: Direct Car Loading System

The Direct Car Loading System consists of two storage silos, two weigh hoppers, a loading spout, a bin dump station, and interconnecting conveyors. Material is conveyed to one of two storage silos from where it can be loaded into a rail car, bulk truck, or tote bin.

Emission units associated with Unit 56-7 were installed in June, 1999 and approved for modification in 2012.

This unit is controlled by a baghouse & HEPA system. The two storage silos are equipped with a bin vent filter, which exhausts to the baghouse & HEPA system.

5. Unit ID 56-9: Flash Calciner System

The Flash Calciner System consists of a feed hopper, natural gas (propane alternative) calciner, process bag filter, Sweco separator, packer and interconnecting conveyors. Lead oxide from the bartons or tote bins is fed into a heated air stream. The material then passes through a process bag filter, a rotary valve and to either the 400Y furnace or through a Sweco separator. Following the Sweco, the material is either packed out or sent to storage tanks.

Emission units associated with Unit 56-9 were installed in May, 2006.

This unit is controlled by a baghouse & HEPA system.

6. Unit ID 56-10: Non-Lead Glass Process

The Non-Lead Glass Process consists of a natural gas (propane alternative) fired furnace, wet ball mill, wet sweco, mixing tank, and interconnecting conveyors. Glass frit from the furnace is milled, separated, and sent to a mix tank. The mix tank feeds the glass product spray dryer.

Emission units associated with Unit 56-10 were installed in May, 2006. The natural gas fired furnace was approved for construction in 2011.

This unit is controlled by a cartridge filter.

7. Unit ID 56-11: XS Furnace System

The XS Furnace System consists of a mixer, natural gas (propane alternative) fired furnace, wet ball mill, wet sweco, mixing tank, and interconnecting conveyors. Lead oxide and other raw materials are batch mixed in the mixer then charged into the furnace. As the raw materials melt, they react to form a material, which then flows to a fritting device. The glass frit is milled, separated, and sent to a mix tank. The mix tank feeds the glass product spray dryer.

Emissions units associated with Unit 56-11 were installed in May, 2006 and approved for modification in 2011.

This unit is controlled by a baghouse & HEPA system.

8. Unit ID 56-12: Glass Additive Drying Process

The Glass Additive Drying Process consists of a bin unloading station, drying screw, heated mixer, bin packing station, and interconnecting conveyors. The mixer is an indirectly heated natural gas fired (with propane as an alternative fuel), unit used to remove the water from the glass additive. The dried glass additive is then packed.

Emission units associated with Unit ID 56-12 were installed in 2002.

This unit is controlled by a baghouse & HEPA system.

9. Unit ID 56-13: Blending System

The blender is a paddle type mixer. The material from the blender will be packed out.

Emission units associated with Unit ID 56-13 were installed in 2001.

This system is controlled by a baghouse & HEPA system.

Under 40 CFR 63, Subpart VVVVVV these units are considered chemical manufacturing process units.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emissions Limitations and Standards [326 IAC 2-8-4(1)]

D.3.1 Particulate Matter less than 10 microns in diameter (PM10) [326 IAC 6.8-2-13(a)] [326 IAC 2-8-4] [326 IAC 2-2]

Pursuant to 326 IAC 6.8-2-13(a) (formerly 326 IAC 6-1-10.1(d)) (Lake County PM10 emission requirements), the PM10 emissions from Stack ID 16-S-56 shall be limited to 0.022 gr/dscf and 1.000 lbs/hr. This requirement will ensure that the source total PM10 emissions stay below 100 tons/yr. Therefore, the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) and 326 IAC 2-7 (Part 70) do not apply.

D.3.2 Particulate Matter (PM) [326 IAC 2-2]

In order to render 326 IAC 2-2 not applicable, particulate matter emissions from Stack ID 16-S-56 shall be set equal to the PM10 emission limit, 0.022 gr/dscf and 1.000 lbs/hr. This requirement will ensure that the source total PM emissions stay below 100 tons/yr. Therefore, the requirements of 326 IAC 2-2 (PSD) do not apply.

D.3.3 Particulate Matter less than 2.5 microns in diameter (PM2.5) [326 IAC 2-1.1-5] [326 IAC 2-8-4]

Pursuant to 326 IAC 2-8-4, PM2.5 emissions from Stack ID 16-S-56 shall be set equal to the PM10 emission limit, 0.022 gr/dscf and 1.000 lbs/hr. This requirement will ensure that the source total PM2.5 emissions stay below 100 tons/yr. Therefore, the requirements of 326 IAC 2-1.1-5 (Nonattainment NSR) and 326 IAC 2-7 (Part 70 Permit Program) do not apply.

D.3.4 Lead (Pb) [326 IAC 15-1-2] [326 IAC 2-8-4] [326 IAC 2-2]

Pursuant to 326 IAC 15 (Lead Emission Limitations), the lead emissions from Stack ID 16-S-56, as specifically listed in 326 IAC 15-1-2(a)(6), shall be limited to 0.200 lbs/hr. This requirement will ensure that the source total lead emissions stay below 4 tons/yr. Therefore, the requirements of 326 IAC 2-2 (PSD) and 326 IAC 2-7 (Part 70) do not apply.

D.3.5 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan is required for these facilities and any control devices. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

Compliance Determination Requirements

D.3.6 Testing Requirements [326 IAC 2-8-5(a)(1), (4)] [326 IAC 2-1.1-11]

During the period between 30 and 36 months after issuance of FESOP Renewal No. 089-14165-00219, in order to demonstrate compliance with Condition D.3.4, the Permittee shall perform lead testing on Stack ID 16-S-56 utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of the most recent valid compliance demonstration. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C – Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition.

D.3.7 Particulate Matter less than 10 microns in diameter (PM10) [326 IAC 2-8-5(4)]

(a) Pursuant to FESOP No. F089-5200-00219, issued on December 12, 1996, and in order to comply with Condition D.3.1, the baghouse and HEPA system shall be operated at all times when the associated facility is in operation.

(b) In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

D.3.8 Lead (Pb) [326 IAC 2-8-5(4)]

(a) Pursuant to FESOP No. F089-5200-00219, issued on December 12, 1996, and in order to comply with Condition D.3.4, the baghouse and HEPA system shall be operated at all times when the associated facility is in operation.

(b) In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

D.3.9 Visible Emissions Notations

(a) Visible emission notations of the Stack ID 16-S-56 exhaust shall be performed once per day during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.

(b) For processes operated continuously, “normal” means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) If abnormal emissions are observed, the Permittee shall take reasonable response. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. An abnormal visible emission notation is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.

D.3.10 Baghouse and HEPA Parametric Monitoring

(a) The Permittee shall record the pressure drop across each baghouse and HEPA filter used in conjunction with the processes associated with Stack ID 16-S-56, at least once per day when the process is in operation. When for any one reading, the pressure drop across the baghouse or HEPA filter is outside the normal range of the following:

(*Stack ID 16-S-56*)

Control Unit ID	**Pressure Drop** (inches of water)
(Unit IDs 56-1, 56-11, 56-12, and 56-13)	
56-18-F & 56-18-H (100-Bag Filter / 100-Bag HEPA)	1.0 - 9.0 / 0.1 - 4.5
56-19-F & 56-19-H (80-Bag Filter / 80-Bag HEPA)	1.0 - 10 / 0.1 - 4.5
56-20-F & 56-20-H (72-Bag Filter / 72-Bag HEPA)	0.5 - 8.5 / 0.1 - 4.5
56-25-F & 56-25-H (130-Bag Filter / 130-Bag HEPA)	1.0 - 9.0 / 0.1 - 4.5

Control Unit ID	Pressure Drop (inches of water)
(Unit ID 56-3)	
56-21-F (Baghouse)	0.1 - 10
56-21-H (HEPA)	0.1 - 4.5
(Unit ID 56-4)	
56-22-F (Baghouse)	0.1 - 8.0
56-22-H (HEPA)	0.1 - 8.0
(Unit ID 56-7)	
56-25-F (130-Bag Baghouse)	1.0 - 9.0
56-25-H (130-Bag HEPA)	0.1 - 4.5
(Unit ID 56-9)	
56-17-F (144 Bag Filter)	0.1 - 8.5
56-17-H (144-Bag HEPA)	0.1 - 4.5
(Unit ID 56-10)	
56-26-F (Cartridge Filter)	0.1 - 8.0

or a range established during the latest stack test, the Permittee shall take reasonable response. Section C- Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A pressure reading that is outside the above-mentioned range is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.

(b) The instrument used for determining the pressure shall comply with Section C - Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated or replaced at least once every six (6) months.

D.3.11 Broken or Failed Bag Detection [326 IAC 2-8-5(1)] [326 IAC 2-8-4(1)]

(a) For a single compartment baghouse controlling emissions from a process operated continuously, a failed unit and the associated process shall be shut down immediately until the failed unit has been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B – Emergency Provisions).

(b) For a single compartment baghouse controlling emissions from a batch process, the feed to the process shall be shut down immediately until the failed unit has been repaired or replaced. The emissions unit shall be shut down no later than the completion of the processing of the material in the emissions unit. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B – Emergency Provisions).

Bag failure can be indicated by a significant drop in the baghouse's pressure reading with abnormal visible emissions, by an opacity violation, or by other means such as gas temperature, flow rate, air infiltration, leaks, dust traces or triboflows.

Record Keeping Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-16]

D.3.12 Record Keeping Requirements

(a) To document the compliance status with Condition D.3.9, the Permittee shall maintain daily records of the visible emission notations of the Stack ID 16-S-56 exhaust. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation, (e.g. the process did not operate that day).

(b) To document the compliance status with Condition D.3.10, the Permittee shall maintain daily records of the pressure drop across each baghouse and HEPA. The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of a pressure drop reading, (e.g. the process did not operate that day).

(c) Section C - General Record Keeping Requirements, of this permit contains the Permittee's obligations with regard to the records required by this condition.

SECTION D.4 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)]:

Stack ID 4-S-35

1. Unit ID 35-1: B-Furnace Drying System

The B-Furnace Drying System consists of a mixer, drying screw, sizing screen, oversize material crusher, and packing system. The mixer blends raw materials used for feedstock for the furnace. Material from the furnace is continuously conveyed from the fritting device through a natural gas or propane heated drying screw to remove excess moisture. The dried material is then conveyed to a classifying screen. The screened material is then conveyed to packing.

Emission units associated with Unit ID 35-1 were installed in 1955.

This unit is controlled by a baghouse & HEPA system.

Under 40 CFR 63, Subpart VVVVVV these units are considered chemical manufacturing process units.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emissions Limitations and Standards [326 IAC 2-8-4(1)]

D.4.1 Particulate Matter less than 10 microns in diameter (PM10) [326 IAC 6.8-2-13(a)] [326 IAC 2-8-4] [326 IAC 2-2]

Pursuant to 326 IAC 6.8-2-13(a) (formerly 326 IAC 6-1-10.1(d)) (Lake County PM10 emission requirements), the PM10 emissions from Stack ID 4-S-35 shall be limited to 0.022 gr/dscf and 0.570 lbs/hr. This requirement will ensure that the source total PM10 emissions stay below 100 tons/yr. Therefore, the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) and 326 IAC 2-7 (Part 70) do not apply.

D.4.2 Particulate Matter (PM) [326 IAC 2-2]

In order to render 326 IAC 2-2 not applicable, particulate matter emissions from Stack ID 4-S-35 shall be set equal to the PM10 emission limit, 0.022 gr/dscf and 0.570 lbs/hr. This requirement will ensure that the source total PM emissions stay below 100 tons/yr. Therefore, the requirements of 326 IAC 2-2 (PSD) do not apply.

D.4.3 Particulate Matter less than 2.5 microns in diameter (PM2.5) [326 IAC 2-1.1-5] [326 IAC 2-8-4]

Pursuant to 326 IAC 2-8-4, PM2.5 emissions from Stack ID 4-S-35 shall be set equal to the PM10 emission limit, 0.022 gr/dscf and 0.570 lbs/hr. This requirement will ensure that the source total PM2.5 emissions stay below 100 tons/yr. Therefore, the requirements of 326 IAC 2-1.1-5 (Nonattainment NSR) and 326 IAC 2-7 (Part 70 Permit Program) do not apply.

D.4.4 Lead (Pb) [326 IAC 15-1-2] [326 IAC 2-8-4] [326 IAC 2-2]

Pursuant to 326 IAC 15 (Lead Emission Limitations), the lead emissions from Stack ID 4-S-35, as specifically listed in 326 IAC 15-1-2(a)(6), shall be limited to 0.090 lbs/hr. This requirement will ensure that the source total lead emissions stay below 4 tons/yr. Therefore, the requirements of 326 IAC 2-2 (PSD) and 326 IAC 2-7 (Part 70) do not apply.

D.4.5 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan is required for this facility and any control devices. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

Compliance Determination Requirements

D.4.6 Testing Requirements [326 IAC 2-8-5(a)(1), (4)] [326 IAC 2-1.1-11]

During the period between 30 and 36 months after issuance of FESOP Renewal No. 089-14165-00219, in order to demonstrate compliance with Condition D.4.4, the Permittee shall perform lead testing on Stack ID 4-S-35 utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of the most recent valid compliance demonstration. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C – Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition.

D.4.7 Particulate Matter less than 10 microns in diameter (PM10) [326 IAC 2-8-5(4)]

(a) Pursuant to FESOP No. F089-5200-00219, issued on December 12, 1996, and in order to comply with Condition D.4.1, the baghouse and HEPA system shall be operated at all times when the associated facility is in operation.

(b) In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

D.4.8 Lead (Pb) [326 IAC 2-8-5(4)]

(a) Pursuant to FESOP No. F089-5200-00219, issued on December 12, 1996, and in order to comply with Condition D.4.4, the baghouse and HEPA system shall be operated at all times when the associated facility is in operation.

(b) In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

D.4.9 Visible Emissions Notations

(a) Visible emission notations of the Stack ID 4-S-35 exhaust shall be performed once per day during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.

(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) If abnormal emissions are observed, the Permittee shall take reasonable response. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. An abnormal

visible emission notation is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.

D.4.10 Baghouse and HEPA Parametric Monitoring

(a) The Permittee shall record the pressure drop across the baghouse and HEPA filter used in conjunction with the process associated with Stack ID 4-S-35, at least once per day when the process is in operation. When for any one reading, the pressure drop across the baghouse or HEPA filter is outside the normal range of the following:

(*Stack ID 4-S-35*)

Control Unit ID	**Pressure Drop** (inches of water)
(Unit ID 35-1)	
35-15-F (Baghouse)	0.1 - 8.5
35-15-H (HEPA)	0.1 - 4.5

or a range established during the latest stack test, the Permittee shall take reasonable response. Section C- Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A pressure reading that is outside the above-mentioned range is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.

(b) The instrument used for determining the pressure shall comply with Section C – Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated or replaced at least once every six (6) months.

D.4.11 Broken or Failed Bag Detection [326 IAC 2-8-5(1)] [326 IAC 2-8-4(1)]

(a) For a single compartment baghouse controlling emissions from a process operated continuously, a failed unit and the associated process shall be shut down immediately until the failed unit has been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B – Emergency Provisions).

(b) For a single compartment baghouse controlling emissions from a batch process, the feed to the process shall be shut down immediately until the failed unit has been repaired or replaced. The emissions unit shall be shut down no later than the completion of the processing of the material in the emissions unit. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B – Emergency Provisions).

Bag failure can be indicated by a significant drop in the baghouse's pressure reading with abnormal visible emissions, by an opacity violation, or by other means such as gas temperature, flow rate, air infiltration, leaks, dust traces or triboflows.

Record Keeping Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-16]

D.4.12 Record Keeping Requirements

(a) To document the compliance status with Condition D.4.9, the Permittee shall maintain daily records of the visible emission notations of the Stack ID 4-S-35 exhaust. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation, (e.g. the process did not operate that day).

(b) To document the compliance status with Condition D.4.10, the Permittee shall maintain daily records of the pressure drop across the baghouse and HEPA. The Permittee shall

include in its daily record when a pressure drop reading is not taken and the reason for the lack of a pressure drop reading, (e.g. the process did not operate that day).

(c) Section C - General Record Keeping Requirements, of this permit contains the Permittee's obligations with regard to the records required by this condition.

SECTION D.5 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)]:

Stack ID 1-S-27

1. Unit ID 27-1: Lead Oxide Mill

The Lead Oxide Mill consists of a mill feed hopper, impact mill, cyclone, source bin, packing hopper, and packing station. Lead oxide is conveyed to the mill feed hopper from where it is metered into the mill for grinding. The mill is an impact, air swept type grinding mill. The air and product from the mill are conveyed to a cyclone. Air from the cyclone is returned to the mill.

Emission units associated with Unit ID 27-1 were installed in October, 1987.

This unit is controlled by a baghouse & HEPA system.

Under 40 CFR 63, Subpart VVVVVV these units are considered chemical manufacturing process units.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emissions Limitations and Standards [326 IAC 2-8-4(1)]

D.5.1 Particulate Matter less than 10 microns in diameter (PM10) [326 IAC 6.8-2-13(a)] [326 IAC 2-8-4] [326 IAC 2-2]

Pursuant to 326 IAC 6.8-2-13(a) (formerly 326 IAC 6-1-10.1(d)) (Lake County PM10 emission requirements), the PM10 emissions from Stack ID 1-S-27 shall be limited to 0.022 gr/dscf and 0.290 lbs/hr. This requirement will ensure that the source total PM10 emissions stay below 100 tons/yr. Therefore, the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) and 326 IAC 2-7 (Part 70) do not apply.

D.5.2 Particulate Matter (PM) [326 IAC 2-2]

In order to render 326 IAC 2-2 not applicable, particulate matter emissions from Stack 1-S-27 shall be set equal to the PM10 emission limit, 0.022 gr/dscf and 0.290 lbs/hr. This requirement will ensure that the source total PM emissions stay below 100 tons/yr. Therefore, the requirements of 326 IAC 2-2 (PSD) do not apply.

D.5.3 Particulate Matter less than 2.5 microns in diameter (PM2.5) [326 IAC 2-1.1-5] [326 IAC 2-8-4]

Pursuant to 326 IAC 2-8-4, PM2.5 emissions from Stack 1-S-27 shall be set equal to the PM10 emission limit, 0.022 gr/dscf and 0.290 lbs/hr. This requirement will ensure that the source total PM2.5 emissions stay below 100 tons/yr. Therefore, the requirements of 326 IAC 2-1.1-5 (Nonattainment NSR) and 326 IAC 2-7 (Part 70 Permit Program) do not apply.

D.5.4 Lead (Pb) [326 IAC 15-1-2] [326 IAC 2-8-4] [326 IAC 2-2]

Pursuant to 326 IAC 15 (Lead Emission Limitations), the lead emissions from Stack ID 1-S-27, as specifically listed in 326 IAC 15-1-2(a)(6), shall be limited to 0.020 lbs/hr. This requirement will ensure that the source total lead emissions stay below 4 tons/yr. Therefore, the requirements of 326 IAC 2-2 (PSD) and 326 IAC 2-7 (Part 70) do not apply.

D.5.5 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan is required for this facility and any control devices. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

Compliance Determination Requirements

D.5.6 Particulate Matter less than 10 microns in diameter (PM10) [326 IAC 2-8-5(4)]

(a) Pursuant to FESOP No. F089-5200-00219, issued on December 12, 1996, and in order to comply with Condition D.5.1, the baghouse and HEPA system shall be operated at all times when the associated facility is in operation.

(b) In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

D.5.7 Lead (Pb) [326 IAC 2-8-5(4)]

(a) Pursuant to FESOP No. F089-5200-00219, issued on December 12, 1996, and in order to comply with Condition D.5.4, the baghouse and HEPA system shall be operated at all times when the associated facility is in operation.

(b) In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

D.5.8 Visible Emissions Notations

(a) Visible emission notations of the Stack ID 1-S-27 exhaust shall be performed once per day during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.

(b) For processes operated continuously, “normal” means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) If abnormal emissions are observed, the Permittee shall take reasonable response. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. An abnormal visible emission notation is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.

D.5.9 Baghouse and HEPA Parametric Monitoring

(a) The Permittee shall record the pressure drop across the baghouse and HEPA filter used in conjunction with the process associated with Stack ID 1-S-27, at least once per day when the process is in operation. When for any one reading, the pressure drop across the baghouse or HEPA filter is outside the normal range of the following:

(*Stack ID 1-S-27*)

Control Unit ID	**Pressure Drop** (inches of water)
(Unit ID 27-1)	
27-12-F (Baghouse)	0.5 - 8.5
27-12-H (HEPA)	0.1 - 4.5

or a range established during the latest stack test, the Permittee shall take reasonable response. Section C- Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A pressure reading that is outside the above-mentioned range is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.

(b) The instrument used for determining the pressure shall comply with Section C - Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated or replaced at least once every six (6) months.

D.5.10 Broken or Failed Bag Detection [326 IAC 2-8-5(1)] [326 IAC 2-8-4(1)]

(a) For a single compartment baghouse controlling emissions from a process operated continuously, a failed unit and the associated process shall be shut down immediately until the failed unit has been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B – Emergency Provisions).

(b) For a single compartment baghouse controlling emissions from a batch process, the feed to the process shall be shut down immediately until the failed unit has been repaired or replaced. The emissions unit shall be shut down no later than the completion of the processing of the material in the emissions unit. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B – Emergency Provisions).

Bag failure can be indicated by a significant drop in the baghouse's pressure reading with abnormal visible emissions, by an opacity violation, or by other means such as gas temperature, flow rate, air infiltration, leaks, dust traces or triboflows.

Record Keeping Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-16]

D.5.11 Record Keeping Requirements

(a) To document the compliance status with Condition D.5.8, the Permittee shall maintain daily records of the visible emission notations of the Stack ID 1-S-27 exhaust. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation, (e.g. the process did not operate that day).

(b) To document the compliance status with Condition D.5.9, the Permittee shall maintain daily records of the pressure drop across the baghouse and HEPA. The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of a pressure drop reading, (e.g. the process did not operate that day).

(c) Section C - General Record Keeping Requirements, of this permit contains the Permittee's obligations with regard to the records required by this condition.

SECTION D.6 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)]:

Stack ID 6-S-33

1. Unit ID 33-1: B-Furnace System

The B-Furnace System consists of feed hoppers, rework system, furnace, fritting device, and interconnecting conveyors. Lead-oxide and other raw materials are batch-mixed in a mixer and conveyed to a stoker hopper. This mixture is then fed to the furnace. The furnace is a direct, natural gas or propane fired reverberatory type furnace. The raw materials are melted to form a molten material which then flows by gravity to the fritting device. The fritted material is conveyed to the drying system.

Emission units associated with Unit ID 33-1 were installed in 1988.

This system is controlled by a baghouse & HEPA system.

Under 40 CFR 63, Subpart VVVVVV these units are considered chemical manufacturing process units.

2. Unit ID 33-2: S-Furnace Operation

The S-Furnace Operation consists of a mixer, furnace, fritting device, drying screw, sizing screen, packers, and interconnecting conveyors. Non-lead raw materials are batch-mixed and then charged into the furnace. The furnace is a direct, natural gas or propane fired reverberatory-type furnace. As the raw materials melt, they react to form a material which then flows to a fritting device. The fritted material is continuously conveyed through a natural gas heated drying screw that removes excess moisture. The dried material is conveyed to a classifying screen and then conveyed to packing.

Emission units associated with Unit ID 33-2 (formerly Unit ID 47-1) were installed in February, 1995 and approved for modification to exhaust to stack 6-S-33 in 2011.

The emissions from this operation are vented to a baghouse & HEPA system.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emissions Limitations and Standards [326 IAC 2-8-4(1)]

D.6.1 Particulate Matter less than 10 microns in diameter (PM10) [326 IAC 6.8-2-13(a)] [326 IAC 2-8-4] [326 IAC 2-2]

Pursuant to 326 IAC 6.8-2-13(a) (formerly 326 IAC 6-1-10.1(d)) (Lake County PM10 emission requirements), the PM10 emissions from Stack ID 6-S-33 shall be limited to 0.022 gr/dscf and 0.900 lbs/hr. This requirement will ensure that the source total PM10 emissions stay below 100 tons/yr. Therefore, the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) and 326 IAC 2-7 (Part 70) do not apply.

D.6.2 Particulate Matter (PM) [326 IAC 2-2]

In order to render 326 IAC 2-2 not applicable, particulate matter emissions from Stack ID 6-S-33 shall be set equal to the PM10 emission limit, 0.022 gr/dscf and 0.900 lbs/hr. This requirement will ensure that the source total PM emissions stay below 100 tons/yr. Therefore, the requirements of 326 IAC 2-2 (PSD) do not apply.

D.6.3 Particulate Matter less than 2.5 microns in diameter (PM2.5) [326 IAC 2-1.1-5] [326 IAC 2-8-4]

Pursuant to 326 IAC 2-8-4, PM2.5 emissions from Stack ID 6-S-33 shall be set equal to the PM10 emission limit, 0.022 gr/dscf and 0.900 lbs/hr. This requirement will ensure that the source total

PM2.5 emissions stay below 100 tons/yr. Therefore, the requirements of 326 IAC 2-1.1-5 (Nonattainment NSR) and 326 IAC 2-7 (Part 70 Permit Program) do not apply.

D.6.4 Lead (Pb) [326 IAC 15-1-2] [326 IAC 2-8-4] [326 IAC 2-2]

Pursuant to 326 IAC 15 (Lead Emission Limitations), the lead emissions from Stack ID 6-S-33, as specifically listed in 326 IAC 15-1-2(a)(6), shall be limited to 0.070 lbs/hr. This requirement will ensure that the source total lead emissions stay below 4 tons/yr. Therefore, the requirements of 326 IAC 2-2 (PSD) and 326 IAC 2-7 (Part 70) do not apply.

D.6.5 Furnace Operation [326 IAC 2-8-4] [326 IAC 2-2]

Pursuant to 326 IAC 2-8-4, the B-Furnace System (Unit ID 33-1) and S-Furnace System (Unit ID 33-2) shall not be in operation at the same time.

Compliance with this limit renders the requirements of 326 IAC 2-7 (Part 70) and 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.

D.6.6 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan is required for these facilities and any control devices. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

Compliance Determination Requirements

D.6.7 Testing Requirements [326 IAC 2-8-5(a)(1), (4)] [326 IAC 2-1.1-11]

(a) In order to demonstrate compliance with Conditions D.6.1, D.6.2, and D.6.3, the Permittee shall perform PM, PM10, and PM2.5 testing on Stack ID 6-S-33, when the S-Furnace System (Unit ID 33-2) is in operation no later than one hundred eighty (180) days after issuance of FESOP Administrative Amendment No. 089-30840-00219 or one hundred eighty (180) days after startup of the S-Furnace System (Unit ID 33-2) emitting through Stack ID 6-S-33, whichever is later. This testing shall be conducted utilizing methods approved by the Commissioner and shall be repeated at least once every five (5) years from the date of the most recent valid compliance demonstration. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C – Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition. PM10 and PM2.5 includes filterable and condensable PM.

(b) During the period between 30 and 36 months after issuance of FESOP Renewal No. 089-14165-00219, in order to demonstrate compliance with Condition D.6.4, the Permittee shall perform lead testing on Stack ID 6-S-33, when the B-Furnace System (Unit ID 33-1) is in operation, utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of the most recent valid compliance demonstration. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C – Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition.

D.6.8 Particulate Matter [326 IAC 2-8-5(4)]

(a) Pursuant to FESOP No. F089-5200-00219, issued on December 12, 1996, and in order to comply with Conditions D.6.1, D.6.2 and D.6.3, the baghouse and HEPA system shall be operated at all times when the associated facility is in operation.

(b) In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also

include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

D.6.9 Lead (Pb) [326 IAC 2-8-5(4)]

(a) Pursuant to FESOP No. F089-5200-00219, issued on December 12, 1996, and in order to comply with Condition D.6.4, the baghouse and HEPA system shall be operated at all times when the associated facility is in operation.

(b) In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

D.6.10 Visible Emissions Notations

(a) Visible emission notations of the Stack ID 6-S-33 exhaust shall be performed once per day during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.

(b) For processes operated continuously, “normal” means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) If abnormal emissions are observed, the Permittee shall take reasonable response. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. An abnormal visible emission notation is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.

D.6.11 Baghouse and HEPA Parametric Monitoring

(a) The Permittee shall record the pressure drop across the baghouse and HEPA filter used in conjunction with the process associated with Stack ID 6-S-33, at least once per day when the process is in operation. When for any one reading, the pressure drop across the baghouse or HEPA filter is outside the normal range of the following:

(*Stack ID 6-S-33*)

Control Unit ID	**Pressure Drop** (inches of water)
(Unit ID 33-1)	
33-14-F (Baghouse)	0.1 - 8.5
33-14-H (HEPA)	0.1 - 4.5

or a range established during the latest stack test, the Permittee shall take reasonable response. Section C- Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A

pressure reading that is outside the above-mentioned range is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.

(b) The instrument used for determining the pressure shall comply with Section C - Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated or replaced at least once every six (6) months.

D.6.12 Broken or Failed Bag Detection [326 IAC 2-8-5(1)] [326 IAC 2-8-4(1)]

(a) For a single compartment baghouse controlling emissions from a process operated continuously, a failed unit and the associated process shall be shut down immediately until the failed unit has been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B – Emergency Provisions).

(b) For a single compartment baghouse controlling emissions from a batch process, the feed to the process shall be shut down immediately until the failed unit has been repaired or replaced. The emissions unit shall be shut down no later than the completion of the processing of the material in the emissions unit. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B – Emergency Provisions).

Bag failure can be indicated by a significant drop in the baghouse's pressure reading with abnormal visible emissions, by an opacity violation, or by other means such as gas temperature, flow rate, air infiltration, leaks, dust traces or triboflows.

Record Keeping Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-16]

D.6.13 Record Keeping Requirements

(a) To document the compliance status with Condition D.6.5, the Permittee shall maintain daily records that demonstrate the B-Furnace System and S-Furnace System were not in operation at the same time. The Permittee shall include in its daily record when each Furnace System started and commenced operation.

(b) To document the compliance status with Condition D.6.10, the Permittee shall maintain daily records of the visible emission notations of the Stack ID 6-S-33 exhaust. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation, (e.g. the process did not operate that day).

(c) To document the compliance status with Condition D.6.11, the Permittee shall maintain daily records of the pressure drop across the baghouse and HEPA. The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of a pressure drop reading, (e.g. the process did not operate that day).

(d) Section C - General Record Keeping Requirements, of this permit contains the Permittee's obligations with regard to the records required by this condition.

SECTION D.7 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)]:

Stack ID 4B-S-34

1. Unit ID 34-1: B-Furnace Mill

The mill feed hopper receives material produced by the B-Furnace. The hopper then charges the mill, which is an air impact air swept type that air conveys the milled material to a cyclone. The air leaving the cyclone is returned to the mill. The material from the cyclone discharges to a packing hopper.

Emission units associated with Unit ID 34-1 were installed in 1955.

This unit is controlled by a baghouse & HEPA system.

2. Unit ID 34-3: Glass Concepts Process

The Glass Concepts Process includes wet ball mills, a holding tank, spray dryers, process baghouses, and interconnecting conveyors. A slurry mixture is batch milled in ball mills and conveyed to a holding tank where it is continuously mixed to keep the material from separating out. The material is then dried in one of two atomizing spray dryers which are natural gas fired with propane as an alternative fuel. The dried product is conveyed through a process baghouse and packed out into containers. This system is drafted to pollution control equipment.

Emission units associated with Unit ID 34-3 were installed in 2005, modified in May, 2006 and October, 2007.

This process is controlled by baghouses & HEPA systems.

Under 40 CFR 63, Subpart VVVVVV these units are considered chemical manufacturing process units.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emissions Limitations and Standards [326 IAC 2-8-4(1)]

D.7.1 Particulate Matter less than 10 microns in diameter (PM10) [326 IAC 6.8-2-13(a)] [326 IAC 2-8-4] [326 IAC 2-2]

Pursuant to 326 IAC 6.8-2-13(a) (formerly 326 IAC 6-1-10.1(d)) (Lake County PM10 emission requirements), the PM10 emissions from Stack ID 4B-S-34 shall be limited to 0.022 gr/dscf and 0.400 lbs/hr. This requirement will ensure that the source total PM10 emissions stay below 100 tons/yr. Therefore, the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) and 326 IAC 2-7 (Part 70) do not apply.

D.7.2 Particulate Matter (PM) [326 IAC 2-2]

In order to render 326 IAC 2-2 not applicable, particulate matter emissions from Stack ID 4B-S-34 shall be set equal to the PM10 emissions limit, 0.022 gr/dscf and 0.400 lbs/hr. This requirement will ensure that the source total PM emissions stay below 100 tons/yr. Therefore, the requirements of 326 2-2 (PSD) do not apply.

D.7.3 Particulate Matter less than 2.5 microns in diameter (PM2.5) [326 IAC 2-1.1-5] [326 IAC 2-8-4]

Pursuant to 326 IAC 2-8-4, PM2.5 emissions from Stack ID 4B-S-34 shall be set equal to the PM10 emissions limit, 0.022 gr/dscf and 0.400 lbs/hr. This requirement will ensure that the source total PM2.5 emissions stay below 100 tons/yr. Therefore, the requirements of 326 IAC 2-1.1-5 (Nonattainment NSR) and 326 IAC 2-7 (Part 70 Permit Program) do not apply.

D.7.4 Lead (Pb) [326 IAC 15-1-2] [326 IAC 2-8-4] [326 IAC 2-2]

Pursuant to 326 IAC 15 (Lead Emission Limitations), the lead emissions from Stack ID 4B-S-34, as specifically listed in 326 IAC 15-1-2(a)(6), shall be limited to 0.080 lbs/hr. This requirement will ensure that the source total lead emissions stay below 4 tons/yr. Therefore, the requirements of 326 IAC 2-2 (PSD) and 326 IAC 2-7 (Part 70) do not apply.

D.7.5 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan is required for these facilities and any control devices. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

Compliance Determination Requirements

D.7.6 Testing Requirements [326 IAC 2-8-5(a)(1), (4)] [326 IAC 2-1.1-11]

During the period between 30 and 36 months after issuance of FESOP Renewal No. 089-14165-00219, in order to demonstrate compliance with D.7.4, the Permittee shall perform lead testing on Stack ID 4B-S-34 utilizing methods as approved by the Commissioner. The test shall be repeated at least once every five (5) years from the date of the most recent valid compliance demonstration. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C – Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition.

D.7.7 Particulate Matter less than 10 microns in diameter (PM10) [326 IAC 2-8-5(4)]

(a) Pursuant to FESOP No. F089-5200-00219, issued on December 12, 1996, and in order to comply with Condition D.7.1, the baghouse and HEPA system shall be operated at all times when the associated facility is in operation.

(b) In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

D.7.8 Lead (Pb) [326 IAC 2-8-5(4)]

(a) Pursuant to FESOP No. F089-5200-00219, issued on December 12, 1996, and in order to comply with Condition D.7.4, the baghouse and HEPA system shall be operated at all times when the associated facility is in operation.

(b) In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

D.7.9 Visible Emissions Notations

(a) Visible emission notations of the Stack ID 4B-S-34 exhaust shall be performed once per day during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.

(b) For processes operated continuously, “normal” means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) If abnormal emissions are observed, the Permittee shall take reasonable response. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. An abnormal visible emission notation is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.

D.7.10 Baghouse and HEPA Parametric Monitoring

(a) The Permittee shall record the pressure drop across each baghouse and HEPA filter used in conjunction with the processes associated with Stack ID 4B-S-34, at least once per day when the process is in operation. When for any one reading, the pressure drop across the baghouse or HEPA filter is outside the normal range of the following:

(*Stack ID 4B-S-34*)

Control Unit ID	**Pressure Drop** (inches of water)
(Unit ID 34-1)	
34-16 F (Baghouse)	0.1 - 8.5
34-16 H (HEPA)	0.1 - 4.5
(Unit ID 34-3)	
34-15 F (Baghouse)	0.1 - 8.0
34-15 H (HEPA)	0.1 - 4.5
34-17 F (Baghouse)	0.1 - 8.0
34-17 H (HEPA)	0.1 - 4.5

or a range established during the latest stack test, the Permittee shall take reasonable response. Section C- Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A pressure reading that is outside the above-mentioned range is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.

(b) The instrument used for determining the pressure shall comply with Section C - Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated or replaced at least once every six (6) months.

D.7.11 Broken or Failed Bag Detection [326 IAC 2-8-5(1)] [326 IAC 2-8-4(1)]

(a) For a single compartment baghouse controlling emissions from a process operated continuously, a failed unit and the associated process shall be shut down immediately until the failed unit has been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B – Emergency Provisions).

(b) For a single compartment baghouse controlling emissions from a batch process, the feed to the process shall be shut down immediately until the failed unit has been repaired or replaced. The emissions unit shall be shut down no later than the completion of the processing of the material in the emissions unit. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B – Emergency Provisions).

Bag failure can be indicated by a significant drop in the baghouse's pressure reading with abnormal visible emissions, by an opacity violation, or by other means such as gas temperature, flow rate, air infiltration, leaks, dust traces or triboflows.

Record Keeping Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-16]

D.7.12 Record Keeping Requirements

(a) To document the compliance status with Condition D.7.9, the Permittee shall maintain daily records of the visible emission notations of the Stack ID 4B-S-34 exhaust. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation, (e.g. the process did not operate that day).

(b) To document the compliance status with Condition D.7.10, the Permittee shall maintain daily records of the pressure drop across each baghouse and HEPA. The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of a pressure drop reading, (e.g. the process did not operate that day).

(c) Section C - General Record Keeping Requirements, of this permit contains the Permittee's obligations with regard to the records required by this condition.

SECTION D.8 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)]:

Stack ID 6-S-47

Reserved

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emissions Limitations and Standards [326 IAC 2-8-4(1)]

D.8.1 Particulate Matter less than 10 microns in diameter (PM10) [326 IAC 6.8-2-13(a)]

Pursuant to 326 IAC 6.8-2-13(a) (formerly 326 IAC 6-1-10.1(d)) (Lake County PM10 emission requirements), the PM10 emissions from Stack ID 6-S-47 shall be limited to 0.022 gr/dscf and 0.400 lbs/hr.

D.8.2 Lead (Pb) [326 IAC 15-1-2]

Pursuant to 326 IAC 15 (Lead Emission Limitations), the lead emissions from Stack ID 6-S-47, as specifically listed in 326 IAC 15-1-2(a)(6), shall be limited to 0.021 lbs/hr.

SECTION D.9 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)]:

Various Stack IDs associated with the Expander Operation (previously Stack ID 14-S-15)

1. Expander Operation: Unit IDs 15-1, 15-2, and 15-3 – Alpha BM Line, Beta BM Line, and Mixer Line

Stack IDs associated with each unit are as follows:

a) Unit ID 15-1: Alpha BM Line – RB-1000, R-1000, DC-4001, T-1000, R-1002, and DC-4000 (Trivial Activities except for RB-1000 and DC-4000 which are classified as Insignificant Activities)
b) Unit ID 15-2: Beta BM Line – RB-2000, R-2000, DC-3003, T-2000, R-2001, and DC-3002 (Trivial Activities except for RB-2000 and DC 3002 which are classified as Insignificant Activities)
c) Unit ID 15-3: Mixer Line - DC-3000 and DC-2000 (Insignificant Activities)

The Expander Operation consists of three (3) lines. Lines 15-1 and 15-2 each consists of a blender, mill receiver, mill, silo, packing receiver, and a bag packer. Various raw materials are charged into the blender, fed to the ball mill, and milled. The blended material is then air conveyed to storage hoppers and/or packed into bags. Line 15-3 consists of a mixer and packer. Blended material from the mixer is mechanically conveyed into bulk containers to be packed out into bags.

Emission units associated with Unit IDs 15-1 and 15-2 were installed in June, 2002 and modified in October, 2006, June and September, 2007, and approved for modification in 2011.

Emission units associated with Unit ID 15-3 were installed in August, 2005 and modified in October, 2006 and September, 2007.

The emissions from these units are controlled by cartridge filters.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emissions Limitations and Standards [326 IAC 2-8-4(1)]

D.9.1 Particulate Matter less than 10 microns in diameter (PM10) [326 IAC 6.8-2-13(a)] [326 IAC 2-8-4] [326 IAC 2-2]

Pursuant to 326 IAC 6.8-2-13(a) (formerly 326 IAC 6-1-10.1(d)) (Lake County PM10 emission requirements), the PM10 emissions from Stack ID 14-S-15 shall be limited to 0.022 gr/dscf and 0.320 lbs/hr. This requirement will ensure that the source total PM10 emissions stay below 100 tons/yr. Therefore, the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) and 326 IAC 2-7 (Part 70) do not apply.

D.9.2 Particulate Matter (PM) [326 IAC 2-2]

In order to render 326 IAC 2-2 not applicable, particulate matter emissions from Stack ID 14-S-15 shall be set equal to the PM10 emission limit, 0.022 gr/dscf and 0.320 lbs/hr. This requirement will ensure that the source total PM emissions stay below 100 tons/yr. Therefore, the requirements of 326 IAC 2-2 (PSD) do not apply.

D.9.3 Particulate Matter less than 2.5 microns in diameter (PM2.5) [326 IAC 2-1.1-5] [326 IAC 2-8-4]

Pursuant to 326 IAC 2-8-4, PM2.5 emissions from Stack ID 14-S-15 shall be set equal to the PM10 emission limit, 0.022 gr/dscf and 0.320 lbs/hr. This requirement will ensure that the source total PM2.5 emissions stay below 100 tons/yr. Therefore, the requirements of 326 IAC 2-1.1-5 (Nonattainment NSR) and 326 IAC 2-7 (Part 70 Permit Program) do not apply.

D.9.4 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan is required for these facilities and any control devices. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

Compliance Determination Requirements

D.9.5 Particulate Matter less than 10 microns in diameter (PM10) [326 IAC 2-8-5(4)]

(a) Pursuant to FESOP No. F089-5200-00219, issued on December 12, 1996, and in order to comply with Condition D.9.1, the dust collectors shall be operated at all times when the associated facility is in operation.

(b) In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

D.9.6 Visible Emissions Notations

(a) Visible emission notations of each stack exhaust associated with T-1000 and T-2000 shall be performed once per day during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.

(b) For processes operated continuously, “normal” means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) If abnormal emissions are observed, the Permittee shall take reasonable response. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. An abnormal visible emission notation is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.

D.9.7 Dust Collector Parametric Monitoring

(a) The Permittee shall record the pressure drop across each dust collector used in conjunction with the process associated with Stack ID 14-S-15, at least once per day when the process is in operation. When for any one reading, the pressure drop across any dust collector is outside the normal range of the following:

(Previously *Stack ID 14-S-15*)

Control Unit ID	**Pressure Drop** (inches of water)
(Unit ID 15-1)	
Alpha Blender (RB-1000)	0.1 - 7.0
Alpha BM Receiver (R-1000)	0.1 - 8.0
Alpha Ball Mill (DC-4001)	0.1 - 8.0
Alpha Silo (T-1000)	0.5 - 10.0
Alpha Packer Receiver (R-1002)	0.5 - 8.5
Alpha Packing (DC-4000)	0.1 - 8.0
(Unit ID 15-2)	
Beta Blender (RB-2000)	0.1 - 8.0
Beta BM Receiver (R-2000)	0.1 - 8.0
Beta Ball Mill (DC-3003)	0.1 - 8.0
Beta Silo (T-2000)	0.5 - 10.0
Beta Packer Receiver (R-2001)	0.5 - 8.5
Beta Packing (DC-3002)	0.1 - 8.0
(Unit ID 15-3)	
Mixer (DC-3000)	2.0 - 10.0
Mixer Packer (DC-2000)	0.5 - 8.5

or a range established during the latest stack test, the Permittee shall take reasonable response. Section C- Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A pressure reading that is outside the above-mentioned range is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.

(b) The instrument used for determining the pressure shall comply with Section C - Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated or replaced at least once every six (6) months.

D.9.8 Broken or Failed Bag Detection [326 IAC 2-8-5(1)] [326 IAC 2-8-4(1)]

(a) For a single compartment baghouse controlling emissions from a process operated continuously, a failed unit and the associated process shall be shut down immediately until the failed unit has been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B – Emergency Provisions).

(b) For a single compartment baghouse controlling emissions from a batch process, the feed to the process shall be shut down immediately until the failed unit has been repaired or replaced. The emissions unit shall be shut down no later than the completion of the processing of the material in the emissions unit. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B – Emergency Provisions).

Bag failure can be indicated by a significant drop in the baghouse's pressure reading with abnormal visible emissions, by an opacity violation, or by other means such as gas temperature, flow rate, air infiltration, leaks, dust traces or triboflows.

Record Keeping Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-16]

D.9.9 Record Keeping Requirements

(a) To document the compliance status with Condition D.9.6, the Permittee shall maintain daily records of the visible emission notations of each stack exhaust. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation, (e.g. the process did not operate that day).

(b) To document the compliance status with Condition D.9.7, the Permittee shall maintain daily records of the pressure drop across each baghouse. The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of a pressure drop reading, (e.g. the process did not operate that day).

(c) Section C - General Record Keeping Requirements, of this permit contains the Permittee's obligations with regard to the records required by this condition.

SECTION D.10 FACILITY OPERATION CONDITIONS – TRIVIAL ACTIVITY

Facility Description [326 IAC 2-8-4(10)]:

Stack ID V-1

1. Unit ID 1-1: General Building Ventilation Control System

The General Building Ventilation Control System consists of a fan and three (3) HEPA filter units which are connected in parallel to the collection ductwork. The system captures potential fugitive emissions which may escape from processing equipment in the lead chemical manufacturing areas.

Emission units associated with Unit ID 1-1 were installed in May, 1990.
[326 IAC 6.8-2-13(a)]

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emissions Limitations and Standards [326 IAC 2-8-4(1)]

D.10.1 Particulate Matter less than 10 microns in diameter (PM10) [326 IAC 6.8-2-13(a)] [326 IAC 2-8-4] [326 IAC 2-2]

Pursuant to 326 IAC 6.8-2-13(a) (formerly 326 IAC 6-1-10.1(d)) (Lake County PM10 emission requirements), the PM10 emissions from Stack ID V-1 shall be limited to 0.022 gr/dscf and 1.000 lbs/hr. This requirement will ensure that the source total PM10 emissions stay below 100 tons/yr. Therefore, the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) and 326 IAC 2-7 (Part 70) do not apply.

D.10.2 Particulate Matter (PM) [326 IAC 2-2]

In order to render 326 IAC 2-2 not applicable, particulate matter emissions from Stack ID V-1 shall be set equal to the PM10 emission limit, 0.022 gr/dscf and 1.000 lbs/hr. This requirement will ensure that the source total PM emissions stay below 100 tons/yr. Therefore, the requirements of 326 IAC 2-2 (PSD) do not apply.

D.10.3 Particulate Matter less than 2.5 microns in diameter (PM2.5) [326 IAC 2-1.1-5] [326 IAC 2-8-4]

Pursuant to 326 IAC 2-8-4, PM2.5 emissions from Stack ID V-1 shall be set equal to the PM10 emission limit, 0.022 gr/dscf and 1.000 lbs/hr. This requirement will ensure that the source total PM2.5 emissions stay below 100 tons/yr. Therefore, the requirements of 326 IAC (Nonattainment NSR) and 326 IAC 2-7 (Part 70 Permit Program) do not apply.

D.10.4 Lead (Pb) [326 IAC 15-1-2] [326 IAC 2-8-4] [326 IAC 2-2]

Pursuant to 326 IAC 15 (Lead Emission Limitations), the lead emissions from Stack ID V-1, as specifically listed in 326 IAC 15-1-2(a)(6), shall be limited to 0.090 lbs/hr. This requirement will ensure that the source total lead emissions stay below 4 tons/yr. Therefore, the requirements of 326 IAC 2-2 (PSD) and 326 IAC 2-7 (Part 70) do not apply.

D.10.5 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan is required for this facility and any control devices. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

Compliance Determination Requirements

D.10.6 Particulate Matter less than 10 microns in diameter (PM10) [326 IAC 2-8-5(4)]

(a) Pursuant to FESOP No. F089-5200-00219, issued on December 12, 1996, and in order to comply with Condition D.10.1, the HEPA system shall be operated at all times when the associated facility is in operation.

(b) In the event that bag failure is observed in a multi-HEPA filter unit, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

D.10.7 Lead (Pb) [326 IAC 2-8-5(4)]

(a) Pursuant to FESOP No. F089-5200-00219, issued on December 12, 1996, and in order to comply with Condition D.10.4, the HEPA system shall be operated at all times when the associated facility is in operation.

(b) In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

D.10.8 Visible Emissions Notations

(a) Visible emission notations of the Stack ID V-1 exhaust shall be performed once per day during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.

(b) For processes operated continuously, “normal” means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) If abnormal emissions are observed, the Permittee shall take reasonable response. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. An abnormal visible emission notation is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.

D.10.9 HEPA Parametric Monitoring

(a) The Permittee shall record the pressure drop across the HEPA filter used in conjunction with the process associated with Stack ID V-1, at least once per day when the process is in operation. When for any one reading, the pressure drop across the HEPA filter is outside the normal range of the following:

(*Stack ID V-1*)

Control Unit ID	**Pressure Drop** (inches of water)
(Unit ID 1-1)	
V-1 West	0.5 - 8.5
V-1 Mid	0.5 - 8.5
V-1 East	0.5 - 8.5

or a range established during the latest stack test, the Permittee shall take reasonable response. Section C- Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A pressure reading that is outside the above-mentioned range is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.

(b) The instrument used for determining the pressure shall comply with Section C - Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated or replaced at least once every six (6) months.

D.10.10 Failed HEPA Filter Detection [326 IAC 2-8-5(1)] [326 IAC 2-8-4(1)]

(a) For single HEPA filter units controlling emissions from a process operated continuously, a failed unit and the associated process shall be shut down immediately until the failed unit has been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B – Emergency Provisions).

(b) For a single HEPA filter unit controlling emissions from a batch process, the feed to the process shall be shut down immediately until the failed unit has been repaired or replaced. The emissions unit shall be shut down no later than the completion of the processing of the material in the emissions unit. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B – Emergency Provisions).

HEPA failure can be indicated by a significant drop in the HEPA's pressure reading with abnormal visible emissions, by an opacity violation, or by other means such as gas temperature, flow rate, air infiltration, leaks, dust traces or triboflows.

Record Keeping Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-16]

D.10.11 Record Keeping Requirements

(a) To document the compliance status with Condition D.10.8, the Permittee shall maintain daily records of the visible emission notations of the Stack ID V-1 exhaust. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation, (e.g. the process did not operate that day).

(b) To document the compliance status with Condition D.10.9, the Permittee shall maintain daily records of the pressure drop across each HEPA. The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of a pressure drop reading, (e.g. the process did not operate that day).

(c) Section C - General Record Keeping Requirements, of this permit contains the Permittee's obligations with regard to the records required by this condition.

SECTION E.1 EMISSIONS UNIT OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)]:

Stack ID 1-S-52

This stack is identified as the Main Control System. This control system is comprised of four (4) units in parallel. Each unit includes a baghouse and a HEPA. Each unit is rated at 99.9998% control efficiency according to the company. The following units are controlled by the Main Control System control equipment, except when otherwise specified.

Stack I-S-52 is used to vent the control device exhausts from various processes.

1. Unit ID 52-1: No. 1 Barton System

   The Barton System consists of a melt kettle, barton reactor, settling device, and interconnecting conveyors. Lead ingots are charged into an enclosed melt kettle which is indirectly heated by either natural gas or propane burners. The molten lead is continuously fed into the barton reactor where it is atomized and oxidized into lead oxide. The oxide is drawn through a settling device and then conveyed to further processing.

   Emission units associated with Unit ID 52-1 were installed in 1930.

   Unit 52-1 is not controlled by the Main Control System. It is controlled by one baghouse followed by a HEPA system which exhausts through stack 1-S-52.

2. Unit IDs 52-2 through 52-10: Furnace Systems No. 1, 2, 10, 3, 4, 5, 6, 8, & 9 (Insignificant Activities)

   Each Furnace System consists of feed hoppers, batch furnace, and interconnecting conveyors. Each furnace is an indirectly heated, natural gas or propane fired, batch furnace which completes the oxidation of the lead oxide.

   Emission units associated with Unit ID 52-2 were originally installed in 1930. This unit was approved for repair and re-activation in 2012.
   Emission units associated with Unit IDs 52-3, 52-6, and 52-7 were installed in 1930.
   Emission units associated with Unit ID 52-4 were installed in 1980.
   Emission units associated with Unit IDs 52-5 were installed in 1971.
   Emission units associated with Unit IDs 52-8 were installed in 1955.
   Emission units associated with Unit IDs 52-9 were installed in 1957.
   Emission units associated with Unit IDs 52-10 were installed in 1972.

3. Unit IDs 52-11 through 52-13: Mills Systems (Insignificant Activities: 52-12 & 52-13)

   Each Mill System consists of a feed hopper, mill, cyclone (Unit IDs 52-11 and 52-12 only), and interconnecting conveyors. Lead Oxide is conveyed to the mill feed hopper from where it is metered into the mill. The air and product from the mill are conveyed to a cyclone. Air from the cyclone is returned to the mill. The oxide is conveyed to the packing station, the North bulk loading storage hopper or for further processing.

   Emission units associated with Unit IDs 52-11 and 52-12 were installed in 1930.
   Emission units associated with Unit ID 52-13 were installed in 1957.

4. Unit ID 52-14: Air Conveying System (Trivial Activity)

   The Air Conveying System consists of a hopper, pressure blowers, and pipes. For the blower 1 system, lead oxide is conveyed to a hopper from which the material is fed through an air lock

rotary valve into the pipe. Pressurized air from the blower conveys the material to storage silos. Blower 2 is used to blow material from the 6 Barton mill to storage silos. Material can also be blown from the 4 Barton mill to storage silos.

Emission units associated with Unit ID 52-14 were installed in 1983.

Unit 52-14 is not controlled by the Main Control System. It is controlled by two baghouses followed by a HEPA system which exhausts through stack 1-S-52.

5. Unit ID 52-15, 16 & 19: Lead Oxide Bulk Loading, Bulk Loading System, & Lead Oxide Bulk Loading – North (Insignificant Activities: 52-15 & 52-16)

Each Bulk Loading System consists of a bulk storage silo, conveyors, and a loading spout. A pneumatic bulk trailer is spotted under the telescopic loading spout. The spout is lowered to the trailer hatch. Material is fed from a bulk storage silo through sealed conveyors into the trailer.

Emission units associated with Unit ID 52-15 were installed in 1960.
Emission units associated with Unit ID 52-16 were installed in 1983.
Emission units associated with Unit ID 52-19 were installed in September, 1995.

Unit ID 52-16 is not controlled by the Main Control System. It is controlled by two baghouses followed by a HEPA system which exhausts through stack 1-S-52.

6. Unit ID 52-17: Mykro Mill (Insignificant Activity)

The Mykro Mill consists of two high efficiency cyclones that separate lead oxide into a fine lead oxide product and a coarse lead oxide product. Lead oxide from a barton is conveyed to the feed hopper from which it is fed through an air lock rotary valve into the Mykro Mill. The fine lead oxide is packed into containers and the coarse lead oxide can either be recycled or packed into containers.

Emission units associated with Unit ID 52-17 were installed in November, 1989.

7. Unit ID 52-20: Rail Car Loading

The Rail Car Loading operation consists of a covered railroad hopper car, loading device, and a dust collection device. A rail car is spotted at the loading area and the loading device and dust collection device are put in place. Tote bins containing material are then lifted above the loading device and discharged into the car.

Emission units associated with Unit 52-20 were installed in 1960.

<u>Stack IDs 4A-S-8, 14-S-16, 1-S-2, & 1-S-26</u>

1. Unit IDs 8-1, 16-1, 2-1, & 26-1: No. 2, 3, 4, & 5 Barton Systems

Each Barton System consists of a melt kettle, barton reactor, settling device, and interconnecting conveyors. Lead ingots are charged into an enclosed melt kettle which is indirectly heated by either natural gas or propane burners. The molten lead is continuously fed into the barton reactor where it is atomized and oxidized into lead oxide. The oxide is drawn through a settling device and then conveyed to further processing.

Emission units associated with Unit ID 8-1 were installed in 1958.
Emission units associated with Unit ID 16-1 were installed in 1972.
Emission units associated with Unit ID 2-1 were installed in 1974.
Emission units associated with Unit ID 26-1 were installed in 1977.

Each system is controlled by a baghouse & HEPA system.

2. Unit ID 26-2: No. 6 Barton System

This Barton System consists of a melt kettle, barton reactor, cyclone, and interconnecting conveyors. Lead ingots are charged into an enclosed melt kettle which is indirectly heated by either natural gas or propane burners. The molten lead is continuously fed into the barton reactor where it is atomized and oxidized into lead oxide. The oxide is drawn through a sealed conductor into a cyclone and then mechanically conveyed to further processing.

Emission units associated with Unit ID 26-2 were installed in July 1995.

The No. 6 Barton system is controlled by a baghouse & HEPA system.

Stack ID 16-S-56

1. Unit ID 56-1: 400Y Furnace System

The 400Y Furnace System is a direct, natural gas or propane fired reverberatory type furnace. The lead oxide is melted in this furnace and then converted to pelletized lead oxide. After appropriate classification, the finished product is screw conveyed to the packing hopper and packed.

Emission units associated with Unit ID 56-1 were installed in 1971.

This unit is controlled by the 16-S-56 Control System which includes six (6) baghouse & HEPA systems.

2. Unit ID 56-3: Lead Oxide Pneumatic Conveyor System

The Pneumatic Conveyor System consists of a hopper, pressure blower, and a pipe. Lead oxide is conveyed to a hopper from which the material is fed through an air lock rotary valve and into the pipe. Pressurized air from the blower conveys the material to a storage silo.

Emission units associated with Unit ID 56-3 were installed in 1977.

This unit is controlled by a baghouse & HEPA system.

3. Unit ID 56-4: Lead Oxide Bulk Loading System

The Bulk Loading System consists of a bulk storage silo, conveyors, and a loading spout. A pneumatic bulk trailer is spotted under the telescopic loading spout. The spout is lowered to the trailer hatch. Material is fed from a bulk storage silo through sealed conveyors into the trailer.

Emission units associated with Unit ID 56-4 were installed in 1977.

This unit is controlled by a baghouse & HEPA system.

4. Unit ID 56-7: Direct Car Loading System

The Direct Car Loading System consists of two storage silos, two weigh hoppers, a loading spout, a bin dump station, and interconnecting conveyors. Material is conveyed to one of two storage silos from where it can be loaded into a rail car, bulk truck, or tote bin.

Emission units associated with Unit 56-7 were installed in June, 1999 and approved for

modification in 2012.

This unit is controlled by a baghouse & HEPA system. The two storage silos are equipped with a bin vent filter, which exhausts to the baghouse & HEPA system.

5. Unit ID 56-9: Flash Calciner System

The Flash Calciner system consists of a feed hopper, natural gas (propane alternative) calciner, process bag filter, Sweco separator, packer and interconnecting conveyors. Lead oxide from the bartons or tote bins is fed into a heated air stream. The material then passes through a process bag filter, a rotary valve and to either the 400Y furnace or through a Sweco separator. Following the Sweco, the material is either packed out or sent to storage tanks.

Emission units associated with Unit ID 56-9 were installed in May, 2006.

This unit is controlled by a baghouse & HEPA system.

6. Unit ID 56-10: Non-Lead Glass Process

The Non-Lead Glass Process consists of a natural gas (propane alternative) fired furnace, wet ball mill, wet sweco, mixing tank, and interconnecting conveyors. Glass frit from the furnace is milled, separated, and sent to a mix tank. The mix tank feeds the glass product spray dryer.

Emission units associated with Unit ID 56-10 were installed in May, 2006. The natural gas fired furnace was approved for construction in 2011.

This unit is controlled by a cartridge filter.

7. Unit ID 56-11: XS Furnace System

The XS Furnace System consists of a mixer, natural gas (propane alternative) fired furnace, wet ball mill, wet sweco, mixing tank, and interconnecting conveyors. Lead oxide and other raw materials are batch mixed in the mixer then charged into the furnace. As the raw materials melt, they react to form a material, which then flows to a fritting device. The glass frit is milled, separated, and sent to a mix tank. The mix tank feeds the glass product spray dryer.

Emissions units associated with Unit 56-11 were installed in May, 2006 and approved for modification in 2011.

This unit is controlled by a baghouse & HEPA system.

8. Unit ID 56-12: Glass Additive Drying Process

The Glass Additive Drying Process consists of a bin unloading station, drying screw, heated mixer, bin packing station, and interconnecting conveyors. The mixer is an indirectly heated natural gas fired (with propane as an alternative fuel), unit used to remove the water from the glass additive. The dried glass additive is then packed.

Emission units associated with Unit ID 56-12 were installed in 2002.

This unit is controlled by a baghouse & HEPA system.

9. Unit ID 56-13: Blending System

The blender is a paddle type mixer. The material from the blender will be packed out.

Emission units associated with Unit ID 56-13 were installed in 2001.

This system is controlled by a baghouse & HEPA system.

Stack ID 4-S-35

1. Unit ID 35-1: B-Furnace Drying System

The B-Furnace Drying System consists of a mixer, drying screw, sizing screen, oversize material crusher, and packing system. The mixer blends raw materials used for feedstock for the furnace. Material from the furnace is continuously conveyed from the fritting device through a natural gas or propane heated drying screw to remove excess moisture. The dried material is then conveyed to a classifying screen. The screened material is then conveyed to packing.

Emission units associated with Unit ID 35-1 were installed in 1955.

This unit is controlled by a baghouse & HEPA system.

Stack ID 1-S-27

1. Unit ID 27-1: Lead Oxide Mill

The Lead Oxide Mill consists of a mill feed hopper, impact mill, cyclone, source bin, packing hopper, and packing station. Lead oxide is conveyed to the mill feed hopper from where it is metered into the mill for grinding. The mill is an impact, air swept type grinding mill. The air and product from the mill are conveyed to a cyclone. Air from the cyclone is returned to the mill.

Emission units associated with Unit ID 27-1 were installed in October, 1987.

This unit is controlled by a baghouse & HEPA system.

Stack ID 6-S-33

1. Unit ID 33-1: B-Furnace System

The B-Furnace System consists of feed hoppers, rework system, furnace, fritting device, and interconnecting conveyors. Lead-oxide and other raw materials are batch-mixed in a mixer and conveyed to a stoker hopper. This mixture is then fed to the furnace. The furnace is a direct, natural gas or propane fired reverberatory type furnace. The raw materials are melted to form a molten material which then flows by gravity to the fritting device. The fritted material is conveyed to the drying system.

Emission units associated with Unit ID 33-1 were installed in 1988.

This system is controlled by a baghouse & HEPA system.

Stack ID 4B-S-34

1. Unit ID 34-1: B-Furnace Mill

The mill feed hopper receives material produced by the B-Furnace. The hopper then charges the mill, which is an air impact air swept type that air conveys the milled material to a cyclone. The air leaving the cyclone is returned to the mill. The material from the cyclone discharges to a packing hopper.

Emission units associated with Unit ID 34-1 were installed in 1955.

This unit is controlled by a baghouse & HEPA system.

2. Unit ID 34-3: Glass Concepts Process

The Glass Concepts Process includes wet ball mills, a holding tank, spray dryers, process baghouses, and interconnecting conveyors. A slurry mixture is batch milled in ball mills and conveyed to a holding tank where it is continuously mixed to keep the material from separating out. The material is then dried in one of two atomizing spray dryers which are natural gas fired with propane as an alternative fuel. The dried product is conveyed through a process baghouse and packed out into containers. This system is drafted to pollution control equipment.

Emission units associated with Unit ID 34-3 were installed in 2005, modified in May, 2006 and October, 2007.

This process is controlled by baghouses & HEPA systems.

Under 40 CFR 63, Subpart VVVVVV these units are considered chemical manufacturing process units.

(The information describing the process contained in this emissions unit description box is descriptive information and does not constitute enforceable conditions.)

National Emission Standards for Hazardous Air Pollutants (NESHAP) Requirements

E.1.1 General Provisions Relating to NESHAP [40 CFR Part 63, Subpart A] [326 IAC 20-1]

Pursuant to 40 CFR 63, the Permittee shall comply with the provisions of 40 CFR Part 63, Subpart A – General Provisions, which are incorporated by reference as 326 IAC 20-1, except as otherwise specified in 40 CFR 63, Subpart VVVVVV.

E.1.2 National Emission Standards for Hazardous Air Pollutants (NESHAP) for Chemical Manufacturing Area Sources [40 CFR Part 63, Subpart VVVVVV]

The Permittee, which engages in chemical manufacturing, shall comply with the following provisions of 40 CFR 63, Subpart VVVVVV (included as Attachment A of this permit):

(1) 40 CFR 63.11494(a), (b), (d), (f), and (h)
(2) 40 CFR 63.11495(a)(1), (a)(3), and (a)(4)
(3) 40 CFR 63.11496(f)(1), (f)(2), (f)(3), and (f)(4)
(4) 40 CFR 63.11501(a), (b)(1), (c)(1)(i), (c)(1)(v), (d)(1), and (d)(4)
(5) 40 CFR 63.11502
(6) 40 CFR 63.11503
(7) Tables 1 and 9

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP) CERTIFICATION

Source Name: Hammond Group, Inc. (HGI)
Source Address: 2308 – 165th Street, Hammond, Indiana 46320
FESOP Permit No.: F089-14165-00219

This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this permit.

Please check what document is being certified:

- ☐ Annual Compliance Certification Letter
- ☐ Test Result (specify)_____
- ☐ Report (specify)_____
- ☐ Notification (specify)_____
- ☐ Affidavit (specify)_____
- ☐ Other (specify)_____

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:
Printed Name:
Title/Position:
Date:

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251
Phone: (317) 233-0178
Fax: (317) 233-6865

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP) EMERGENCY OCCURRENCE REPORT

Source Name: Hammond Group, Inc. (HGI)
Source Address: 2308 – 165th Street, Hammond, Indiana 46320
FESOP Permit No.: F089-14165-00219

This form consists of 2 pages **Page 1 of 2**

☐ This is an emergency as defined in 326 IAC 2-7-1(12)
- The Permittee must notify the Office of Air Quality (OAQ), within four (**4**) business hours (1-800-451-6027 or 317-233-0178, ask for Compliance Section); and
- The Permittee must submit notice in writing or by facsimile within two (**2**) working days (Facsimile Number: 317-233-6865), and follow the other requirements of 326 IAC 2-7-16

If any of the following are not applicable, mark N/A

Facility/Equipment/Operation:
Control Equipment:
Permit Condition or Operation Limitation in Permit:
Description of the Emergency:
Describe the cause of the Emergency:

If any of the following are not applicable, mark N/A **Page 2 of 2**

Date/Time Emergency started:
Date/Time Emergency was corrected:
Was the facility being properly operated at the time of the emergency? Y N Describe:
Type of Pollutants Emitted: TSP, PM-10, SO_2, VOC, NO_X, CO, Pb, other:
Estimated amount of pollutant(s) emitted during emergency:
Describe the steps taken to mitigate the problem:
Describe the corrective actions/response steps taken:
Describe the measures taken to minimize emissions:
If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value:

Form Completed by:_____

Title / Position:_____

Date:_____

Phone: _____

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH
FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT

Source Name: Hammond Group, Inc. (HGI)
Source Address: 2308 – 165th Street, Hammond, Indiana 46320
FESOP Permit No.: F089-14165-00219

Months: _____ **to** _____ **Year:** _____

Page 1 of 2

This report shall be submitted quarterly based on a calendar year. Proper notice submittal under Section B - Emergency Provisions satisfies the reporting requirements of paragraph (a) of Section C - General Reporting. Any deviation from the requirements of this permit, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. A deviation required to be reported pursuant to an applicable requirement that exists independent of the permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".
☐ NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.
☐ THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD

Permit Requirement (specify permit condition #)	
Date of Deviation:	**Duration of Deviation:**
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

Permit Requirement (specify permit condition #)	
Date of Deviation:	**Duration of Deviation:**
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

Permit Requirement (specify permit condition #)	
Date of Deviation:	**Duration of Deviation:**
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

Permit Requirement (specify permit condition #)	
Date of Deviation:	**Duration of Deviation:**
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

Permit Requirement (specify permit condition #)	
Date of Deviation:	**Duration of Deviation:**
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

Form Completed by:_____

Title / Position:_____

Date:_____

Phone: _____

Indiana Department of Environmental Management
Office of Air Quality

Attachment A

Title 40: Protection of Environment

PART 63—NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORIES (CONTINUED)

Subpart VVVVVV—National Emission Standards for Hazardous Air Pollutants for Chemical Manufacturing Area Sources

Source: 74 FR 56041, Oct. 29, 2009, unless otherwise noted.

Applicability and Compliance Dates

§ 63.11494 What are the applicability requirements and compliance dates?

(a) Except as specified in paragraph (c) of this section, you are subject to this subpart if you own or operate a chemical manufacturing process unit (CMPU) that meets the conditions specified in paragraphs (a)(1) through (3) of this section.

(1) The CMPU uses as feedstocks, generates as byproducts, or produces as products any of the hazardous air pollutants (HAP) listed in Table 1 to this subpart (Table 1 HAP).

(2) The CMPU is located at an area source of HAP emissions.

(3) Table 1 HAP are present in feedstocks, or Table 1 HAP are generated or produced in the CMPU and are present in process fluid, at concentrations greater than 0.1 percent for carcinogens, as defined by the Occupational Safety and Health Administration at 29 CFR 1910.1200(d)(4), and greater than 1.0 percent for noncarcinogens. To determine the Table 1 HAP content of feedstocks, you may rely on formulation data provided by the manufacturer or supplier, such as the Material Safety Data Sheet (MSDS) for the material. If the concentration in an MSDS is presented as a range, use the upper bound of the range.

(b) A CMPU includes all process vessels, equipment, and activities necessary to operate a chemical manufacturing process that produces a material or a family of materials described by North American Industry Classification System (NAICS) code 325. A CMPU consists of one or more unit operations and any associated recovery devices. A CMPU also includes each storage tank, transfer operation, surge control vessel, and bottoms receiver associated with the production of such NAICS code 325 materials.

(c) This subpart does not apply to the operations specified in paragraphs (c)(1) through (6) of this section.

(1) Affected sources under the following chemical manufacturing area source categories listed pursuant to Clean Air Act (CAA) section 112(c)(3) and 112(k)(3)(B)(ii) that are subject to area source standards under this part:

(i) Manufacture of Paint and Allied Products, subject to subpart CCCCCCC of this part.

(ii) Mercury Emissions from Mercury Cell Chlor-Alkali Plants, subject to subpart IIIII of this part.

(iii) Polyvinyl Chloride and Copolymers Production, subject to subpart DDDDDD of this part.

(iv) Acrylic and Modacrylic Fibers Production, subject to subpart LLLLLL of this part.

(v) Carbon Black Production, subject to subpart MMMMMM of this part.

(vi) Chemical Manufacturing Area Sources: Chromium Compounds, subject to subpart NNNNNN of this part.

(2) Production of the following chemical manufacturing materials described in NAICS code 325:

(i) Manufacture of radioactive elements or isotopes, radium chloride, radium luminous compounds, strontium, uranium.

(ii) Manufacture of photographic film, paper, and plate where the material is coated with or contains chemicals. This subpart does apply to the manufacture of photographic chemicals.

(iii) Fabricating operations (such as spinning or compressing a solid polymer into its end use); compounding operations (in which blending, melting, and resolidification of a solid polymer product occurs for the purpose of incorporating additives, colorants, or stabilizers); and extrusion and drawing operations (converting an already produced solid polymer into a different shape by melting or mixing the polymer and then forcing it or pulling it through an orifice to create an extruded product). An operation is subject if it involves processing with Table 1 HAP solvent or if an intended purpose of the operation is to remove residual Table 1 HAP monomer.

(iv) Manufacture of chemicals classified in NAICS code 325222, 325314, 325413, or 325998.

(3) Research and development facilities, as defined in CAA section 112(c)(7).

(4) Quality assurance/quality control laboratories.

(5) Ancillary activities, as defined in §63.11502(b).

(6) Metal HAP in structures or existing as articles as defined in 40 CFR 372.3.

(d) This subpart applies to each new or existing affected source. The affected source is the facility-wide collection of CMPUs and each heat exchange system and wastewater system associated with a CMPU that meets the criteria specified in paragraphs (a) and (b) of this section. A CMPU using only Table 1 organic HAP is required to control only total CAA section 112(b) organic HAP. A CMPU using only Table 1 metal HAP is required to control only total CAA section 112(b) metal HAP.

(1) An affected source is an existing source if you commenced construction or reconstruction of the affected source before October 6, 2008.

(2) An affected source is a new source if you commenced construction or reconstruction of the affected source on or after October 6, 2008.

(e) Any source that was a major source and installed a control device on a CMPU after November 15, 1990, and, as a result, became an area source under 40 CFR part 63 is required to obtain a permit under 40 CFR part 70 or 40 CFR part 71. Otherwise, you are exempt from the obligation to obtain a permit under 40 CFR part 70 or 40 CFR part 71, provided you are not otherwise required by law to obtain a permit under 40 CFR 70.3(a) or 40 CFR 71.3(a). Notwithstanding the previous sentence, you must continue to comply with the provisions of this subpart.

(f) If you own or operate an existing affected source, you must achieve compliance with the applicable provisions in this subpart no later than October 29, 2012.

(g) If you start up a new affected source on or before October 29, 2009, you must achieve compliance with the applicable provisions of this subpart no later than October 29, 2009.

(h) If you start up a new affected source after October 29, 2009, you must achieve compliance with the provisions in this subpart upon startup of your affected source.

Effective Date Note: At 75 FR 77762, Dec. 14, 2010, in §63.11494, paragraph (e) was suspended, effective December 14, 2010 through March 14, 2011.

Standards and Compliance Requirements

§ 63.11495 What are the management practices and other requirements?

(a) *Management practices.* If you have a CMPU subject to this subpart, you must comply with paragraphs (a)(1) through (5) of this section.

(1) Each process vessel in organic HAP service or metal HAP service must be equipped with a cover or lid that must be in place at all times when the vessel contains HAP, except for material addition and sampling.

(2) You must use any of the methods listed in paragraphs (a)(2)(i) through (iv) of this section to control total organic HAP emissions from transfer of liquids containing Table 1 organic HAP to tank trucks or railcars. You are not required to comply with this paragraph (a)(2) if you have notified the Administrator in your initial notification that a material is reactive or resinous, and you will not be able to comply with any of the methods in paragraphs (a)(2)(i) through (iv) of this section for the transfer of such material.

(i) Use submerged loading or bottom loading.

(ii) Route emissions to a fuel gas system or process in accordance with §63.982(d) of subpart SS.

(iii) Vapor balance back to the storage tank or another storage tank connected by a common header.

(iv) Vent through a closed-vent system to a control device.

(3) You must conduct inspections of process vessels and equipment for each CMPU in organic HAP service or metal HAP service at least quarterly to demonstrate compliance with these requirements and to determine that the process vessels and equipment are sound and free of leaks. For these inspections, detection methods incorporating sight, sound, or smell are acceptable. The inspection must include direct and proximal (thorough) inspection of all areas of potential leak within the CMPU. Indications of a leak identified using such method constitutes a leak unless you demonstrate that the indications of a leak are due to a condition other than loss of HAP. Alternatively, Method 21 of 40 CFR part 60, appendix A–7, with a leak definition of 500 parts per million by volume (ppmv), may be used for detection of leaks or to determine if the indications of a leak are due to a condition other than loss of HAP. If indications of a leak are determined not to be HAP in one quarterly monitoring period, you must still perform the inspection and demonstration in the next quarterly monitoring period. Inspections must be conducted while the subject CMPU is operating. No inspection is required in a calendar quarter during which the subject CMPU does not operate for the entire calendar quarter and is not in organic HAP service or metal HAP service. If the CMPU operates at all during a calendar quarter, an inspection is required.

(4) You must repair any leak within 15 calendar days after detection of the leak, or document the reason for any delay of repair. For the purposes of this paragraph (a)(4), a leak will be considered “repaired” if a condition specified in paragraph (a)(4)(i), (ii), or (iii) of this section is met.

(i) The visual, audible, olfactory, or other indications of a leak to the atmosphere have been eliminated, or

(ii) No bubbles are observed at potential leak sites during a leak check using soap solution, or

(iii) The system will hold a test pressure.

(5) You must keep records of the dates and results of each inspection event, the dates of equipment repairs, and, if applicable, the reasons for any delay in repair.

(b) *Small heat exchange systems.* For each heat exchange system subject to this subpart with a cooling water flow rate less than 8,000 gallons per minute (gal/min) and not meeting one or more of the conditions in §63.104(a), you

must comply with paragraphs (b)(1) through (3) of this section, or as an alternative, you may comply with any one of the requirements in Item 1.a or 1.b of Table 8 to this subpart.

(1) You must develop and operate in accordance with a heat exchange system inspection plan. The plan must describe the inspections to be performed that will provide evidence of hydrocarbons in the cooling water. Among other things, inspections may include checks for visible floating hydrocarbon on the water, hydrocarbon odor, discolored water, and/or chemical addition rates. You must conduct inspections at least once per quarter, even if the previous inspection determined that the indications of a leak did not constitute a leak as defined by §63.104(b)(6).

(2) You must perform repairs to eliminate the leak and any indications of a leak or demonstrate that the HAP concentration in the cooling water does not constitute a leak, as defined by §63.104(b)(6), within 45 calendar days after indications of the leak are identified, or you must document the reason for any delay of repair in your next semiannual compliance report.

(3) You must keep records of the dates and results of each inspection, documentation of any demonstrations that indications of a leak do not constitute a leak, the dates of leak repairs, and, if applicable, the reasons for any delay in repair.

(c) Startup, shutdown, and malfunction (SSM) provisions in subparts that are referenced in paragraphs (a) and (b) of this section do not apply.

§ 63.11496 What are the standards and compliance requirements for process vents?

(a) *Organic HAP emissions from batch process vents.* You must comply with the requirements in paragraphs (a)(1) through (4) of this section for organic HAP emissions from your batch process vents for each CMPU using Table 1 organic HAP. If uncontrolled organic HAP emissions from all batch process vents from a CMPU subject to this subpart are equal to or greater than 10,000 pounds per year (lb/yr), you must also comply with the emission limits and other requirements in Table 2 to this subpart.

(1) You must determine the sum of actual organic HAP emissions from all of your batch process vents within a CMPU subject to this subpart using process knowledge, engineering assessment, or test data. Emissions for a standard batch in a process may be used to represent actual emissions from each batch in that process. You must maintain records of the calculations. Calculations of annual emissions are not required if you meet the emission standards for batch process vents in Table 2 to this subpart.

(2) As an alternative to calculating actual emissions for each affected CMPU at your facility, you may elect to estimate emissions for each CMPU based on the emissions for the worst-case CMPU. The worst-case CMPU means the CMPU at the affected source with the highest organic HAP emissions per batch. The worst-case emissions per batch are used with the number of batches run for other affected CMPU. Process knowledge, engineering assessment, or test data may be used to identify the worst-case process. You must keep records of the information and procedures used to identify the worst-case process.

(3) If your current estimate is that emissions from batch process vents from a CMPU are less than 10,000 pounds per year (lb/yr), then you must keep a record of the number of batches of each process operated per month. Also, you must reevaluate your total emissions from batch process vents prior to making any process changes that affect emission calculations in paragraphs (a)(1) and (2) of this section. If projected emissions increase to 10,000 lb/yr or more, you must be in compliance options for batch process vents in Table 2 to this subpart upon initiating operation under the new operating conditions. You must maintain records documenting the results of all updated emissions calculations.

(4) As an alternative to determining the HAP emissions, you may elect to demonstrate that the amount of organic HAP used in the process is less than 10,000 lb/yr. You must keep monthly records of the organic HAP usage.

(b) *Organic HAP emissions from continuous process vents.* You must comply with the requirements in paragraphs (b)(1) through (3) of this section for organic HAP emissions from your continuous process vents for each CMPU subject to this subpart using Table 1 organic HAP. If the total resource-effectiveness (TRE) index value for a continuous process vent is less than or equal to 1.0, you must also comply with the emission limits and other requirements in Table 3 to this subpart.

(1) You must determine the TRE index value according to the procedures in §63.115(d), except as specified in paragraphs (b)(1)(i) through (iii) of this section.

(i) You are not required to calculate the TRE index value if you control emissions in accordance with Table 3 to this subpart.

(ii) Sections 63.115(d)(1)(i) and (ii) are not applicable for the purposes of this paragraph (b)(1)(ii).

(iii) You may assume the TRE for a vent stream is > 1.0 if the amount of organic HAP emitted in the vent stream is less than 0.1 pound per hour.

(2) If the current TRE index value is greater than 1, you must recalculate the TRE index value before you make any process or operational change that affects parameters in the calculation. If the recalculated TRE is less than or equal to 1.0, then you must comply with one of the compliance options for continuous process vents in Table 3 to this subpart before operating under the new operating conditions. You must maintain records of all TRE calculations.

(3) If a recovery device as defined in §63.11502 is used to maintain the TRE index value at a level greater than 1.0 and less than or equal to 4.0, you must comply with §63.982(e) and the requirements specified therein.

(c) *Combined streams.* If you combine organic HAP emissions from batch process vents and continuous process vents, you must comply with the more stringent standard in Table 2 or Table 3 to this subpart that applies to any portion of the combined stream, or you must comply with Table 2 for the batch process vents and Table 3 for the continuous process vents. The TRE index value for continuous process vents and the annual emissions from batch process vents shall be determined for the individual streams before they are combined, and prior to any control, in order to determine the most stringent applicable requirements.

(d) *Combustion of halogenated streams.* If you use a combustion device to comply with the emission limits for organic HAP from a halogenated batch process vent or a halogenated continuous process vent, you must use a halogen reduction device to meet the emission limit in either paragraph (d)(1) or (d)(2) of this section and in accordance with §63.994 and the requirements referenced therein.

(1) Reduce overall emissions of hydrogen halide and halogen HAP after the combustion device by greater than or equal to 95 percent, to less than or equal to 0.45 kilograms per hour (kg/hr), or to a concentration less than or equal to 20 parts per million by volume (ppmv).

(2) Reduce the halogen atom mass emission rate before the combustion device to less than or equal to 0.45 kg/hr or to a concentration less than or equal to 20 ppmv.

(e) *Alternative standard for organic HAP.* Exceptions to the requirements for the alternative standard requirements specified in Tables 2 and 3 to this subpart and §63.2505 are specified in paragraphs (e)(1) through (5) of this section.

(1) When §63.2505 of subpart FFFF refers to Tables 1 and 2 to subpart FFFF and §§63.2455 and 63.2460, it means Tables 2 and 3 to this subpart and §63.11496(a) and (b).

(2) Sections 63.2505(a)(2) and (b)(9) do not apply.

(3) When §63.2505(b) references §63.2445 it means §63.11494(f) through (h).

(4) The requirements for hydrogen halide and halogen HAP apply only to hydrogen halide and halogen HAP generated in a combustion device that is used to comply with the alternative standard.

(5) When §63.1258(b)(5)(ii)(B)(*2*) refers to a “notification of process change” report, it means the semi-annual compliance report required by §63.11501(d) for the purposes of this subpart.

(f) *Emissions from metal HAP process vents.* You must comply with the requirements in paragraphs (f)(1) and (2) of this section for metal HAP emissions from each CMPU using Table 1 metal HAP. If the collective uncontrolled metal

HAP emissions from all metal HAP process vents from a CMPU are equal to or greater than 400 lb/yr, then you must also comply with the emission limits and other requirements in Table 4 to this subpart and in paragraph (f)(3), (4), or (5) of this section.

(1) You must determine the sum of metal HAP emissions from all metal HAP process vents within a CMPU subject to this subpart, except you are not required to determine the annual emissions if you control the metal HAP process vents within a CMPU in accordance with Table 4 to this subpart or if you determine your total metal HAP usage in the process unit is less than 400 lb/yr. To determine the mass emission rate you may use process knowledge, engineering assessment, or test data. You must keep records of the emissions calculations.

(2) If your current estimate is that total uncontrolled metal HAP emissions from a CMPU subject to this subpart are less than 400 lb/yr, then you must keep records of either the number of batches operated per month (batch vents) or the process operating hours (continuous vents). Also, you must reevaluate your total emissions before you make any process or operational change that affects emissions of metal HAP. If projected emissions increase to 400 lb/yr or more, then you must be in compliance with one of the options for metal HAP process vents in Table 4 to this subpart upon initiating operation under the new operating conditions. You must keep records of all recalculated emissions determinations.

(3) If you have an existing source subject to the HAP metals emission limits specified in Table 4 to this subpart, you must comply with the initial compliance and monitoring requirements in paragraphs (f)(3)(i) through (iii) of this section. You must keep records of monitoring results to demonstrate continuous compliance.

(i) You must prepare a monitoring plan containing the information in paragraphs (f)(3)(i)(A) through (E) of this section. The plan must be maintained on-site and be available on request. You must operate and maintain the control device according to a site-specific monitoring plan at all times.

(A) A description of the device;

(B) Results of a performance test or engineering assessment conducted in accordance with paragraph (f)(3)(ii) of this section verifying the performance of the device for reducing HAP metals or particulate matter (PM) to the levels required by this subpart;

(C) Operation and maintenance plan for the control device (including a preventative maintenance schedule consistent with the manufacturer's instructions for routine and long-term maintenance) and continuous monitoring system.

(D) A list of operating parameters that will be monitored to maintain continuous compliance with the applicable emissions limits; and

(E) Operating parameter limits based on either monitoring data collected during the performance test or established in the engineering assessment.

(ii) You must conduct a performance test or an engineering assessment for each CMPU subject to a HAP metals emissions limit in Table 4 to this subpart and report the results in your Notification of Compliance Status (NOCS) report. If you own or operate an existing affected source, you are not required to conduct a performance test if a prior performance test was conducted within the 5 years prior to the effective date using the same methods specified in paragraph (f)(3)(iii) of this section and either no process changes have been made since the test, or if you can demonstrate that the results of the performance test, with or without adjustments, reliably demonstrate compliance despite process changes. For each performance test, sampling must be conducted at both the inlet and outlet of the control device, and the test must be conducted under representative process operating conditions.

(iii) If you elect to conduct a performance test, it must be conducted according to requirements in §63.11410(j)(1). As an alternative to conducting a performance test using Method 5 or 5D to determine the concentration of PM, you may use Method 29 in 40 CFR part 60, appendix A–8 to determine the concentration of HAP metals. You have demonstrated initial compliance if the overall reduction of either HAP metals or total PM is equal to or greater than 95 percent.

(4) If you have a new source using a baghouse as a control device, you must install, operate, and maintain a bag leak detection system on all baghouses used to comply with the HAP metals emissions limit in Table 4 to this subpart. You

must comply with the testing, monitoring, and recordkeeping requirements in §63.11410(g), (i), and (j)(1), except you are not required to submit the monitoring plan required by §63.11410(g)(2) for approval.

(5) If you have a new source using a control device other than a baghouse to comply with the HAP metals emission limits in Table 4 to this subpart, you must comply with the initial compliance and monitoring requirements in paragraphs (f)(3)(i) through (iii) of this section.

(g) *Exceptions and alternatives to 40 CFR part 63, subpart SS.* If you are complying with the emission limits and other requirements for continuous process vents in Table 3 to this subpart, the provisions in paragraphs (g)(1) through (7) and (9) of this section apply in addition to the provisions in 40 CFR part 63, subpart SS. If you are complying with the emission limits and other requirements for batch process vents in Table 2 to this subpart, the provisions in paragraphs (g)(1) through (8) of this section apply in addition to the provisions in subpart SS.

(1) *Requirements for performance tests.* The requirements specified in §§63.2450(g)(1) through (4) apply instead of or in addition to the requirements specified in 40 CFR part 63, subpart SS.

(2) *Design evaluation.* To determine initial compliance with a percent reduction emission limit, you may elect to conduct a design evaluation as specified in §63.1257(a)(1) instead of a performance test as specified in subpart SS of this part 63. You must establish the value(s) and basis for the operating limits as part of the design evaluation. For continuous process vents, the design evaluation must be conducted at maximum representative operating conditions for the process, unless the Administrator specifies or approves alternate operating conditions. For batch process vents, the design evaluation must be conducted under worst-case conditions, as specified in §63.2460(c)(2).

(3) *Outlet concentration correction for combustion devices.* When §63.997(e)(2)(iii)(C) requires you to correct the measured concentration at the outlet of a combustion device to 3 percent oxygen if you add supplemental combustion air, the requirements in either paragraph (g)(3)(i) or (g)(3)(ii) of this section apply for the purposes of this subpart.

(i) You must correct the concentration in the gas stream at the outlet of the combustion device to 3 percent oxygen if you add supplemental gases, as defined in §63.2550, to the vent stream, or;

(ii) You must correct the measured concentration for supplemental gases using Equation 1 of §63.2460; you may use process knowledge and representative operating data to determine the fraction of the total flow due to supplemental gas.

(4) *Continuous parameter monitoring.* The provisions in §63.2450(k)(1) through (6) apply in addition to the requirements for continuous parameter monitoring systems (CPMS) in subpart SS of this part 63, except as specified in paragraphs (g)(4)(i) and (ii) of this section.

(i) You may measure pH at least once per day for any halogen scrubber within a CMPU subject to this rule.

(ii) The requirements in §63.2450(k)(6) to request approval of a procedure to monitor operating parameters does not apply for the purposes of this subpart. You must provide the required information in your NOCS report required by §63.11501(b).

(5) *Startup, shutdown, malfunction (SSM).* Section 63.998(b)(2)(iii),(b)(6)(i)(A), and (d)(3) do not apply for the purposes of this subpart.

(6) *Excused excursions.* Excused excursions, as defined in subpart SS of this part 63, are not allowed.

(7) *Energetics and organic peroxides.* If an emission stream contains energetics or organic peroxides that, for safety reasons, cannot meet an applicable emission limit specified in this subpart, then you must submit an application to the Administrator explaining why an undue safety hazard would be created if the air emission controls were installed, and you must describe the procedures that you will implement to minimize HAP emissions from these vent streams in lieu of the emission limitations in this section.

(8) *Additional requirements for batch process vents.* The provisions specified in §63.2460(c) apply in addition to the provisions in subpart SS of this part 63, except as specified in paragraphs (g)(8)(i) through (iii) of this section.

(i) References to emission limits in Table 2 to subpart FFFF mean the emission limits in Table 2 to this subpart.

(ii) References to MCPU mean CMPU for purposes of this subpart.

(iii) Section 63.2460(c)(8) does not apply for the purposes of this subpart.

(9) *Parameter monitoring averaging periods.* Daily averages required in §63.998(b)(3) apply at all times except during startup and shutdown. Separate averages shall be determined for each period of startup and period of shutdown.

(h) *Surge control vessels and bottoms receivers.* For each surge control vessel and bottoms receiver that meets the applicability criteria for storage tanks specified in Table 5 to this subpart, you must meet the emission limits and control requirements specified in Table 5 to this subpart.

(i) *Startup, shutdown, and malfunction (SSM).* References to SSM provisions in subparts that are referenced in paragraphs (a) through (h) of this section or Tables 2 through 5 to this subpart do not apply.

§ 63.11497 What are the standards and compliance requirements for storage tanks?

(a) You must comply with the emission limits and other requirements in Table 5 to this subpart and in paragraph (b) of this section for organic HAP emissions from each of your storage tanks that meet the applicability criteria in Table 5 to this subpart.

(b) *Planned routine maintenance for a control device.* Operate in accordance with paragraphs (b)(1) through (3) of this section for periods of planned routine maintenance of a control device for storage tanks.

(1) Add no material to the storage tank during periods of planned routine maintenance.

(2) Limit periods of planned routine maintenance for each control device (or series of control devices) to no more than 240 hours per year (hr/yr), or submit an application to the Administrator requesting an extension of this time limit to a total of 360 hr/yr. The application must explain why the extension is needed and it must be submitted at least 60 days before the 240-hour limit will be exceeded.

(3) Keep records of the day and time at which planned routine maintenance periods begin and end, and keep a record of the type of maintenance performed.

(c) References to SSM provisions in subparts that are referenced in paragraphs (a) or (b) of this section or Table 5 to this subpart do not apply.

§ 63.11498 What are the standards and compliance requirements for wastewater systems?

(a) You must comply with the requirements in paragraph (a)(1) and (2) of this section and in Table 6, Item 1 to this subpart for all wastewater streams from a CMPU subject to this subpart. If the partially soluble HAP concentration in a wastewater stream is equal to or greater than 10,000 parts per million by weight (ppmw) and the wastewater stream contains a separate organic phase, then you must also comply with Table 6, Item 2 to this subpart for that wastewater stream. Partially soluble HAP are listed in Table 7 to this subpart.

(1) Except as specified in paragraph (a)(2) of this section, you must determine the total concentration of partially soluble HAP in each wastewater stream using process knowledge, engineering assessment, or test data. Also, you must reevaluate the concentration of partially soluble HAP if you make any process or operational change that affects the concentration of partially soluble HAP in a wastewater stream.

(2) You are not required to determine the partially soluble concentration in wastewater that is hard piped to a combustion unit or hazardous waste treatment unit, and you are not required to determine the partially soluble HAP

concentration in wastewater that is hard piped to a storage tank from which the wastewater is collected and shipped offsite for treatment in a combustion unit or hazardous waste treatment unit.

(3) Separated organic material that is recycled to a process is no longer wastewater and no longer subject to the wastewater requirements after it has been recycled.

(b) The requirements in Item 2 of Table 6 to this subpart do not apply during periods of startup or shutdown. References to SSM provisions in subparts that are referenced in paragraph (a) of this section or Table 6 to this subpart do not apply.

§ 63.11499 What are the standards and compliance requirements for heat exchange systems?

(a) If the cooling water flow rate in your heat exchange system is equal to or greater than 8,000 gal/min and is not meeting one or more of the conditions in §63.104(a), then you must comply with one of the requirements specified in Table 8 to this subpart.

(b) For equipment that meets Current Good Manufacturing Practice (CGMP) requirements of 21 CFR part 211, you may use the physical integrity of the reactor as the surrogate indicator of heat exchanger system leaks when complying with Item 1.a in Table 8 to this subpart.

(c) Any reference to SSM provisions in other subparts that are referenced in paragraphs (a) and (b) of this section or Table 8 to this subpart do not apply.

§ 63.11500 What compliance options do I have if part of my plant is subject to both this subpart and another Federal standard?

For any CMPU, heat exchange system, or wastewater system subject to the provisions of both this subpart and another rule, you may elect to comply only with the more stringent provisions as specified in paragraphs (a) through (d) of this section. You must consider all provisions of the rules, including monitoring, recordkeeping, and reporting. You must identify the subject CMPU, heat exchange system, and/or wastewater system, and the provisions with which you will comply in your NOCS report required by §63.11501(b). You also must demonstrate in your NOCS report that each provision with which you will comply is at least as stringent as the otherwise applicable requirement in this subpart VVVVVV. You are responsible for making accurate determinations concerning the more stringent standards and noncompliance with this rule is not excused if it is later determined that your determination was in error and, as a result, you are violating this subpart. Compliance with this rule is your responsibility and the NOCS report does not alter or affect that responsibility.

(a) *Compliance with other subparts of this part 63.* If any part of a CMPU that is subject to the provisions of this subpart is also subject to the provisions of another subpart of 40 CFR part 63, then compliance with any of the requirements in the other subpart of this part 63 that are at least as stringent as the corresponding requirements in this subpart VVVVVV constitutes compliance with this subpart VVVVVV.

(b) *Compliance with subparts of 40 CFR part 60.* If any part of a CMPU that is subject to the provisions of this subpart is also subject to the provisions of subpart VV, DDD, III, NNN, RRR, or YYY in 40 CFR part 60, then compliance with any of the requirements in 40 CFR part 60, subpart VV, DDD, III, NNN, RRR, or YYY that are at least as stringent as the corresponding requirements in this subpart VVVVVV constitutes compliance with this subpart VVVVVV.

(c) *Compliance with subparts of 40 CFR part 61.* If any part of a CMPU that is subject to the provisions of this subpart is also subject to the provisions of subpart V, Y, BB, or FF of 40 CFR part 61, then compliance with any of the requirements in 40 CFR part 61, subpart V, Y, BB, or FF that are at least as stringent as the corresponding requirements in this subpart VVVVVV constitutes compliance with this subpart VVVVVV.

(d) *Compliance with 40 CFR parts 260 through 272.* If any part of a CMPU that is subject to the provisions of this subpart is also subject to the provisions of 40 CFR parts 260 through 272, then compliance with any of the requirements in 40 CFR part 260 through 272 rule that are at least as stringent as the corresponding requirements in this subpart VVVVVV constitutes compliance with this subpart VVVVVV.

§ 63.11501 What are the notification, recordkeeping, and reporting requirements?

(a) *General provisions.* You must meet the requirements of the General Provisions in 40 CFR part 63, subpart A, as shown in Table 9 to this subpart. The General Provisions in other parts do not apply except when a requirement in an overlapping standard, which you determined is at least as stringent as subpart VVVVVV and with which you have opted to comply, requires compliance with general provisions in another part.

(b) *Notification of compliance status (NOCS).* Your NOCS required by §63.9(h) must include the following additional information as applicable:

(1) This certification of compliance, signed by a responsible official:

(i) “This facility complies with the management practices in §63.11495.”

(ii) “This facility complies with the requirements in §63.11496 for HAP emissions from process vents.”

(iii) “This facility complies with the requirements in §63.11496 and §63.11497 for surge control vessels, bottoms receivers, and storage tanks.”

(iv) “This facility complies with the requirements in §63.11498 to treat wastewater streams.”

(v) “This facility complies with the requirements in §63.11499 for heat exchange systems.”

(2) If you comply with the alternative standard as specified in Table 2 to this subpart or Table 3 to this subpart, include the information specified in §63.1258(b)(5), as applicable.

(3) If you establish an operating limit for a parameter that will not be monitored continuously in accordance with §§63.11496(g)(4) and 63.2450(k)(6), provide the information as specified in §§63.11496(g)(4) and 63.2450(k)(6).

(4) A list of all transferred liquids that are reactive or resinous materials, as defined in §63.11502(b).

(5) If you comply with provisions in an overlapping rule in accordance with §63.11500, identify the affected CMPU, heat exchange system, and/or wastewater system; provide a list of the specific provisions with which you will comply; and demonstrate that the provisions with which you will comply are at least as stringent as the otherwise applicable requirements, including monitoring, recordkeeping, and reporting requirements, in this subpart VVVVVV.

(c) *Recordkeeping.* You must maintain files of all information required by this subpart for at least 5 years following the date of each occurrence according to the requirements in §63.10(b)(1). If you are subject, you must comply with the recordkeeping requirements of §63.10(b)(2) and the applicable requirements specified in paragraphs (c)(1) through (7) of this section.

(1) For each CMPU subject to this subpart you must keep the records specified in paragraphs (c)(1)(i) through (vi) of this section, as applicable.

(i) Records of management practice inspections, repairs, and reasons for any delay of repair, as specified in §63.11495(a)(5).

(ii) Records of small heat exchange system inspections, demonstrations of indications of leaks that do not constitute leaks, repairs, and reasons for any delay in repair as specified in §63.11495(b).

(iii) If batch process vent emissions are less than 10,000 lb/yr for a CMPU, records of batch process vent emission calculations, as specified in §63.11496(a)(1), the number of batches operated each month, as specified in §63.11496(a)(3), and any updated emissions calculations, as specified in §63.11496(a)(3). Alternatively, keep records of the worst-case processes or organic HAP usage, as specified in §63.11496(a)(2) and (4), respectively.

(iv) Records of all TRE calculations for continuous process vents as specified in §63.11496(b)(2).

(v) Records of metal HAP emission calculations as specified in §63.11496(f)(1) and (2). If total uncontrolled metal HAP process vent emissions from a CMPU subject to this subpart are estimated to be less than 400 lb/yr, also keep records of either the number of batches per month or operating hours, as specified in §63.11496(f)(2).

(vi) Records identifying wastewater streams and the type of treatment they receive, as specified in Table 6 to this subpart.

(2) For batch process vents subject to Table 2 to this subpart and continuous process vents subject to Table 3 to this subpart, you must keep records specified in paragraphs (c)(2)(i) or (ii) of this section, as applicable.

(i) If you route emissions to a control device other than a flare, keep records of performance tests, if applicable, as specified in §63.998(a)(2)(ii) and (4), keep records of the monitoring system and the monitored parameters, as specified in §63.998(b) and (c), and keep records of the closed-vent system, as specified in §63.998(d)(1). If you use a recovery device to maintain the TRE above 1.0 for a continuous process vent, keep records of monitoring parameters during the TRE index value determination, as specified in §63.998(a)(3).

(ii) If you route emissions to a flare, keep records of the flare compliance assessment, as specified in §63.998(a)(1)(i), keep records of the pilot flame monitoring, as specified in §63.998(a)(1)(ii) and (iii), and keep records of the closed-vent system, as specified in §63.998(d)(1).

(3) For metal HAP process vents subject to Table 4 to this subpart, you must keep records specified in paragraphs (c)(3)(i) or (ii) of this section, as applicable.

(i) For a new source using a control device other than a baghouse and for any existing source, maintain a monitoring plan, as specified in §63.11496(f)(3)(i), and keep records of monitoring results, as specified in §63.11496(f)(3).

(ii) For a new source using a baghouse to control metal HAP emissions, keep a site-specific monitoring plan, as specified in §§63.11496(f)(4) and 63.11410(g), and keep records of bag leak detection systems, as specified in §§63.11496(f)(4) and 63.11410(g)(4).

(4) For each storage tank subject to Table 5 to this subpart, you must keep records specified in paragraphs (c)(4)(i) through (vi) of this section, as applicable.

(i) Keep records of the vessel dimension, capacity, and liquid stored, as specified in §63.1065(a).

(ii) Keep records of each inspection of an internal floating roof, as specified in §63.1065(b)(1).

(iii) Keep records of each seal gap measurement for external floating roofs, as specified in §63.1065(b)(2), and keep records of inspections of external floating roofs, as specified in §63.1065(b)(1).

(iv) If you vent emissions to a control device other than a flare, keep records of the operating plan and measured parameter values, as specified in §§63.985(c) and 63.998(d)(2).

(v) If you vent emissions to a flare, keep records of all periods of operation during which the flare pilot flame is absent, as specified in §§63.987(c) and 63.998(a)(1), and keep records of closed-vent systems, as specified in §63.998(d)(1).

(vi) For periods of planned routine maintenance of a control device, keep records of the day and time at which each maintenance period begins and ends, and keep records of the type of maintenance performed, as specified in §63.11497(b)(3).

(5) For each wastewater stream subject to Item 2 in Table 6 to this subpart, keep records of the wastewater stream identification and the disposition of the organic phase(s), as specified in Item 2 to Table 6 to this subpart.

(6) For each large heat exchange system subject to Table 8 to this subpart, you must keep records of detected leaks; the date the leak was detected; if demonstrated not to be a leak, the basis for that determination; the date of efforts to repair the leak; and the date the leak is repaired, as specified in Table 8 to this subpart.

(7) You must keep a record of all transferred liquids that are reactive or resinous materials, as defined in §63.11502(b), and not included in the NOCS.

(d) *Semiannual Compliance Reports.* You must submit semiannual compliance reports that contain the information specified in paragraphs (d)(1) through (7) of this section, as applicable. Reports are required only for semiannual periods during which you experienced any of the events described in paragraphs (d)(1) through (7) of this section.

(1) *Deviations.* You must clearly identify any deviation from the requirements of this subpart.

(2) *Delay of repair for a large heat exchange system.* You must include the information specified in §63.104(f)(2) each time you invoke the delay of repair provisions for a heat exchange system with a cooling water flow rate equal to or greater than 8,000 gal/min.

(3) *Delay of leak repair.* You must provide the following information for each delay of leak repair beyond 15 days for any process equipment, storage tank, surge control vessel, bottoms receiver, and each delay of leak repair beyond 45 days for any heat exchange system with a cooling water flow rate less than 8,000 gal/min: information on the date the leak was identified, the reason for the delay in repair, and the date the leak was repaired.

(4) *Process change.* You must report each process change that affects a compliance determination and submit a new certification of compliance with the applicable requirements in accordance with the procedures specified in paragraph (b) of this section.

(5) *Data for the alternative standard.* If you comply with the alternative standard, as specified in Table 2 to this subpart or Table 3 to this subpart, report the information required in §63.1258(b)(5).

(6) *Overlapping rule requirements.* Report any changes in the overlapping provisions with which you comply.

(7) *Reactive and resinous materials.* Report any transfer of liquids that are reactive or resinous materials, as defined in §63.11502(b), and not included in the NOCS.

Other Requirements and Information

§ 63.11502 What definitions apply to this subpart?

(a) The following terms used in this subpart have the meaning given them in the CAA, §63.2, subpart SS (§63.981), subpart WW (§63.1061), 40 CFR 60.111b, subpart F (§63.101), subpart G (§63.111), subpart FFFF (§63.2550), as specified after each term:

Administrator (§63.2)

Article (40 CFR 372.3)

Boiler (§63.111)

Bottoms receiver (§63.2550)

CAA (§63.2)

Closed-vent system (§63.981)

Combustion device (§63.111)

Commenced (§63.2)

Compliance date (§63.2)

Container (§63.111)

Continuous monitoring system (§63.2)

Distillation unit (§63.111)

Emission standard (§63.2)

EPA (§63.2)

Family of materials (§63.2550)

Fill or filling (§63.111)

Floating roof (§63.1061)

Fuel gas system (§63.981)

Halogen atoms (§63.2550)

Halogenated vent stream (§63.2550)

Halogens and hydrogen halides (§63.2550)

Hazardous air pollutant (§63.2)

Heat exchange system (§63.101)

Incinerator (§63.111)

Maintenance wastewater (§63.2550)

Major source (§63.2)

Maximum true vapor pressure (§63.111)

Oil-water separator or organic-water separator (§63.111)

Operating permit (§63.101)

Owner or operator (§63.2)

Performance test (§63.2)

Permitting authority (§63.2)

Process condenser (§63.2550)

Process heater (§63.111)

Process tank (§63.2550)

Process wastewater (§63.101)

Reactor (§63.111)

Responsible official (§63.2)

State (§63.2)

Supplemental gases (§63.2550)

Surge control vessel (§63.2550)

Test method (§63.2)

Unit operation (§63.101)

(b) All other terms used in this subpart shall have the meaning given them in this section. If a term is defined in the CAA, §63.2, subpart SS (§63.981), subpart WW (§63.1061), 40 CFR 60.111b, subpart F (§63.101), subpart G (§63.111), or subpart FFFF (§63.2550), and in this section, it shall have the meaning given in this section for purposes of this subpart.

Ancillary activities means boilers, incinerators, and process heaters not used to comply with the emission standards in §§63.11495 through 63.11500, chillers and other refrigeration systems, and other equipment and activities that are not directly involved (i.e., they operate within a closed system and materials are not combined with process fluids) in the processing of raw materials or the manufacturing of a product or intermediates used in the production of the product.

Batch process vent means a vent from a CMPU or vents from multiple CMPUs within a process that are manifolded together into a common header, through which a HAP-containing gas stream is, or has the potential to be, released to the atmosphere. Batch process vents include vents with intermittent flow from continuous operations that are not combined with any stream that originated as a continuous gas stream from the same continuous process. Examples of batch process vents include, but are not limited to, vents on condensers used for product recovery, reactors, filters, centrifuges, and process tanks. The following are not batch process vents for the purposes of this subpart:

(1) Continuous process vents;

(2) Bottoms receivers;

(3) Surge control vessels;

(4) Gaseous streams routed to a fuel gas system(s);

(5) A gas stream routed to other processes for reaction or other use in another process (i.e., for chemical value as a product, isolated intermediate, byproduct, or coproduct, or for heat value).

(6) Vents on storage tanks or wastewater systems;

(7) Drums, pails, and totes; and

(8) Emission streams from emission episodes that are undiluted and uncontrolled containing less than 50 ppmv HAP are not part of any batch process vent. The HAP concentration may be determined using any of the following: process knowledge, an engineering assessment, or test data.

Byproduct means a chemical (liquid, gas, or solid) that is produced coincidentally during the production of the product.

Chemical manufacturing process means all equipment which collectively functions to produce a product or isolated intermediate. A process includes, but is not limited to any, all, or a combination of reaction, recovery, separation, purification, or other activity, operation, manufacture, or treatment which are used to produce a product or isolated intermediate. A process is also defined by the following:

(1) Routine cleaning operations conducted as part of batch operations are considered part of the process;

(2) Each nondedicated solvent recovery operation is considered a single process;

(3) Each nondedicated formulation operation is considered a single process;

(4) Quality assurance/quality control laboratories are not considered part of any process;

(5) Ancillary activities are not considered a process or part of any process; and

(6) The end of a process that produces a solid material is either up to and including the dryer or extruder, or for a polymer production process without a dryer or extruder, it is up to and including the die plate or solid-state reactor, except in two cases. If the dryer, extruder, die plate, or solid-state reactor is followed by an operation that is designed and operated to remove HAP solvent or residual monomer from the solid, then the solvent removal operation is the last step in the process. If the dried solid is diluted or mixed with a HAP-based solvent, then the solvent removal operation is the last step in the process.

Continuous process vent means a “process vent” as defined in §63.101 in subpart F of this part, except:

(1) The reference in §63.107(e) to a chemical manufacturing process unit that meets the criteria of §63.100(b) means a CMPU that meets the criteria of §63.11494(a) and (b);

(2) The reference in §63.107(h)(2) to subpart H means §63.11495(a) for the purposes of this subpart;

(3) The reference in §63.107(h)(4) to §63.113 means Tables 2 and 3 to this subpart;

(4) The reference in §63.107(h)(7) to §63.119 means Table 5 to this subpart, and the reference to §63.126 does not apply for the purposes of this subpart;

(5) The second sentence in the definition of “process vent” in §63.101 does not apply for the purposes of this subpart;

(6) The references to an “air oxidation reactor, distillation unit, or reactor” in §63.107 means any continuous operation for the purposes of this subpart;

(7) Section §63.107(h)(8) does not apply for the purposes of this subpart; and

(8) A separate determination is required for the emissions from each CMPU, even if emission streams from two or more CMPU are combined prior to discharge to the atmosphere or to a control device.

Co-Product means a chemical that is produced during the production of another chemical, both for their intended production.

Deviation means any instance in which an affected source subject to this subpart, or an owner or operator of such a source fails to meet any requirement or obligation established by this subpart, including, but not limited to any emissions limitation or management practice; or fails to meet any term or condition that is adopted to implement an applicable requirement in this subpart and that is included in the operating permit for any affected source required to obtain such a permit.

Equipment means each pump, compressor, agitator, pressure relief device, sampling connection system, open-ended valve or line, valve, connector, and instrumentation system in or associated with a CMPU.

Feedstock means any raw material, reactant, solvent, additive, or other material introduced to a CMPU.

In metal HAP service means that a process vessel or piece of equipment either contains or contacts a feedstock, byproduct, or product that contains metal HAP.

In organic HAP service means that a process vessel or piece of equipment either contains or contacts a feedstock, byproduct, or product that contains an organic HAP.

Metal HAP means the compounds containing metals listed as HAP in section 112(b) of the CAA.

Metal HAP process vent means the point of discharge to the atmosphere (or inlet to a control device, if any) of a metal HAP-containing gas stream from any CMPU at an affected source.

Organic HAP means any organic HAP listed in section 112(b) of the CAA. For the purposes of requirements in this subpart VVVVVV, hydrazine is to be considered an organic HAP.

Process vessel means each vessel, except hand-held containers, used in the processing of raw materials to chemical products. Examples include, but are not limited to reactors, distillation units, centrifuges, mixing vessels, and process tanks.

Product means a compound or chemical which is manufactured as the intended product of the CMPU. Products include co-products. By-products, isolated intermediates, impurities, wastes, and trace contaminants are not considered products.

Reactive material means energetics, organic peroxides, and unstable chemicals such as chemicals that react violently with water and chemicals that vigorously polymerize, decompose, or become self-reactive under conditions of pressure or temperature.

Recovery device means an individual unit of equipment capable of and normally used for the purpose of recovering organic chemicals or metal-containing chemicals for fuel value (i.e., net positive heating value), use, reuse, or for sale for fuel value, use, or reuse. Examples of equipment that may be recovery devices include absorbers, carbon adsorbers, condensers, oil-water separators or organic-water separators, or organic removal devices such as decanters, strippers, or thin-film evaporation units.

Resinous material means a viscous, high-boiling point material resembling pitch or tar, such as plastic resin, that sticks to or hardens in the fill pipe under normal transfer conditions.

Shutdown, for a unit operation with a continuous process vent, means the cessation of the unit operation for any purpose. Shutdown begins with the initiation of steps as described in a written standard operating procedures (SOP) or shutdown plan to cease normal/stable operation (e.g., reducing or immediately stopping feed).

Startup, for a unit operation with a continuous process vent, means the setting in operation of the unit for any purpose. The period of startup ends upon completion of the transient, non-equilibrium step at the time operating conditions reach steady state for operating parameters such as temperature, pressure, composition, feed rate, and production rate. Periods of startup described by SOP manuals at the affected source may be used to determine the period of startup.

Storage tank means a tank or other vessel that is used to store liquids that contain organic HAP and that are part of a CMPU subject to this subpart VVVVVV. The following are not considered storage tanks for the purposes of this subpart:

(1) Vessels permanently attached to motor vehicles such as trucks, railcars, barges, or ships;

(2) Pressure vessels designed to operate in excess of 204.9 kilopascals (kPa) and without emissions to the atmosphere;

(3) Process tanks;

(4) Tanks storing organic liquids containing HAP only as impurities;

(5) Surge control vessels;

(6) Bottoms receivers; and

(7) Wastewater storage tanks.

Transfer operations means all product loading into tank trucks and rail cars of liquid containing organic HAP from a transfer rack. Transfer operations do not include the loading to other types of containers such as cans, drums, and totes.

Transfer rack means the system used to load organic liquids into tank trucks and railcars at a single geographic site. It includes all loading arms, pumps, meters, shutoff valves, relief valves, and other piping and equipment necessary for the transfer operation. Transfer equipment that are physically separate (i.e., do not share common piping, valves, and other equipment) are considered to be separate transfer racks.

Wastewater means water that is discarded from a CMPU or control device and that contains at least 5 ppmw of any HAP listed in Table 9 to 40 CFR part 63, subpart G and has an annual average flow rate of 0.02 liters per minute. Wastewater means both process wastewater and maintenance wastewater that is discarded from a CMPU or control device. The following are not considered wastewater for the purposes of this subpart:

(1) Stormwater from segregated sewers;

(2) Water from fire-fighting and deluge systems, including testing of such systems;

(3) Spills;

(4) Water from safety showers;

(5) Samples of a size not greater than reasonably necessary for the method of analysis that is used;

(6) Equipment leaks;

(7) Wastewater drips from procedures such as disconnecting hoses after cleaning lines; and

(8) Noncontact cooling water.

Wastewater stream means a single point discharge of wastewater from a CMPU or control device.

Wastewater treatment means chemical, biological, and mechanical procedures applied to wastewater to remove or reduce HAP or other chemical constituents.

§ 63.11503 Who implements and enforces this subpart?

(a) This subpart can be implemented and enforced by the U.S. EPA or a delegated authority such as a State, local, or tribal agency. If the U.S. EPA Administrator has delegated authority to a State, local, or tribal agency pursuant to 40 CFR part 63, subpart E, then that Agency has the authority to implement and enforce this subpart. You should contact your U.S. EPA Regional Office to find out if this subpart is delegated to a State, local, or tribal agency within your State.

(b) In delegating implementation and enforcement authority of this subpart to a State, local, or tribal agency under 40 CFR part 63, subpart E, the approval authorities contained in paragraphs (b)(1) through (4) of this section are retained by the Administrator of the U.S. EPA and are not transferred to the State, local, or tribal agency.

(1) Approval of an alternative non-opacity emissions standard under §63.6(g).

(2) Approval of a major change to a test method. A “major change to test method” is defined in §63.90.

(3) Approval of a major change to monitoring under §63.8(f). A “major change to monitoring” is defined in §63.90.

(4) Approval of a major change to recordkeeping/reporting under §63.10(f). A “major change to recordkeeping/reporting” is defined in §63.90.

Table 1 to Subpart VVVVVV of Part 63—Hazardous Air Pollutants Used To Determine Applicability of Chemical Manufacturing Operations

As required in §63.11494(a), chemical manufacturing operations that process, use, or produce the HAP shown in the following table are subject to subpart VVVVVV.

Type of HAP	Chemical name	CAS No.
1. Organic compounds	a. 1,3-butadiene	106990
	b. 1,3-dichloropropene	542756
	c. Acetaldehyde	75070
	d. Chloroform	67663
	e. Ethylene dichloride	107062
	f. Hexachlorobenzene	118741
	g. Methylene chloride	75092
	h. Quinoline	91225
2. Metal compounds	a. Arsenic compounds	
	b. Cadmium compounds	
	c. Chromium compounds	
	d. Lead compounds	
	e. Manganese compounds	
	f. Nickel compounds	
3. Others	a. Hydrazine	302012

Table 2 to Subpart VVVVVV of Part 63—Emission Limits and Compliance Requirements for Batch Process Vents

As required in §63.11496, you must comply with the requirements for batch process vents as shown in the following table.

For * * *	You must * * *	Except * * *
1. Batch process vents in a CMPU at an existing source for which the total organic HAP emissions are equal to or greater than 10,000 lb/yr	a. Reduce collective uncontrolled total organic HAP emissions from the sum of all batch process vents by ≥85 percent by weight or to ≤20 ppmv by routing emissions from a sufficient number of the batch process vents through a closed vent system to any combination of control devices (except a flare) in accordance with the requirements of §63.982(c) and the requirements referenced therein; or	i. Compliance may be based on either total organic HAP or total organic carbon (TOC); and ii. As specified in §63.11496(g).
	b. Route emissions from batch process vents containing at least 85 percent of the uncontrolled total organic HAP through a closed-vent system to a flare (except that a flare may not be used to control halogenated vent streams) in accordance with the requirements of §63.982(b) and the requirements referenced therein; or	i. Not applicable.
	c. Comply with the alternative standard specified in §63.2505 and the requirements referenced therein; or	i. As specified in §63.11496(e) of this subpart.
	d. Comply with combinations of the requirements in Items a., b., and c. of this Table for different groups of batch process vents	i. The information specified above for Items a., b., and c., as applicable.
2. Batch process vents in a CMPU at a new source for which the total organic HAP emissions are equal to or greater than 10,000 lb/yr	a. Comply with any of the emission limits in Items 1.a through 1.d of this Table, except 90 percent reduction applies instead of 85 percent reduction in Item 1.a, and 90 percent of the emissions must be routed to a flare instead of 85 percent in Item 1.b	i. The information specified above for Items 1.a., 1.b., 1.c., and 1.d, as applicable.
3. Halogenated batch process vent stream at a new or existing source that is controlled through combustion	a. Comply with the requirements for halogen scrubbers in §63.11496(d).	

Table 3 to Subpart VVVVVV of Part 63—Emission Limits and Compliance Requirements for Continuous Process Vents

As required in §63.11496, you must comply with the requirements for continuous process vents as shown in the following table.

For * * *	You must * * *	Except * * *
1. Each continuous process vent with a TRE ≤1.0	a. Reduce emissions of total organic HAP by ≥95 percent by weight (≥85 percent by weight for periods of startup or shutdown) or to ≤20 ppmv by routing emissions through a closed vent system to any combination of control devices (except a flare) in accordance with the requirements of §63.982(c)(2) and the requirements referenced therein; or	i. Compliance may be based on either total organic HAP or TOC; and ii. As specified in §63.11496(g).
	b. Reduce emissions of total organic by HAP by routing all emissions through a closed-vent system to a flare (except that a flare may not be used to control halogenated vent streams) in accordance with the requirements of §63.982(b) and the requirements referenced therein; or	i. Not applicable.
	c. Comply with the alternative standard specified in §63.2505 and the requirements referenced therein	i. As specified in §63.11496(e).
2. Halogenated vent stream that is controlled through combustion	a. Comply with the requirements for halogen scrubbers in §63.11496(d).	

Table 4 to Subpart VVVVVV of Part 63—Emission Limits and Compliance Requirements for Metal HAP Process Vents

As required in §63.11496(f), you must comply with the requirements for metal HAP process vents as shown in the following table.

For * * *	You must * * *	Except * * *
Each CMPU with total metal HAP emissions ≥400 lb/yr	Reduce collective uncontrolled emissions of total metal HAP emissions by ≥95 percent by weight by routing emissions from a sufficient number of the metal process vents through a closed-vent system to any combination of control devices, according to the requirements of §63.11496(f)(3), (4), or (5)	Not applicable.

Table 5 to Subpart VVVVVV of Part 63—Emission Limits and Compliance Requirements for Storage Tanks

As required in §63.11497, you must comply with the requirements for storage tanks as shown in the following table.

For each * * *	You must * * *	Except * * *
1. Storage tank with a design capacity ≥40,000 gallons, storing liquid that contains organic HAP listed in Table 1 to this subpart, and for which the maximum true vapor pressure (MTVP) of total organic HAP at the storage temperature is ≥5.2 kPa and <76.6 kPa	a. Comply with the requirements of subpart WW of this part;	i. All required seals must be installed by the compliance date in §63.11494.
	b. Reduce total organic HAP emissions by ≥95 percent by weight by operating and maintaining a closed-vent system and control device (other than a flare) in accordance with §63.982(c)(1); or	i. Compliance may be based on either total organic HAP or TOC; ii. Comply with the management practice inspection requirements in §63.11495 for the closed-vent system; iii. When the term storage vessel is used in subpart SS of this part, the term storage tank, surge control vessel, or bottoms receiver, as defined in §63.11502 of this subpart, applies; and iv. The requirements do not apply during periods of planned routine maintenance of the control device, as specified in §63.11497(b).
	c. Reduce total HAP emissions by operating and maintaining a closed-vent system and a flare in accordance with §63.982(b); or	i. The requirements do not apply during periods of planned routine maintenance of the flare, as specified in §63.11497(b); and ii. When the term storage vessel is used in subpart SS of this part, it means storage tank, surge control vessel, or bottoms receiver, as defined

		in §63.11502 of this subpart.
	d. Vapor balance in accordance with §63.2470(e); or	i. Not applicable.
	e. Route emissions to a fuel gas system or process in accordance with the requirements in §63.982(d) and the requirements referenced therein	i. When the term storage vessel is used in subpart SS of this part, it means storage tank, surge control vessel, or bottoms receiver, as defined in §63.11502.
2. Storage tank with a design capacity ≥20,000 gallons and <40,000 gallons, storing liquid that contains organic HAP listed in Table 1 to this subpart, and for which the MTVP of total organic HAP at the storage temperature is ≥27.6 kPa and <76.6 kPa	a. Comply with one of the options in Item 1 of this table	i. The information specified above for Items 1.a., 1.b., 1.c., 1.d, and 1.e, as applicable.
3. Storage tank with a design capacity ≥20,000 gallons, storing liquid that contains organic HAP listed in Table 1 to this subpart, and for which the MTVP of total organic HAP at the storage temperature is ≥76.6 kPa	a. Comply with option b, c, d, or e in Item 1 of this table	i. The information specified above for Items 1.b., 1.c., 1.d, and 1.e, as applicable.
4. Storage tank described by Item 1, 2, or 3 in this table and emitting a halogenated vent stream that is controlled with a combustion device	a. Reduce emissions of hydrogen halide and halogen HAP by ≥95 percent by weight, or to ≤0.45 kg/hr, or to ≤20 ppmv by using a halogen reduction device after the combustion device according to the requirements in §63.11496(d); or	
	b. Reduce the halogen atom mass emission rate to ≤0.45 kg/hr or to ≤20 ppmv by using a halogen reduction device before the combustion device according to the requirements in §63.11496(d).	

Table 6 to Subpart VVVVVV of Part 63—Emission Limits and Compliance Requirements for Wastewater Systems

As required in §63.11498, you must comply with the requirements for wastewater systems as shown in the following table.

For each * * *	You must * * *	And you must * * *
1. Wastewater stream	a. Discharge to onsite or offsite treatment	i. Maintain records identifying each wastewater stream and documenting the type of treatment that it receives. Multiple wastewater streams with similar characteristics and from the same type of activity in a CMPU may be grouped together for recordkeeping purposes.
2. Wastewater stream containing partially soluble HAP at a concentration ≥10,000 ppmw and separate organic and water phases	a. Use a decanter, steam stripper, thin film evaporator, or distillation unit to separate the water phase from the organic phase(s); or	i. For the water phase, comply with the requirements in Item 1 of this table, and ii. For the organic phase(s), recycle to a process, use as fuel, or dispose as hazardous waste either onsite or offsite, and iii. Keep records of the wastewater streams subject to this requirement and the disposition of the organic phase(s).
	b. Hard pipe the entire wastewater stream to onsite treatment as a hazardous waste, or hard pipe the entire wastewater stream to a point of transfer for offsite treatment as a hazardous waste	i. Keep records of the wastewater streams subject to this requirement and the disposition of the wastewater streams.

Table 7 to Subpart VVVVVV of Part 63—Partially Soluble HAP

As required in §63.11498(a), you must comply with emission limits for wastewater streams that contain the partially soluble HAP listed in the following table.

Partially soluble HAP name	CAS No.
1. 1,1,1-Trichloroethane (methyl chloroform)	71556
2. 1,1,2,2-Tetrachloroethane	79345
3. 1,1,2-Trichloroethane	79005
4. 1,1-Dichloroethylene (vinylidene chloride)	75354
5. 1,2-Dibromoethane	106934
6. 1,2-Dichloroethane (ethylene dichloride)	107062
7. 1,2-Dichloropropane	78875
8. 1,3-Dichloropropene	542756
9. 2,4,5-Trichlorophenol	95954
10. 1,4-Dichlorobenzene	106467
11. 2-Nitropropane	79469
12. 4-Methyl-2-pentanone (MIBK)	108101
13. Acetaldehyde	75070
14. Acrolein	107028
15. Acrylonitrile	107131
16. Allyl chloride	107051
17. Benzene	71432
18. Benzyl chloride	100447
19. Biphenyl	92524
20. Bromoform (tribromomethane)	75252
21. Bromomethane	74839
22. Butadiene	106990
23. Carbon disulfide	75150
24. Chlorobenzene	108907
25. Chloroethane (ethyl chloride)	75003
26. Chloroform	67663

27. Chloromethane	74873
28. Chloroprene	126998
29. Cumene	98828
30. Dichloroethyl ether	111444
31. Dinitrophenol	51285
32. Epichlorohydrin	106898
33. Ethyl acrylate	140885
34. Ethylbenzene	100414
35. Ethylene oxide	75218
36. Ethylidene dichloride	75343
37. Hexachlorobenzene	118741
38. Hexachlorobutadiene	87683
39. Hexachloroethane	67721
40. Methyl methacrylate	80626
41. Methyl-t-butyl ether	1634044
42. Methylene chloride	75092
43. N-hexane	110543
44. N,N-dimethylaniline	121697
45. Naphthalene	91203
46. Phosgene	75445
47. Propionaldehyde	123386
48. Propylene oxide	75569
49. Styrene	100425
50. Tetrachloroethylene (per- chloroethylene)	127184
51. Tetrachloromethane (carbon tetrachloride)	56235
52. Toluene	108883
53. Trichlorobenzene (1,2,4-)	120821
54. Trichloroethylene	79016
55. Trimethylpentane	540841
56. Vinyl acetate	108054

57. Vinyl chloride	75014
58. Xylene (m)	108383
59. Xylene (o)	95476
60. Xylene (p)	106423

Table 8 to Subpart VVVVVV of Part 63—Emission Limits and Compliance Requirements for Heat Exchange Systems

As required in §63.11499, you must comply with the requirements for heat exchange systems as shown in the following table.

For * * *	You must * * *	Except * * *
1. Each heat exchange system with a cooling water flow rate ≥8,000 gal/min and not meeting one or more of the conditions in §63.104(a)	a. Comply with the monitoring requirements in §63.104(c), the leak repair requirements in §63.104(d) and (e), and the recordkeeping and reporting requirements in §63.104(f); or	i. The reference to monthly monitoring for the first 6 months in §63.104(c)(1)(iii) does not apply. Monitoring shall be no less frequent than quarterly; ii. The reference in §63.104(f)(1) to record retention requirements in §63.103(c)(1) does not apply. Records must be retained as specified in §§63.10(b)(1) and 63.11501(c); and iii. The reference in §63.104(f)(2) to “the next semi-annual periodic report required by §63.152(c)” means the next semi-annual compliance report required by §63.11501(f).
	b. Comply with the heat exchange system requirements in §63.104(b) and the requirements referenced therein	i. Not applicable.

Table 9 to Subpart VVVVVV of Part 63—Applicability of General Provisions to Subpart VVVVVV

As required in §63.11501(a), you must comply with the requirements of the NESHAP General Provisions (40 CFR part 63, subpart A) as shown in the following table.

Citation	Subject	Applies to Subpart VVVVVV?	Explanation
63.1(a)(1), (a)(2), (a)(3), (a)(4), (a)(6), (a)(10)–(a)(12) (b)(1), (b)(3), (c)(1), (c)(2), (c)(5), (e)	Applicability	Yes	
63.1(a)(5), (a)(7)-(a)(9), (b)(2), (c)(3), (c)(4), (d)	Reserved	No	
63.2	Definitions	Yes	
63.3	Units and Abbreviations	Yes	
63.4	Prohibited Activities and Circumvention	Yes	
63.5	Preconstruction Review and Notification Requirements	Yes	
63.6(a), (b)(1)–(b)(5), (b)(7), (c)(1), (c)(2), (c)(5), (e)(1)(iii), (g), (i), (j)	Compliance with Standards and Maintenance Requirements	Yes	
63.6(b)(6), (c)(3), (c)(4), (d), (h)(3), (h)(5)(iv)	Reserved	No	
63.6 (e)(1)(i) and (ii), (e)(3), and (f)(1)	SSM Requirements	No	
63.6(h)(1)–(h)(4), (h)(5)(i)–(h)(5)(iii), (h)(6)–(h)(9)		No	Subpart VVVVVV does not include opacity or visible emissions (VE) standards or require a continuous opacity monitoring system (COMS).
63.7(a)(1), (a)(3), (a)(4), (c), (e)(4), and (f)–(h)	Performance Testing Requirements	Yes	

63.7(a)(2), (b), (d), (e)(1)–(3)	Performance Testing Schedule, Notification of Performance Test, Performance Testing Facilities, and Conduct of Performance Tests	Yes/No	Requirements apply if conducting test for metal HAP control; requirements in §§63.997(c)(1), (d), (e), and 63.999(a)(1) apply, as referenced in §63.11496(g), if conducting test for organic HAP or hydrogen halide and halogen HAP control device.
63.8(a)(1), (a)(4), (b), (c)(1)–(c)(3), (f)(1)–(5)	Monitoring Requirements	Yes	References to SSM in §63.8(c) do not apply.
63.8(a)(2)	Monitoring Requirements	No	
63.8(a)(3)	Reserved	No	
63.8(c)(4)		No	Continuous parameter monitoring system (CPMS) requirements in 40 CFR part 63, subparts SS and FFFF are referenced from §63.11496.
63.8(c)(5)		No	Subpart VVVVVV does not require COMS.
63.8(c)(6)–(c)(8), (d), (e), (f)(6)		Yes	Requirements apply only if you use a continuous emission monitoring system (CEMS) to demonstrate compliance with the alternative standard in §63.11496(e). References to SSM in §63.8(d) do not apply.
63.8(g)(1)–(g)(4)		Yes	Data reduction requirements apply only if you use CEMS to demonstrate compliance with alternative standard in §63.11496(e). COMS requirements do not apply. Requirement in §63.8(g)(2) does not apply because data reduction for CEMS are specified in 40 CFR part 63, subpart FFFF.
63.8(g)(5)		No	Data reduction requirements for CEMS are specified in 40 CFR part 63, subpart FFFF, as referenced from §63.11496. CPMS requirements are specified in 40

			CFR part 63, subparts SS and FFFF, as referenced from §63.11496.
63.9(a), (b)(1), (b)(2), (b)(4), (b)(5), (c), (d), (e), (i)	Notification Requirements	Yes	
63.9(b)(3), (h)(4)	Reserved	No	
63.9(f)		No	Subpart VVVVVV does not contain opacity or VE limits.
63.9(g)		Yes	Additional notification requirement applies only if you use CEMS to demonstrate compliance with alternative standard in §63.11496(e).
63.9(h)(1)–(h)(3), (h)(5)–(h)(6)		Yes	Except subpart VVVVVV does not contain opacity or VE limits.
63.9(j)	Change in Information Already Provided	No	Notification of process changes that affect a compliance determination are required in §63.11501(d)(4).
63.10(a)	Recordkeeping Requirements	Yes	
63.10(b)(1)		Yes	
63.10(b)(2)(i)–(b)(2)(v)		Yes	Any references to SSM do not apply.
63.10(b)(2)(vi), (x), (xi), (xiii)		Yes	Apply only if you use CEMS to demonstrate compliance with alternative standard in §63.11496(e).
63.10(b)(2)(vii)–(b)(2)(ix), (b)(2)(xii), (b)(2)(xiv)		Yes	
63.10(b)(3)		Yes	
63.10(c)(1), (c)(5)–(c)(6), (c)(13)–(c)(14)		Yes	Apply only if you use CEMS to demonstrate compliance with alternative standard in §63.11496(e).
63.10(c)(7)–(c)(8),(c)(10)–(c)(12),(c)(15)		Yes	Any reference to SSM does not apply.

63.10(c)(2)–(c)(4), (c)(9)	Reserved	No	
63.10(d)(1), (d)(2), (d)(4), (e)(1), (e)(2), (f)	Reporting Requirements	Yes	
63.10(d)(3)		No	Subpart VVVVVV does not include opacity or VE limits.
63.10(d)(5)		No	
63.10(e)(1)–(e)(2)		Yes	Apply only if you use CEMS to demonstrate compliance with alternative standard in §63.11496(e).
63.10(e)(3)		Yes	
63.10(e)(4)		No	Subpart VVVVVV does not include opacity or VE limits.
63.11	Control Device Requirements	Yes	
63.12	State Authorities and Delegations	Yes	
63.13	Addresses	Yes	
63.14	Incorporations by Reference	Yes	
63.15	Availability of Information and Confidentiality	Yes	
63.16	Performance Track Provisions	Yes	

Appendix A: Emission Calculations
Summary of Limited Emissions

Company Name: Hammond Group, Inc.
Address City IN Zip: 2803 165th Street, Hammond, Indiana 46320
Permit Number: 089-32182-00219
Reviewer: Brian Williams

Limited Potential to Emit (tons/yr)										
Process	**PM**	**PM10**	**PM2.5**	**SO2***	**NOx***	**VOC***	**CO***	**GHGs as CO_2e****	**Total HAPs**	**Single HAP/Pb**
Stack ID 1-S-52	4.38	4.38	4.38	negl.	3.17	0.17	0.63	4,456.72	0.31	0.31
Stack ID 4A-S-8	1.1	1.1	1.1	negl.	0.73	negl.	0.15	709.21	0.23	0.23
Stack ID14-S-16	1.1	1.1	1.1	negl.	0.47	negl.	negl.	678.62	0.23	0.23
Stack ID 1-S-2	1.1	1.1	1.1	negl.	0.72	negl.	0.14	1,029.24	0.23	0.23
Stack ID 1-S-26	1.1	1.1	1.1	negl.	1.13	negl.	0.23	1,626.48	0.23	0.23
Stack ID 16-S-56	4.38	4.38	4.38	negl.	7.47	0.57	4.42	7,343.01	0.98	0.88
Stack ID 4-S-35	2.5	2.5	2.5	negl.	1.05	negl.	0.21	1,503.48	0.39	0.39
Stack ID 1-S-27	1.27	1.27	1.27	-	-	-	-	-	0.09	0.09
Stack ID 6-S-33	3.94	3.94	3.94	negl.	1.69	negl.	0.34	2,355.88	0.31	0.31
Stack ID 4B-S-34	1.75	1.75	1.75	negl.	1.31	negl.	0.26	1,835.8	0.35	0.35
Stack ID 6-S-47	1.75	1.75	1.75	negl.	2.19	0.12	0.44	917.9	0.09	0.09
Stack ID 14-S-15	1.4	1.4	1.4	-	-	-	-	-	-	-
Stack ID 20-S-37	0.88	0.88	0.88	-	-	-	-	-	-	-
Stack ID 20-S-42	0.88	0.88	0.88	-	-	-	-	-	-	-
Stack ID 20-S-39	2.17	2.17	2.17	-	-	-	-	-	-	-
Stack ID 20-S-44	2.17	2.17	2.17	-	-	-	-	-	-	-
Stack ID 13-S-48	2.06	2.06	2.06	-	-	-	-	-	-	-
Stack ID 14-S-45	2.06	2.06	2.06	-	-	-	-	-	-	-
Stack ID 20-S-36	1.73	1.73	1.73	negl.	0.88	negl.	0.18	1,057.6	-	-
Stack ID 20-S-41	1.97	1.97	1.97	negl.	0.88	negl.	0.18	1,057.6	-	-
Stack ID 18-S-49	0.56	0.56	0.56	negl.	3.68	0.20	3.09	4,441.9	-	-
Stack ID 18-S-24	0.56	0.56	0.56	negl.	3.68	0.20	3.09	4,441.9	-	-
Stack ID 17-S-25	9.29	9.29	9.29	-	-	-	-	-	-	-
Stack ID 17-S-40	9.29	9.29	9.29	-	-	-	-	-	-	-
Stack ID 20-S-38	0.38	0.38	0.38	-	-	-	-	-	-	-
Stack ID 20-S-43	0.38	0.38	0.38	-	-	-	-	-	-	-
Stack ID V-1	4.38	4.38	4.38	-	-	-	-	3,402.3	0.39	0.39
Total	**64.51**	**64.51**	**64.51**	**negl.**	**29.03**	**1.26**	**13.34**	**36,857.54**	**3.83**	**3.73**

* Unlimited Potential to Emit
** Unlimited Potential to Emit GHGs as CO2e = Worst Case Emissions from Natural Gas or Propane Combustion from each stack
*** See page 4 for the unlimited potential to emit of the No. 1 Calcining Furnace (Unit ID: 52-2)

Appendix A: Emission Calculations
Process Emissions
Unit ID: 52-2 (No. 1 Calcining Furnace)

Company Name: **Hammond Group, Inc.**
Address City IN Zip: **2803 165th Street, Hammond, Indiana 46320**
Permit Number: **089-32182-00219**
Reviewer: **Brian Williams**

Stack ID 1-S-52

STACK ID (DIAM:HEIGHT): (3: 82)
FLOWRATE (ACFM): 22551
Ts(°F): 167

Unit ID: 52-2 (No. 1 Calcining Furnace)
(Group #3, Process #1, Stack #1, Abatement #1 & 66)
CNTRL DEV: Main Control System (52-1 thru 4-F & H)

Maximum Capacity (tons/hr) 1.05

			Potential Emissions				
SCC NO. 3-01-035-07			Before Controls		After Controls		
POLLUTANT	EF(LB/T)	CE (%)	(lbs/hr)	**(TPY)**	(lbs/hr)	(TPY)	(gr/dscf)
PM	0.034	99.99%	0.04	**0.16**	3.57E-06	1.56E-05	2.18E-08
PM10	0.034	99.99%	0.04	**0.16**	3.57E-06	1.56E-05	2.18E-08
PM2.5	0.034	99.99%	0.04	**0.16**	3.57E-06	1.56E-05	2.18E-08
SOx	0	0.00%	0.00	**0.00**	0	0	N/A
NOx	0	0.00%	0.00	**0.00**	0	0	N/A
VOC	0	0.00%	0.00	**0.00**	0	0	N/A
CO	0	0.00%	0.00	**0.00**	0	0	N/A
Lead (Pb)	0.032	99.99%	0.03	**0.15**	3.36E-06	1.47E-05	N/A

Emission Factor from stack test results (11/17/99): 0.00421 lbs/ton
Potential fugitives captured by building ventilation system (V-1).

Methodology
Before Control Emissions (lbs/hr) = Max. Capacity (tons/hr) x EF (LB/T)
Before Control Emissions (TPY) = Before Control Emissions (lbs/hr) x 8,760 (hrs/yr) x 1/2,000 (ton/lbs)
After Control Emissions (lbs/hr) = Before Control Emissions (lbs/hr) x (1 - CE%)
After Control Emissions (TPY) = After Control Emissions (lbs/hr) x 8,760 (hrs/yr) x 1/2,000 (ton/lbs)
After Control Emissions (gr/dscf) = After Control Emissions (lbs/hr) x 7,000 (gr/lb) x 1/60 (hr/min) x (530/(460 + Ts(°F))) x 1/Flowrate (ACFM)

Appendix A: Emission Calculations
Unit ID: 52-2 (No. 1 Calcining Furnace)
Continued

Unit ID: 52-2 (No. 1 Calcining Furnace)
Natural Gas Combustion

Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr
0.825	7.23

	Pollutant						
	PM*	PM10*	direct PM2.5*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	7.6	0.6	100 **see below	5.5	84
Potential Emission in tons/yr	0.01	0.03	0.03	0.002	0.36	0.02	0.30

*PM emission factor is filterable PM only. PM10 and PM2.5 emission factors are filterable and condensable PM10 and PM2.5 combined, respectively.
**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

	HAPs - Organics				
	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene
Emission Factor in lb/MMcf	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03
Potential Emission in tons/yr	7.59E-06	4.34E-06	2.71E-04	6.50E-03	1.23E-05

	HAPs - Metals				
	Lead	Cadmium	Chromium	Manganese	Nickel
Emission Factor in lb/MMcf	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03
Potential Emission in tons/yr	1.81E-06	3.97E-06	5.06E-06	1.37E-06	7.59E-06

Methodology
All emission factors are based on normal firing.
MMBtu = 1,000,000 Btu
Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03
Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton
The five highest organic and metal HAPs emission factors are provided above. Additional HAPs emission factors are available in AP-42, Chapter 1.4.
See page 6 for greenhouse gas emission calculations

Unit ID: 52-2 (No. 1 Calcining Furnace)
Propane Combustion (Alternative Scenario)

Heat Input Capacity MMBtu/hr	Potential Throughput kgals/year	SO2 Emission factor = 0.10 x S S = Sulfur Content = 1.00 grains/100ft^3
0.83	78.98	

	Pollutant						
	PM*	PM10*	direct PM2.5**	SO2	NOx	VOC	CO
Emission Factor in lb/kgal	0.2	0.7	0.7	0.1 *(0.10S)*	13.0	1.0 **TOC value	7.5
Potential Emission in tons/yr	0.01	0.03	0.03	0.004	0.51	0.04	0.30

*PM emission factor is filterable PM only. PM emissions are stated to be all less than 10 microns in aerodynamic equivalent diameter, footnote in Table 1.5-1, therefore PM10 is based on the filterable and condensable PM emission factors.
** No direct PM2.5 emission factor was given. Direct PM2.5 is a subset of PM10. If one assumes all PM10 to be all direct PM2.5, then a worst case assumption of direct PM2.5 can be made.
**The VOC value given is TOC. The methane emission factor is 0.2 lb/kgal.

Methodology
1 gallon of propane has a heating value of 91,500 Btu (Source - AP-42 (Supplement B 10/96) page 1.5-1).
Potential Throughput (kgals/year) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1kgal per 1000 gallon x 1 gal per 0.0915 MMBtu
Emission Factors are from AP42 (7/08), Table 1.5-1 (SCC #1-02-010-02)
Emission (tons/yr) = Throughput (kgals/yr) x Emission Factor (lb/kgal) / 2,000 lb/ton
See page 7 for greenhouse gas emission calculations

Appendix A: Emission Calculations
Unit ID: 52-2 (No. 1 Calcining Furnace)
Summary of Emissions

Total: Unit ID: 52-2 (No. 1 Calcining Furnace)

	Potential Emissions				
	Before Controls		After Controls		
POLLUTANT	(lbs/hr)	**(TPY)**	(lbs/hr)	(TPY)	(gr/dscf)
PM	0.038	**0.16**	0.002	0.01	0.0000
PM10	0.042	**0.18**	0.006	0.03	0.0000
PM2.5	0.042	**0.18**	0.006	0.03	0.0000
SOx	0.001	**0.004**	0.001	0.00	N/A
NOx	0.117	**0.51**	0.117	0.51	N/A
VOC	0.009	**0.04**	0.009	0.04	N/A
CO	0.069	**0.30**	0.069	0.30	N/A
GHGs as CO2e	115.26	**504.83**	115.26	504.83	N/A
Total HAPs	0.035	**0.15**	0.002	0.01	N/A
Lead (PB)	0.034	**0.15**	3.36E-06	1.47E-05	N/A

Methodology
Before Control Emissions (lbs/hr) = Process Emissions (lbs/hr) + (Worst Case Pollutant Fuel Combustion (tons/yr) / 8,760 / 2,000)
Before Control Emissions (TPY) = Before Control Emissions (lbs/hr) x 8,760 (hrs/yr) x 1/2,000 (ton/lbs)
After Control Emissions (lbs/hr) = Process Emissions After Control (lbs/hr) + (Worst Case Pollutant Fuel Combustion (tons/yr) / 8,760 / 2,000)
After Control Emissions (TPY) = After Control Emissions (lbs/hr) x 8,760 (hrs/yr) x 1/2,000 (ton/lbs)
After Control Emissions (gr/dscf) = After Control Emissions (lbs/hr) x 7,000 (gr/lb) x 1/60 (hr/min) x (530/(460 + Ts(°F))) x 1/Flowrate (ACFM)

Appendix A: Emission Calculations
Combustion Emissions for Natural Gas < 100 MMBtu

Company Name: Hammond Group, Inc.
Address City IN Zip: 2803 165th Street, Hammond, Indiana 46320
Permit Number: 089-32182-00219
Reviewer: Brian Williams

1. Process Description

Emission Unit ID	Heat Input Capacity (MMBtu/hr)	Maximum Potential Throughput of Natural Gas (MMCF/yr)	Maximum Potential Throughput of Propane (kgals/yr)
No. 1 Barton System	1.67	14.6	159.7
Furnace #1	0.83	7.2	79.0
Furnace #2	0.51	4.5	48.8
Furnace #3	0.37	3.2	35.3
Furnace #4	0.47	4.1	44.8
Furnace #5	0.47	4.1	44.8
Furnace #6	0.47	4.1	44.8
Furnace #7	0.47	4.1	44.8
Furnace #8	0.79	6.9	75.8
Furnace #9	0.78	6.8	74.6
Furnace #10	0.47	4.1	44.8
No. 2 Barton System	1.16	10.2	111.0
No. 3 Barton System	1.11	9.7	106.2
No. 4 Barton System	1.68	14.7	161.0
No. 5 Barton System	1.51	13.2	144.3
No. 6 Barton System	1.15	10.1	110.2
400Y Furnace	5.00	43.8	478.7
Flash Calciner	1.50	13.1	143.6
Non-lead Glass Furnace	2.50	21.9	239.3
XS Furnace System	2.50	21.9	239.3
Glass Additives Mixer	0.50	4.4	47.9
B-Furnace Drying	2.46	21.5	235.2
B-Furnace	3.85	33.7	368.6
Glass Frit Spray Dryers	3.00	26.3	287.2
S-Furnace	1.50	13.1	143.6
Boiler #1	8.40	73.6	N/A
Boiler #2	8.40	73.6	N/A
#1 Drum Flash Dryer	2.00	17.5	N/A
#2 Drum Flash Dryer	2.00	17.5	N/A
Miscellaneous Furnaces and Heaters	5.56	48.7	532.3
Total	**63.06**	**552.4**	**4,045.70**

Methodology
Maximum Potential Throughput (MMCF/yr) = Heat Input Capacity (MMBtu/hr) x 8,760 (hrs/yr) x 1 MMCF/1,000 MMBtu
Maximum Potential Throughput (kgals/year) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1kgal per 1000 gallon x 1 gal per 0.0915 MMBtu

Appendix A: Emission Calculations
Natural Gas Combustion < 100 MMBtu/hr

Company Name: Hammond Group, Inc.
Address City IN Zip: 2803 165th Street, Hammond, Indiana 46320
Permit Number: 089-32182-00219
Reviewer: Brian Williams

2. Combustion Emissions - Greenhouse Gas Emissions

Emission Factor (lbs/MMCF)		
CO2	CH4	N20
120,000	2.3	2.2

		Potential To Emit (tons/yr)			
Emission Unit ID	Stack ID	CO2	CH4	N20	CO2e
No. 1 Barton System	1-S-52	876.81	0.017	0.016	882.15
Furnace #1		433.62	0.008	0.008	436.26
Furnace #2		268.06	0.005	0.005	269.69
Furnace #3		193.95	0.004	0.004	195.13
Furnace #4		245.98	0.005	0.005	247.48
Furnace #5		245.98	0.005	0.005	247.48
Furnace #6		245.98	0.005	0.005	247.48
Furnace #7		245.98	0.005	0.005	247.48
Furnace #8		416.28	0.008	0.008	418.81
Furnace #9		409.44	0.008	0.008	411.93
Furnace #10		245.98	0.005	0.005	247.48
No. 2 Barton System	4A-S-8	609.17	0.012	0.011	612.88
No. 3 Barton System	14-S-16	582.89	0.011	0.011	586.44
No. 4 Barton System	1-S-2	884.06	0.017	0.016	889.44
No. 5 Barton System	1-S-26	792.08	0.015	0.015	796.90
No. 6 Barton System		604.97	0.012	0.011	608.65
400Y Furnace	16-S-56	2,628.00	0.050	0.048	2,643.99
Flash Calciner		788.40	0.015	0.014	793.20
Non-lead Glass Furnace		1,314.00	0.025	0.024	1,322.00
XS Furnace System		1,314.00	0.025	0.024	1,322.00
Glass Additives Mixer		262.80	0.005	0.005	264.40
B-Furnace Drying	4-S-35	1,291.40	0.025	0.024	1,299.26
B-Furnace	6-S-33	2,023.56	0.039	0.037	2,035.88
Glass Frit Spray Dryers	4B-S-34	1,576.80	0.030	0.029	1,586.40
S-Furnace	6-S-47	788.40	0.015	0.014	793.20
Boiler #1	18-S-49	4,415.04	0.085	0.081	4,441.91
Boiler #2	18-S-24	4,415.04	0.085	0.081	4,441.91
#1 Drum Flash Dryer	20-S-36	1,051.20	0.020	0.019	1,057.60
#2 Drum Flash Dryer	20-S-41	1,051.20	0.020	0.019	1,057.60
Miscellaneous Furnaces and Heaters	V-1	2,922.34	0.056	0.054	2,940.12
Total		**33,143.40**	**0.64**	**0.61**	**33,345.10**

Methodology
The N2O Emission Factor for uncontrolled is 2.2. The N2O Emission Factor for low Nox burner is 0.64.
Emission Factors are from AP 42, Table 1.4-2 SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03.
Global Warming Potentials (GWP) from Table A-1 of 40 CFR Part 98 Subpart A.
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton
CO2e (tons/yr) = CO2 Potential Emission ton/yr x CO2 GWP (1) + CH4 Potential Emission ton/yr x CH4 GWP (21) + N2O Potential Emission ton/yr x N2O GWP (310).

Appendix A: Emission Calculations
Propane Combustion < 100 MMBtu/hr

Company Name: Hammond Group, Inc.
Address City IN Zip: 2803 165th Street, Hammond, Indiana 46320
Permit Number: 089-32182-00219
Reviewer: Brian Williams

3. Combustion Emissions - Greenhouse Gas Emissions

Emission Factor (lbs/kgal)		
CO2	CH4	N20
12,500	0.2	0.9

		Potential To Emit (tons/yr)			
Emission Unit ID	**Stack ID**	**CO2**	**CH4**	**N20**	**CO2e**
No. 1 Barton System	1-S-52	998.19	0.016	0.072	1,020.81
Furnace #1		493.65	0.008	0.036	504.83
Furnace #2		305.16	0.005	0.022	312.08
Furnace #3		220.80	0.004	0.016	225.80
Furnace #4		280.03	0.004	0.020	286.38
Furnace #5		280.03	0.004	0.020	286.38
Furnace #6		280.03	0.004	0.020	286.38
Furnace #7		280.03	0.004	0.020	286.38
Furnace #8		473.90	0.008	0.034	484.64
Furnace #9		466.12	0.007	0.034	476.68
Furnace #10		280.03	0.004	0.020	286.38
No. 2 Barton System	4A-S-8	693.50	0.011	0.050	709.21
No. 3 Barton System	14-S-16	663.58	0.011	0.048	678.62
No. 4 Barton System	1-S-2	1,006.44	0.016	0.072	1,029.24
No. 5 Barton System	1-S-26	901.73	0.014	0.065	922.16
No. 6 Barton System		688.71	0.011	0.050	704.32
400Y Furnace	16-S-56	2,991.80	0.048	0.215	3,059.59
Flash Calciner		897.54	0.014	0.065	917.88
Non-lead Glass Furnace		1,495.90	0.024	0.108	1,529.79
XS Furnace System		1,495.90	0.024	0.108	1,529.79
Glass Additives Mixer		299.18	0.005	0.022	305.96
B-Furnace Drying	4-S-35	1,470.17	0.024	0.106	1,503.48
B-Furnace	6-S-33	2,303.69	0.037	0.166	2,355.88
Glass Frit Spray Dryers		1,795.08	0.029	0.129	1,835.75
S-Furnace	6-S-47	897.54	0.014	0.065	917.88
Miscellaneous Furnaces and Heaters	V-1	3,326.89	0.053	0.240	3,402.26
Total		**25,285.65**	**0.40**	**1.82**	**25,858.52**

Methodology
Emission Factors are from AP 42 (7/08),
Global Warming Potentials (GWP) from Table A-1 of 40 CFR Part 98 Subpart A.
Emission (tons/yr) = Throughput (kgals/ yr) x Emission Factor (lb/kgal)/2,000 lb/ton
CO2e (tons/yr) = CO2 Potential Emission ton/yr x CO2 GWP (1) + CH4 Potential Emission ton/yr x CH4 GWP (21) + N2O Potential Emission ton/yr x N2O GWP (310).

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

Mitchell E. Daniels Jr.
Governor

Thomas W. Easterly
Commissioner

100 North Senate Avenue
Indianapolis, Indiana 46204
(317) 232-8603
Toll Free (800) 451-6027
www.idem.IN.gov

SENT VIA U.S. MAIL: CONFIRMED DELIVERY AND SIGNATURE REQUESTED

TO: Jean Ziga
Hammond Group, Inc.
2323 165th St
Hammond, IN 46320

DATE: September 20, 2012

FROM: Matt Stuckey, Branch Chief
Permits Branch
Office of Air Quality

SUBJECT: Final Decision
FESOP
089-32182-00219

Enclosed is the final decision and supporting materials for the air permit application referenced above. Please note that this packet contains the original, signed, permit documents.

The final decision is being sent to you because our records indicate that you are the contact person for this application. However, if you are not the appropriate person within your company to receive this document, please forward it to the correct person.

A copy of the final decision and supporting materials has also been sent via standard mail to:
OAQ Permits Branch Interested Parties List

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178, or toll-free at 1-800-451-6027 (ext. 3-0178), and ask to speak to the permit reviewer who prepared the permit. If you think you have received this document in error, please contact Joanne Smiddie-Brush of my staff at 1-800-451-6027 (ext 3-0185), or via e-mail at jbrush@idem.IN.gov.

Final Applicant Cover letter.dot 11/30/07

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
We Protect Hoosiers and Our Environment.

Mitchell E. Daniels Jr.
Governor

Thomas W. Easterly
Commissioner

100 North Senate Avenue
Indianapolis, Indiana 46204
(317) 232-8603
Toll Free (800) 451-6027
www.idem.IN.gov

TO: Interested Parties / Applicant

DATE: September 20, 2012

RE: Hammond Group Inc / 089-32182-00219

FROM: Matthew Stuckey, Branch Chief
Permits Branch
Office of Air Quality

In order to conserve paper and reduce postage costs, IDEM's Office of Air Quality is now sending many permit decisions on CDs in Adobe PDF format. The enclosed CD contains information regarding the company named above.

This permit is also available on the IDEM website at:
http://www.in.gov/ai/appfiles/idem-caats/

If you would like to request a paper copy of the permit document, please contact IDEM's central file room at:

Indiana Government Center North, Room 1201
100 North Senate Avenue, MC 50-07
Indianapolis, IN 46204
Phone: 1-800-451-6027 (ext. 4-0965)
Fax (317) 232-8659

Please Note: *If you feel you have received this information in error, or would like to be removed from the Air Permits mailing list, please contact Patricia Pear with the Air Permits Administration Section at 1-800-451-6027, ext. 3-6875 or via e-mail at PPEAR@IDEM.IN.GOV.*

Enclosures
CD Memo.dot 11/14/08

Mail Code 61-53

IDEM Staff	CDENNY 9/20/2012 Hammond Group, Inc. 089-32182-00219 (final)			AFFIX STAMP HERE IF USED AS CERTIFICATE OF MAILING
Name and address of Sender	▶	Indiana Department of Environmental Management Office of Air Quality – Permits Branch 100 N. Senate Indianapolis, IN 46204	Type of Mail: **CERTIFICATE OF MAILING ONLY**	

Line	Article Number	Name, Address, Street and Post Office Address	Postage	Handing Charges	Act. Value (If Registered)	Insured Value	Due Send if COD	R.R. Fee	S.D. Fee	S.H. Fee	Rest. Del. Fee Remarks
1		Jean Ziga Hammond Group, Inc. 2323 165th St Hammond IN 46320 (Source CAATS)									
2		East Chicago City Council 4525 Indianapolis Blvd East Chicago IN 46312 *(Local Official)*									
3		Gary - Hobart Water Corp 650 Madison St, P.O. Box M486 Gary IN 46401-0486 *(Affected Party)*									
4		Lake County Health Department-Gary 1145 W. 5th Ave Gary IN 46402-1795 *(Health Department)*									
5		WJOB / WZVN Radio 6405 Olcott Ave Hammond IN 46320 *(Affected Party)*									
6		Hammond City Council and Mayors Office 5925 Calumet Avenue Hammond IN 46320 *(Local Official)*									
7		Shawn Sobocinski 3229 E. Atlanta Court Portage IN 46368 *(Affected Party)*									
8		Ms. Carolyn Marsh Lake Michigan Calumet Advisory Council 1804 Oliver St Whiting IN 46394-1725 *(Affected Party)*									
9		Mark Coleman 107 Diana Road Portage IN 46368 *(Affected Party)*									
10		Mr. Chris Hernandez Pipefitters Association, Local Union 597 8762 Louisiana St., Suite G Merrillville IN 46410 *(Affected Party)*									
11		Craig Hogarth 7901 West Morris Street Indianapolis IN 46231 *(Affected Party)*									
12		Lake County Commissioners 2293 N. Main St, Building A 3rd Floor Crown Point IN 46307 *(Local Official)*									
13		Anthony Copeland 2006 E. 140th Street East Chicago IN 46312 (Affected Party)									
14		Barbara G. Perez 506 Lilac Street East Chicago IN 46312 *(Affected Party)*									
15		Mr. Robert Garcia 3733 Parrish Avenue East Chicago IN 46312 *(Affected Party)*									

Total number of pieces Listed by Sender	Total number of Pieces Received at Post Office	Postmaster, Per (Name of Receiving employee)	The full declaration of value is required on all domestic and international registered mail. The maximum indemnity payable for the reconstruction of nonnegotiable documents under Express Mail document reconstructing insurance is $50,000 per piece subject to a limit of $50, 000 per occurrence. The maximum indemnity payable on Express mil merchandise insurance is $500. The maximum indemnity payable is $25,000 for registered mail, sent with optional postal insurance. See ***Domestic Mail Manual*** **R900, S913**, and **S921** for limitations of coverage on inured and COD mail. See ***International Mail Manual*** for limitations o coverage on international mail. Special handling charges apply only to Standard Mail (A) and Standard Mail (B) parcels.

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Mail Code 61-53

IDEM Staff	CDENNY 9/20/2012 Hammond Group, Inc. 089-32182-00219 (final)			AFFIX STAMP HERE IF USED AS CERTIFICATE OF MAILING
Name and address of Sender	▶	Indiana Department of Environmental Management Office of Air Quality – Permits Branch 100 N. Senate Indianapolis, IN 46204	Type of Mail: **CERTIFICATE OF MAILING ONLY**	

Line	Article Number	Name, Address, Street and Post Office Address	Postage	Handing Charges	Act. Value (If Registered)	Insured Value	Due Send if COD	R.R. Fee	S.D. Fee	S.H. Fee	Rest. Del. Fee Remarks
1		Karen 8212 Madison Ave Munster IN 46321-1627 (Affected Party)									
2		Joseph Hero 11723 S Oakridge Drive St. John IN 46373 *(Affected Party)*									
3		Gary City Council 401 Broadway # 209 Gary IN 46402 *(Local Official)*									
4		Ron Novak Hammond Dept. of Environmental Management 5925 Calumnet Ave. Hammond IN 46320 *(Local Official)*									
5		Mr. Larry Davis 268 South, 600 West Hebron IN 46341 *(Affected Party)*									
6		Gitte Laasby Post Tribune 1433 E. 83rd Ave Merrillville IN 46410 *(Affected Party)*									
7		Susan Severtson City of Gary Law Dept. 401 Broadway 4th Floor Gary IN 46402 *(Local Official)*									
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Total number of pieces Listed by Sender	Total number of Pieces Received at Post Office	Postmaster, Per (Name of Receiving employee)	The full declaration of value is required on all domestic and international registered mail. The maximum indemnity payable for the reconstruction of nonnegotiable documents under Express Mail document reconstructing insurance is $50,000 per piece subject to a limit of $50, 000 per occurrence. The maximum indemnity payable on Express mil merchandise insurance is $500. The maximum indemnity payable is $25,000 for registered mail, sent with optional postal insurance. See ***Domestic Mail Manual*** **R900, S913**, and **S921** for limitations of coverage on inured and COD mail. See ***International Mail Manual*** for limitations o coverage on international mail. Special handling charges apply only to Standard Mail (A) and Standard Mail (B) parcels.

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