Thomas M. McDermott, Jr.
Mayor

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
CITY OF HAMMOND
RONALD L. NOVAK
Director

NOTICE OF 30-DAY PERIOD
FOR PUBLIC COMMENT

Preliminary Findings Regarding the Renewal of a
Federally Enforceable State Operating Permit (FESOP)

for **Hammond Group, Inc. (HGI)** in **Lake County**

FESOP Renewal No. 089-14165-00219

The Indiana Department of Environmental Management (IDEM) and Hammond Department of Environmental Management (HDEM) have received an application from Hammond Group, Inc. (HGI) located at 2308 – 165th Street, Hammond, Indiana for a renewal of their FESOP issued on December 12, 1996. If approved by IDEM's Office of Air Quality (OAQ), this proposed renewal would allow HGI to continue to operate their existing source.

This draft FESOP renewal does not contain any new equipment that would emit air pollutants; however, some conditions from previously issued permits/approvals may have been corrected, changed, or removed. This notice fulfills the public notice procedures to which those conditions are subject. HDEM has reviewed this application, and has developed preliminary findings, consisting of a draft permit and several supporting documents, that would allow the applicant to make this change.

A copy of the permit application and HDEM's preliminary findings are available at:

Hammond Public Library
564 State Street
Hammond, IN 46320

and

Northwest Regional Office
8380 Louisiana Street
Merrillville, Indiana 46410

and

Hammond Department of Environmental Management
5925 Calumet Avenue
Hammond, Indiana 46320

A copy of the preliminary findings is available on the Internet at: http://www.in.gov/ai/appfiles/idem-caats/.

How can you participate in this process?

The date that this notice is published in a newspaper marks the beginning of a 30-day public comment period. If the 30th day of the comment period falls on a day when IDEM or HDEM offices are closed for business, all comments must be postmarked or delivered in person on the next business day that IDEM or HDEM is open.

5925 Calumet Avenue
Hammond, IN 46320
219. 853.6306
fax: 219 853 6343

You may request that IDEM and HDEM hold a public hearing about this draft permit. If adverse comments concerning the **air pollution impact** of this draft permit are received, with a request for a public hearing, IDEM and HDEM will decide whether or not to hold a public hearing. IDEM and HDEM could also decide to hold a public meeting instead of, or in addition to, a public hearing. If a public hearing or meeting is held, IDEM and HDEM will make a separate announcement of the date, time, and location of that hearing or meeting. At a hearing, you would have an opportunity to submit written comments and make verbal comments. At a meeting, you would have an opportunity to submit written comments, ask questions, and discuss any air pollution concerns with IDEM and HDEM staff.

Comments and supporting documentation, or a request for a public hearing should be sent in writing to HDEM at the address below. If you comment via e-mail, please include your full U.S. mailing address so that you can be added to HDEM's mailing list to receive notice of future action related to this permit. If you do not want to comment at this time, but would like to receive notice of future action related to this permit application, please contact HDEM at the address below. Please refer to permit number 089-14165-00219 in all correspondence.

Comments should be sent to:

Debra Malone
Hammond Department of Environmental Management
5925 Calumet Avenue
Hammond, Indiana 46320
(219) 853-6306
Email: maloned@gohammond.com

All comments will be considered by IDEM and HDEM when we make a decision to issue or deny the permit. Comments that are most likely to affect final permit decisions are those based on the rules and laws governing this permitting process (326 IAC 2), air quality issues, and technical issues. IDEM does not have legal authority to regulate zoning, odor or noise. For such issues, please contact your local officials.

For additional information about air permits and how you can participate, please see IDEM's **Guide for Citizen Participation** and **Permit Guide** on the Internet at: www.idem.in.gov.

What will happen after IDEM makes a decision?

Following the end of the public comment period, IDEM will issue a Notice of Decision stating whether the permit has been issued or denied. If the permit is issued, it may be different than the draft permit because of comments that were received during the public comment period. If comments are received during the public notice period, the final decision will include a document that summarizes the comments and IDEM's and HDEM's response to those comments. If you have submitted comments or have asked to be added to the mailing list, you will receive a Notice of the Decision. The notice will provide details on how you may appeal IDEM's decision, if you disagree with that decision. The final decision will also be available on the Internet at the address indicated above, at the local library indicated above, and Northwest Regional Office indicated above, and at the HDEM office at 5925 Calumet Avenue, Hammond, Indiana 46320.

If you have any questions please contact Debra Malone of my staff at the above address.

Ronald L. Novak, Director
Hammond Department of Environmental Management

DM

Thomas M. McDermott, Jr.
Mayor

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
CITY OF HAMMOND
RONALD L. NOVAK
Director

DRAFT
Federally Enforceable State Operating Permit Renewal

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
and
HAMMOND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
-AIR POLLUTION CONTROL DIVISION-

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.

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.

This permit is issued in accordance with 326 IAC 2 and 40 CFR 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.

Operation Permit No.: F089-14165-00219	
Issued by: _____ Ronald L. Novak, Director Hammond Department of Environmental Management	Issuance Date: Expiration Date:

5925 Calumet Avenue
Hammond. IN 46320
219. 853.6306
fax: 219 853 6343

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SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) and the Hammond Department of Environmental Management (HDEM). 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
Mailing Address:	2323 – 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 PM2.5 and 8-hour ozone 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.

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 IDs 52-2, 52-3, 52-6, 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.

8. Unit ID 52-21: 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 52-21 were installed in 2002.

Unit 52-21 is controlled by a baghouse followed by a HEPA followed by the Main Control System.

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, & 26-2: No. 2, 3, 4, 5, & 6 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 and those associated with Unit ID 26-2 were installed in July, 1995.

Each 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.

This unit is controlled by a 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.

This unit is controlled by a cartridge filter.

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 IDs 34-1 and 34-2: B-Furnace Mill and Blending System

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.

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

Emission units associated with Unit ID 34-1 were installed in 1955 and those associated with Unit ID 34-2 were installed in 2001.

Both units share 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.

Stack ID 6-S-47

1. Unit ID 47-1: S-Furnace Operation

The S-Furnace Operation consists of a mixer, furnace, fritting device, drying screw, sizing screen, packers, and interconnecting conveyors. Lead oxide and other raw materials are batch-mixed in a mixer. This mixture is then charged into the furnace, which 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. The screened material is then conveyed to packing.

Emission units associated with Unit ID 47-1 were installed in February, 1995.

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

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, 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, T-2000, R-2001, and DC-3002 (Trivial Activities except for RB-2000 and DC-3002 which are classified as Insignificant Activities) (Shared unit between Units 15-1 & 15-2): R-1001 (Trivial Activity)
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, bag packer and a sling bag packer (shared between both lines). Various raw materials are mixed in the mill. The blended material is 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.

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.

Stack IDs 20-S-37 and 20-S-42

1. Unit IDs 37-1 and 42-1: South and North Mill Charging Systems

Each Mill Charging System consists of an air conveyor system, a primary-receiver baghouse hopper, and interconnecting conveyors. Material is vacuum conveyed from the drum dryer holding tanks to a receiver baghouse and then fed to a mill weigh hopper.

Emission units associated with Unit IDs 37-1 and 42-1 were installed in March, 1982.

Each system is controlled by a baghouse.

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) Stack IDs 18-S-49 & 18-S-24

1. Unit ID 49-1 & 24-1: Cleaver Brooks Boiler No. 2 and No. 1

Each Boiler is rated at 8.4 MMBtu/hr and is fueled by natural gas only. There are no pollution control equipment associated with these units.

Emission units associated with Unit ID 49-1 were installed in 1990 and those associated with Unit ID 24-1 were installed in 1978.
[326 IAC 6.8-1-2(b)(3) and 326 IAC 6.8-2-13(b)]

(b) Stack ID 13-S-48

1. Unit IDs 48-1 and 48-2: Wet Mixing North and South Systems

The Mixing Systems are used for wet-mixing raw ingredients. Liquid is charged to the mixers from drums and holding tanks and then dry materials in bags are manually added to produce slurries. The mixed slurry is then pumped from the mixers to the wet grinding equipment then to further processing.

Emission units associated with Unit IDs 48-1 and 48-2 were installed in November, 1994.

Each system is vented to a cartridge filter followed by a HEPA unit.
[326 IAC 6.8-2-13(a)]

2. Unit ID 48-3: Rust Inhibitor Process

The Rust Inhibitor Process mixes various chemical powders and liquids. The powders are dumped manually to the bag unloader and fed into the mixing tank. The liquid raw material is added through the drum station. The mixer discharges into 5-gallon pails or 55-gallon drums.

Emission units associated with Unit ID 48-3 were installed in August, 1997.

This system is vented to a baghouse which vents into the Wet Mixing South HEPA unit.
[326 IAC 6.8-2-13(a)]

3. Unit ID 48-4: Liquid Stain Inhibitor Process

The Liquid Stain Inhibitor Process mixes various chemical powders and liquids. The powders are dumped manually to the bag unloader and fed into the mixing tank. The liquid raw materials are added through the weigh tank. The mixer discharges into the Unit 48-3 filling stations.

Emission units associated with Unit 48-4 were installed in May, 2000.

This system is vented to the Rust Inhibitor baghouse.
[326 IAC 6.8-2-13(a)]

(c) Stack ID 14-S-45

1. Unit IDs 45-1 and 45-2: Packing Operation North and South

Each Packing Operation consists of hoppers, packers, and interconnecting conveyors. Material is conveyed to the hoppers which feeds it to the packers. Packed bags are then sent to a palletizer.

Emission units associated with Unit IDs 45-1 and 45-2 were installed in June, 1989.

The two packing systems share a baghouse.
[326 IAC 6.8-2-13(a)]

(d) Stack ID 17-S-25 and 17-S-40

1. Unit IDs 25-1 and 40-1: North and South Drum Dryer Systems

Each Drum Dryer System consists of a steam heated drum dryer and interconnecting conveyors. The drum dryers are heated by process steam provided by boilers. The wet slurry is pumped onto the drum dryer where the majority of the moisture is removed. A heated vacuum conveyor line then finishes the drying of the product. The dried material is transferred to holding tanks for storage prior to further processing.

Emission units associated with Unit IDs 25-1 were installed in December, 1992 and those associated with Unit ID 40-1 were installed in July, 1990.

The control system on each system is comprised of a dust collecting hood and a scrubber.
[326 IAC 6.8-2-13(a)]

(e) Stack ID 20-S-36 and 20-S-41

1. Unit IDs 36-1 and 41-1: South and North Drum Dryer Silo Systems

The Drum Dryer Silo Systems consist of storage tanks, flash dryer, and interconnecting conveyors. From the drum dryers, the material is air swept and cyclone separated. The separated material is screw conveyed to holding tanks to await further processing. The flash dryers are natural gas fired and provide a heated air stream that completes the drying of the material.

Emission units associated with Unit IDs 36-1 and 41-1 were installed in March, 1982.

Each system is controlled by a baghouse.
[326 IAC 6.8-2-13(a)]

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

(g) 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.

(h) Combustion source flame safety purging on startup.

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

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

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

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

(m) 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.

(n) 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]

(o) Closed loop heating and cooling systems.

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

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

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

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

(t) Heat exchanger cleaning and repair.

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

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

(w) 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.

(x) 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.

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

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

(aa) Purge double block and bleed valves.

(bb) Filter or coalescer media changeout.

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

(dd) 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) <u>Stack IDs 20-S-39 & 20-S-44</u>

1. Unit IDs 39-1 and 44-1: South and North Product Packing

   Each packing system consists of an air conveyor, receiver baghouse, hopper, and interconnecting conveyors. Milled products are conveyed to a receiver baghouse and fed to the packing hopper.

   Emission units associated with Unit IDs 39-1 and 44-1 were installed in March, 1982.

Each system is controlled by a baghouse followed by a HEPA.
[326 IAC 6.8-2-13(a)]

(b) Stack ID 20-S-38 and 20-S-43

1. Unit IDs 38-1 and 43-1: Finished Product West and East Holding Tanks

Each system consists of a vacuum conveyor, primary receiver baghouse, interconnecting conveyors and a hopper. The material is vacuum conveyed from dry milling operations to a primary baghouse and from there it is fed to the finished treated product holding tank.

Emission units associated with Unit IDs 38-1 and 43-1 were installed in March, 1982.

Emissions from each system are controlled by a baghouse.
[326 IAC 6.8-2-13(a)]

(c) 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 and HDEM, 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, including any permit shield provided in 326 IAC 2-7-15, 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]

(a) 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 and HDEM, the United States Environmental Protection Agency (U.S. EPA) and by citizens in accordance with the Clean Air Act.

(b) Unless otherwise stated, all terms and conditions in this permit that are local requirements, including any provisions designed to limit the source's potential to emit, are enforceable by HDEM.

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 and HDEM, within a reasonable time, any information that IDEM, OAQ and HDEM 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. The submittal by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1). Upon

request, the Permittee shall also furnish to IDEM, OAQ and HDEM 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 Compliance Order Issuance [326 IAC 2-8-5(b)]

IDEM, OAQ and HDEM 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.9 Certification [326 IAC 2-8-3(d)] [326 IAC 2-8-4(3)(C)(i)] [326 IAC 2-8-5(1)]

(a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by an "authorized individual" of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

(b) One (1) certification shall be included, using the attached Certification Form, 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.10 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 15th of each year to:

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

and

Hammond Department of Environmental Management
5925 Calumet Avenue – Room 304
Hammond, Indiana 46320

(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 and HDEM 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 and HDEM may require to determine the compliance status of the source.

The submittal by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

B.11 Preventive Maintenance Plan [326 IAC 1-6-3] [326 IAC 2-8-4(9)] [326 IAC 2-8-5(a)(1)]

(a) If required by specific condition(s) in Section D of this permit, the Permittee shall maintain and implement Preventive Maintenance Plans (PMPs) 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.

(b) A copy of the PMPs shall be submitted to IDEM, OAQ and HDEM upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ and HDEM. IDEM, OAQ and HDEM 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 or potential to emit. The PMPs do not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(c) 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 describes 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, and HDEM and 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;

(IDEM, OAQ)
Telephone No.: 1-800-451-6027 (ask for Office of Air Quality, Compliance Section) or,
Telephone No.: 317-233-0178 (ask for Compliance Section)
Facsimile No.: 317-233-6865
Hammond Department of Environmental Management phone: (219) 853-6306; fax: (219) 853-6343
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 Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

and

Hammond Department of Environmental Management
5925 Calumet Avenue - Room 304
Hammond, Indiana 46320

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 the certification by the “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 and HDEM 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 and HDEM 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.

(h) The Permittee shall include all emergencies in the Quarterly Deviation and Compliance Monitoring Report.

B.13 Prior Permits Superseded [326 IAC 2-1.1-9.5] [326 IAC 2-8-11.1]

(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 Deviations from Permit Requirements and Conditions [326 IAC 2-8-4(3)(C)(ii)]

(a) Deviations from any permit requirements (for emergencies see Section B - Emergency Provisions), the probable cause of such deviations, and any response steps or preventive measures taken shall be reported to:

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

and

Hammond Department of Environmental Management
5925 Calumet Avenue – Room 304
Hammond, Indiana 46320

using the attached Quarterly Deviation and Compliance Monitoring Report, or its equivalent. 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.

The Quarterly Deviation and Compliance Monitoring Report does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(b) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.

B.16 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 the certification 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, or HDEM 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, or HDEM 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, or HDEM at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ, or HDEM may provide a shorter time period in the case of an emergency. [326 IAC 2-8-8(c)]

B.17 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 HDEM 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(40) and 326 IAC 2-7-1(21). The renewal application does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Request for renewal shall be submitted to:

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

and

Hammond Department of Environmental Management
5925 Calumet Avenue - Room 304
Hammond, Indiana 46320

(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 and HDEM 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 and HDEM 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 in writing by IDEM, OAQ and HDEM any additional information identified as being needed to process the application.

B.18 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
Permits Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

and

Hammond Department of Environmental Management
5925 Calumet Avenue - Room 304
Hammond, Indiana 46320

Any such application shall be certified by the "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. A basic filing fee of one hundred dollars ($100) shall be submitted with any request for an administrative amendment submitted to HDEM for review. [326 IAC 2-8-10(b)(3)] [326 IAC 2-1.1-10(d)]

B.19 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) through (d), 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
Permits Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

and

Hammond Department of Environmental Management
5925 Calumet Avenue – Room 304
Hammond, Indiana 46320

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) through (d). 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 and HDEM in the notices specified in 326 IAC 2-8-15(b)(2), (c)(1), and (d).

(b) Emission Trades [326 IAC 2-8-15(c)]
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(c).

(c) Alternative Operating Scenarios [326 IAC 2-8-15(d)]
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.20 Source Modification Requirement [326 IAC 2-8-11.1]

A modification, construction, or reconstruction is governed by the requirements of 326 IAC 2 and 326 IAC 2-8-11.1.

B.21 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, and HDEM 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.22 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
Permits Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

and

Hammond Department of Environmental Management
5925 Calumet Avenue – Room 304
Hammond, Indiana 46320

The application which shall be submitted by the Permittee does require the certification by the "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.23 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 within 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, or HDEM 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.24 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

Emissions 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 volatile organic compounds (VOCs) from the entire source shall be limited to less than twenty-five (25) tons per twelve (12) consecutive month period. This limitation shall also satisfy the requirements of 326 IAC 2-3 (Emission Offset);

(2) The potential to emit any regulated pollutant from the entire source, except volatile organic compounds (VOCs), shall be limited to less than one hundred (100) tons per twelve (12) consecutive month period;

(3) 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

(4) 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.

(b) The 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. This limitation shall render 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable.

(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 5-1-3 (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 or incinerate any waste or refuse except as provided in 326 IAC 4-2 and in 326 IAC 9-1-2.

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 Fugitive Dust Emissions [326 IAC 6.8-10-3]

The Permittee shall be in violation of 326 IAC 6.8-10-3 (formerly 326 IAC 6-1-11.1) (Lake County Fugitive Particulate Matter Control Requirements), if the opacity of fugitive particulate emissions exceeds ten percent (10%).

C.7 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.8 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.9 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
Asbestos Section, Office of Air Quality
100 North Senate Avenue
MC 61-52 IGCN 1003
Indianapolis, Indiana 46204-2251

and

Hammond Department of Environmental Management
5925 Calumet Avenue – Room 304
Hammond, Indiana 46320

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 by the "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. The requirement to use an Indiana Licensed Asbestos Inspector is not federally enforceable.

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

C.10 Performance Testing [326 IAC 3-6]

(a) All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

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

and

Hammond Department of Environmental Management
5925 Calumet Avenue – Room 304
Hammond, Indiana 46320

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

(b) The Permittee shall notify IDEM, OAQ and HDEM 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 certification 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 and HDEM not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ and HDEM 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.11 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.12 Compliance Monitoring [326 IAC 2-8-4(3)] [326 IAC 2-8-5(a)(1)]

Unless otherwise specified in this permit, all monitoring and record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance. If required by Section D, the Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. If due to circumstances beyond its control, that equipment cannot be installed and operated within ninety (90) days, 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 Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

and

Hammond Department of Environmental Management
5925 Calumet Avenue – Room 304
Hammond, IN 46320

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 the certification 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.13 Continuous Compliance Plan [326 IAC 6.8-8-1]

Pursuant to 326 IAC 6.8-8-1(5) (formerly 326 IAC 6-1-10.1(l) (Lake County PM10 Emission Requirements), the Permittee shall submit to IDEM, OAQ and HDEM, and maintain at the source a copy of the Continuous Compliance Plan (CCP). The Permittee shall perform the inspections, monitoring, and record keeping requirements as specified in 326 IAC 6.8-8-2 through 326 IAC 6.8-8-7 or according to the Permittee's CCP.

C.14 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]

Any monitoring or testing required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, 40 CFR 60 Appendix B, 40 CFR 63 or other approved methods as specified in this permit.

C.15 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.16 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.17 Response to Excursions or Exceedances [326 IAC 2-8-4] [326 IAC 2-8-5]

(a) Upon detecting an excursion or exceedance, the Permittee shall 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 emissions.

(b) The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by

excused startup or shutdown conditions). Corrective actions may include, but are not limited to, the following:

(1) initial inspection and evaluation;

(2) recording that operations returned 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 within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.

(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;

(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 maintain the following records:

(1) monitoring data;

(2) monitor performance data, if applicable; and

(3) corrective actions taken.

C.18 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 take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ and HDEM within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.

(b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred and twenty (120) 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 the certification by the “authorized individual” as defined by 326 IAC 2-1.1-1(1).

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

C.19 Emission Reporting [326 IAC 2-8-4(3)] [Hammond Ordinance No. 7102]

(a) The Permittee shall submit an annual emission inventory containing production information, fuel usage and estimated actual emissions of criteria pollutants. The emission inventory must be received by April 15th of each year. The submittal should cover the twelve (12) consecutive month time period starting January 1 and ending December 31. This is a local requirement only. The emission inventory must be submitted to:

Hammond Department of Environmental Management
5925 Calumet Avenue - Room 304
Hammond, Indiana 46320

This inventory does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(b) The emission inventory 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 HDEM on or before the date it is due.

C.20 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. 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 or HDEM makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner or HDEM within a reasonable time.

(b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

C.21 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. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported. This report shall be submitted within thirty (30) days of the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:

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

and

Hammond Department of Environmental Management
5925 Calumet Avenue - Room 304
Hammond, Indiana 46320

(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 and HDEM on or before the date it is due.

(d) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(e) 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.

(f) The Permittee shall make the information required to be documented and maintained in accordance with (c) in Section C- General Record Keeping Requirements available for review upon a request for inspection by IDEM, OAQ and HDEM. The general public may request this information from the IDEM, OAQ and HDEM under 326 IAC 17.1.

Stratospheric Ozone Protection

C.22 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 the standards for recycling and emissions reduction:

(a) Persons opening appliances for maintenance, service, repair or disposal must comply with the required practices pursuant to 40 CFR 82.156.

(b) Equipment used during the maintenance, service, repair or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.

(c) Persons performing maintenance, service, repair or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

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 52-21. 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.

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 IDs 52-2, 52-3, 52-6, 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.

8. Unit ID 52-21: 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 52-21 were installed in 2002.

Unit 52-21 is controlled by a baghouse followed by a HEPA followed by the Main Control 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.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) [Hammond Air Quality Control Ordinance No. 3522 (as amended)] [326 IAC 2-2]

Pursuant to the Hammond Air Quality Control Ordinance No. 3522 (as amended), 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) [Hammond Air Quality Control Ordinance No. 3522 (as amended)] [326 IAC 2-3] [326 IAC 2-1.1-5]

Pursuant to the Hammond Air Quality Control Ordinance No. 3522 (as amended), 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 2-3 (Emission Offset) and 326 IAC 2-1.1-5 (Nonattainment NSR) 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, in accordance with Section B – Preventive Maintenance Plan, of this permit, is required for these facilities and any control devices.

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 this FESOP, 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 this valid compliance demonstration. Testing shall be conducted in accordance with Section C – Performance Testing.

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 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.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 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.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 steps in accordance with Section C – Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C – Response to Excursions or Exceedances 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)
(Main Control System) (Unit IDs 52-1 through 52-13, 52-15, 52-17, 52-19 through 52-21)	
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
52-8-F (Unit ID 52-21 Baghouse)	1.0 - 9.0
52-8-H (Unit ID 52-21 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
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 steps in accordance with Section C- Response to Excursions or Exceedances. A pressure reading that is outside the above-mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C – Response to Excursions or Exceedances, 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 HDEM and shall be calibrated 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 compliance with Section C – Opacity and 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 compliance 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) All records shall be maintained in accordance with Section C – General Record Keeping Requirements, of this permit.

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, & 26-2: No. 2, 3, 4, 5, & 6 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 and those associated with Unit ID 26-2 were installed in July, 1995.

Each system is controlled by 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.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) [Hammond Air Quality Control Ordinance No. 3522 (as amended)] [326 IAC 2-2]

Pursuant to the Hammond Air Quality Control Ordinance No. 3522 (as amended), 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) [Hammond Air Quality Control Ordinance No. 3522 (as amended)] [326 IAC 2-3] [326 IAC 2-1.1-5]

Pursuant to the Hammond Air Quality Control Ordinance No. 3522 (as amended), 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 2-3 (Emission Offset) and 326 IAC 2-1.1-5 (Nonattainment NSR) 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, in accordance with Section B – Preventive Maintenance Plan, of this permit, is required for these facilities and any control devices.

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 this FESOP, 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 this valid compliance demonstration. Testing shall be conducted in accordance with Section C – Performance Testing.

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 steps in accordance with Section C – Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C – Response to Excursions or Exceedances 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 steps in accordance with Section C- Response to Excursions or Exceedances. A pressure reading that is outside the above-mentioned range is not a deviation from this

permit. Failure to take response steps in accordance with Section C – Response to Excursions or Exceedances, 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 HDEM and shall be calibrated 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 compliance with Section C – Opacity and 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 compliance 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) All records shall be maintained in accordance with Section C – General Record Keeping Requirements, of this permit.

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 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.

   This unit is controlled by a 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.

This unit is controlled by a cartridge filter.

(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) [Hammond Air Quality Control Ordinance No. 3522 (as amended)] [326 IAC 2-2]

Pursuant to the Hammond Air Quality Control Ordinance No. 3522 (as amended), 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) [Hammond Air Quality Control Ordinance No. 3522 (as amended)] [326 IAC 2-3] [326 IAC 2-1.1-5]

Pursuant to the Hammond Air Quality Control Ordinance No. 3522 (as amended), 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 2-3 (Emission Offset) and 326 IAC 2-1.1-5 (Nonattainment NSR) 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, in accordance with Section B – Preventive Maintenance Plan, of this permit, is required for these facilities and any control devices.

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 this FESOP, 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 this valid compliance demonstration. Testing shall be conducted in accordance with Section C – Performance Testing.

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 steps in accordance with Section C – Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C – Response to Excursions or Exceedances 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 ID 56-1)	
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
56-23-F & 56-23-H (W. Reactor Bag Filter / HEPA)	0.1 - 8.5 / 0.1 - 4.5
56-24-F & 56-24-H (E. Reactor Bag Filter / HEPA)	0.1 - 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
(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 steps in accordance with Section C- Response to Excursions or Exceedances. A pressure reading that is outside the above-mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C – Response to Excursions or Exceedances, 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 HDEM and shall be calibrated 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 compliance with Section C – Opacity and 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 compliance 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) All records shall be maintained in accordance with Section C – General Record Keeping Requirements, of this permit.

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.

(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) [Hammond Air Quality Control Ordinance No. 3522 (as amended)] [326 IAC 2-2]

Pursuant to the Hammond Air Quality Control Ordinance No. 3522 (as amended), 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) [Hammond Air Quality Control Ordinance No. 3522 (as amended)] [326 IAC 2-3] [326 IAC 2-1.1-5]

Pursuant to the Hammond Air Quality Control Ordinance No. 3522 (as amended), 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 2-3 (Emission Offset) and 326 IAC 2-1.1-5 (Nonattainment NSR) 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, in accordance with Section B – Preventive Maintenance Plan, of this permit, is required for this facility and any control devices.

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 this FESOP, 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 this valid compliance demonstration. Testing shall be conducted in accordance with Section C – Performance Testing.

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 steps in accordance with Section C – Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C – Response to Excursions or Exceedances 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 steps in accordance with Section C- Response to Excursions or Exceedances. A pressure reading that is outside the above-mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C – Response to Excursions or Exceedances, 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 HDEM and shall be calibrated 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 compliance with Section C – Opacity and 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 compliance 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) All records shall be maintained in accordance with Section C – General Record Keeping Requirements, of this permit.

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.

(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) [Hammond Air Quality Control Ordinance No. 3522 (as amended)] [326 IAC 2-2]

Pursuant to the Hammond Air Quality Control Ordinance No. 3522 (as amended), 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) [Hammond Air Quality Control Ordinance No. 3522 (as amended)] [326 IAC 2-3] [326 IAC 2-1.1-5]

Pursuant to the Hammond Air Quality Control Ordinance No. 3522 (as amended), 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 2-3 (Emission Offset) and 326 IAC 2-1.1-5 (Nonattainment NSR) 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, in accordance with Section B – Preventive Maintenance Plan, of this permit, is required for this facility and any control devices.

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 steps in accordance with Section C – Response to Excursions or Exceedances. Failure to take

response steps in accordance with Section C – Response to Excursions or Exceedances 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 steps in accordance with Section C- Response to Excursions or Exceedances. A pressure reading that is outside the above-mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C – Response to Excursions or Exceedances, 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 HDEM and shall be calibrated 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 compliance with Section C – Opacity and 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 compliance 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) All records shall be maintained in accordance with Section C – General Record Keeping Requirements, of this permit.

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.

(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) [Hammond Air Quality Control Ordinance No. 3522 (as amended)] [326 IAC 2-2]

Pursuant to the Hammond Air Quality Control Ordinance No. 3522 (as amended), 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) [Hammond Air Quality Control Ordinance No. 3522 (as amended)] [326 IAC 2-3] [326 IAC 2-1.1-5]

Pursuant to the Hammond Air Quality Control Ordinance No. 3522 (as amended), 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 2-3 (Emission Offset) and 326 IAC 2-1.1-5 (Nonattainment NSR) 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 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan, in accordance with Section B – Preventive Maintenance Plan, of this permit, is required for this facility and any control devices.

Compliance Determination Requirements

D.6.6 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 this FESOP, in order to demonstrate compliance with Condition D.6.4, the Permittee shall perform lead testing on Stack ID 6-S-33 utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. Testing shall be conducted in accordance with Section C – Performance Testing.

D.6.7 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.6.1, 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.6.8 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.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.6.9 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 steps in accordance with Section C – Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C – Response to Excursions or Exceedances shall be considered a deviation from this permit.

D.6.10 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 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 steps in accordance with Section C- Response to Excursions or Exceedances. A pressure reading that is outside the above-mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C – Response to Excursions or Exceedances, 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 HDEM and shall be calibrated at least once every six (6) months.

D.6.11 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.6.12 Record Keeping Requirements

(a) To document compliance with Section C – Opacity and Condition D.6.9, 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).

(b) To document compliance with Condition D.6.10, 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) All records shall be maintained in accordance with Section C – General Record Keeping Requirements, of this permit.

SECTION D.7 FACILITY OPERATION CONDITIONS

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

Stack ID 4B-S-34

1. Unit IDs 34-1 and 34-2: B-Furnace Mill and Blending System

   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.

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

   Emission units associated with Unit ID 34-1 were installed in 1955 and those associated with Unit ID 34-2 were installed in 2001.

   Both units share 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.

(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) [Hammond Air Quality Control Ordinance No. 3522 (as amended)] [326 IAC 2-2]

Pursuant to the Hammond Air Quality Control Ordinance No. 3522 (as amended), 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) [Hammond Air Quality Control Ordinance No. 3522 (as amended)] [326 IAC 2-3] [326 IAC 2-1.1-5]

Pursuant to the Hammond Air Quality Control Ordinance No. 3522 (as amended), 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 2-3 (Emission Offset) and 326 IAC 2-1.1-5 (Nonattainment NSR) 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, in accordance with Section B – Preventive Maintenance Plan, of this permit, is required for these facilities and any control devices.

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 this FESOP, 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 this valid compliance demonstration. Testing shall be conducted in accordance with Section C – Performance Testing.

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 steps in accordance with Section C – Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C – Response to Excursions or Exceedances 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 IDs 34-1 & 34-2)	
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 steps in accordance with Section C- Response to Excursions or Exceedances. A pressure reading that is outside the above-mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C – Response to Excursions or Exceedances, 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 HDEM and shall be calibrated 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 compliance with Section C – Opacity and 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 compliance 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) All records shall be maintained in accordance with Section C – General Record Keeping Requirements, of this permit.

SECTION D.8 FACILITY OPERATION CONDITIONS

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

Stack ID 6-S-47

1. Unit ID 47-1: S-Furnace Operation

The S-Furnace Operation consists of a mixer, furnace, fritting device, drying screw, sizing screen, packers, and interconnecting conveyors. Lead oxide and other raw materials are batch-mixed in a mixer. This mixture is then charged into the furnace, which 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. The screened material is then conveyed to packing.

Emission units associated with Unit ID 47-1 were installed in February, 1995.

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.8.1 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-47 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.8.2 Particulate Matter (PM) [Hammond Air Quality Control Ordinance No. 3522 (as amended)] [326 IAC 2-2]

Pursuant to the Hammond Air Quality Control Ordinance No. 3522 (as amended), particulate matter emissions from Stack ID 6-S-47 shall be set equal to the PM10 emission 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 IAC 2-2 (PSD) do not apply.

D.8.3 Particulate Matter less than 2.5 microns in diameter (PM2.5) [Hammond Air Quality Control Ordinance No. 3522 (as amended)] [326 IAC 2-3] [326 IAC 2-1.1-5]

Pursuant to the Hammond Air Quality Control Ordinance No. 3522 (as amended), PM2.5 emissions from Stack ID 6-S-47 shall be set equal to the PM10 emission 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 2-3 (Emission Offset) and 326 IAC 2-1.1-5 (Nonattainment NSR) do not apply.

D.8.4 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-47, as specifically listed in 326 IAC 15-1-2(a)(6), shall be limited to 0.021 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.8.5 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan, in accordance with Section B – Preventive Maintenance Plan, of this permit, is required for this facility and any control devices.

Compliance Determination Requirements

D.8.6 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 this FESOP, in order to demonstrate compliance with Condition D.8.4, the Permittee shall perform lead testing on Stack ID 6-S-47 utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. Testing shall be conducted in accordance with Section C – Performance Testing.

D.8.7 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, 2006, and in order to comply with Condition D.8.1, 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.8.8 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.8.4, 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.8.9 Visible Emissions Notations

(a) Visible emission notations of the Stack ID 6-S-47 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 steps in accordance with Section C – Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C – Response to Excursions or Exceedances shall be considered a deviation from this permit.

D.8.10 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 6-S-47, at least once per day when the process is in operation. When for any one reading, the pressure drop across the baghouse and HEPA filter is outside the normal range of the following:

(*Stack ID 6-S-47*)

Control Unit ID	Pressure Drop (inches of water)
(Unit ID 47-1)	
47-13-F (Baghouse)	0.1 - 8.5
47-13-H (HEPA)	0.1 - 4.5

or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C- Response to Excursions or Exceedances. A pressure reading that is outside the above-mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C – Response to Excursions or Exceedances, 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 HDEM and shall be calibrated at least once every six (6) months.

D.8.11 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.8.12 Record Keeping Requirements

(a) To document compliance with Section C – Opacity and Condition D.8.9, the Permittee shall maintain daily records of the visible emission notations of the Stack ID 6-S-47 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 compliance with Condition D.8.10, 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) All records shall be maintained in accordance with Section C – General Record Keeping Requirements, of this permit.

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, 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, T-2000, R-2001, and DC-3002 (Trivial Activities except for RB-2000 and DC 3002 which are classified as Insignificant Activities)
(Shared unit between Units ID 15-1 & 15-2): R-1001 (Trivial Activity)
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, bag packer and a sling bag packer (shared between both lines). Various raw materials are mixed in the mill. The blended material is 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.

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) [Hammond Air Quality Control Ordinance No. 3522 (as amended)] [326 IAC 2-2]

Pursuant to the Hammond Air Quality Control Ordinance No. 3522 (as amended), 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) [Hammond Air Quality Control Ordinance No. 3522 (as amended)] [326 IAC 2-3] [326 IAC 2-1.1-5]

Pursuant to the Hammond Air Quality Control Ordinance No. 3522 (as amended), 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 2-3 (Emission Offset) and 326 IAC 2-1.1-5 (Nonattainment NSR) do not apply.

D.9.4 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan, in accordance with Section B – Preventive Maintenance Plan, of this permit, is required for these facilities and any control devices.

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 steps in accordance with Section C – Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C – Response to Excursions or Exceedances 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 & Ball Mill (RB-1000)	0.1 - 7.0
Alpha BM Receiver (R-1000)	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 and Ball Mill (RB-2000)	0.1 - 8.0
Beta BM Receiver (R-2000)	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 15-1 & Unit ID 15-2: Shared Unit)	
Sling Bag Packing (R-1001)	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 steps in accordance with Section C- Response to Excursions or Exceedances. A pressure reading that is outside the above-mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C – Response to Excursions or Exceedances, 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 HDEM and shall be calibrated 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 compliance with Section C – Opacity and 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 compliance 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) All records shall be maintained in accordance with Section C – General Record Keeping Requirements, of this permit.

SECTION D.10 FACILITY OPERATION CONDITIONS

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

Stack IDs 20-S-37 and 20-S-42

1. Unit IDs 37-1 and 42-1: South and North Mill Charging Systems

   Each Mill Charging System consists of an air conveyor system, a primary-receiver baghouse hopper, and interconnecting conveyors. Material is vacuum conveyed from the drum dryer holding tanks to a receiver baghouse and then fed to a mill weigh hopper.

   Emission units associated with Unit IDs 37-1 and 42-1 were installed in March, 1982.

   Each system is controlled by a baghouse.

(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 IDs 20-S-37 and 20-S-42 shall be limited to 0.022 gr/dscf and 0.200 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.10.2 Particulate Matter (PM) [Hammond Air Quality Control Ordinance No. 3522 (as amended)] [326 IAC 2-2]

Pursuant to the Hammond Air Quality Control Ordinance No. 3522 (as amended), particulate matter emissions from Stack IDs 20-S-37 and 20-S-42 shall be set equal to the PM10 emission limit, 0.022 gr/dscf and 0.200 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 (PSD) do not apply.

D.10.3 Particulate Matter less than 2.5 microns in diameter (PM2.5) [Hammond Air Quality Control Ordinance No. 3522 (as amended)] [326 IAC 2-3] [326 IAC 2-1.1-5]

Pursuant to the Hammond Air Quality Control Ordinance No. 3522 (as amended), PM2.5 emissions from Stack IDs 20-S-37 and 20-S-42 shall be set equal to the PM10 emission limit, 0.022 gr/dscf and 0.200 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 2-3 (Emission Offset) and 326 IAC 2-1.1-5 (Nonattainment NSR) do not apply.

D.10.4 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan, in accordance with Section B – Preventive Maintenance Plan, of this permit, is required for these facilities and any control devices.

Compliance Determination Requirements

D.10.5 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.10.1, the baghouse 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.10.6 Visible Emissions Notations

(a) Visible emission notations of the Stack IDs 20-S-37 and 20-S-42 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 steps in accordance with Section C – Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C – Response to Excursions or Exceedances shall be considered a deviation from this permit.

D.10.7 Baghouse Parametric Monitoring

(a) The Permittee shall record the pressure drop across each baghouse used in conjunction with the processes associated with Stack IDs 20-S-37 and 20-S-42, at least once per day when the process is in operation. When for any one reading, the pressure drop across any baghouse is outside the normal range of the following:

(*Stack IDs 20-S-37 and 20-S-42*)

Control Unit ID	**Pressure Drop** (inches of water)
(Unit IDs 37-1 and 42-1)	
37-1F (Baghouse)	2.0 - 10.0
42-1F (Baghouse)	2.0 - 10.0

or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C- Response to Excursions or Exceedances. A pressure reading that is outside the above-mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C – Response to Excursions or Exceedances, 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 HDEM and shall be calibrated at least once every six (6) months.

D.10.8 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.10.9 Record Keeping Requirements

(a) To document compliance with Section C – Opacity and Condition D.10.6, the Permittee shall maintain daily records of the visible emission notations of the Stack IDs 20-S-37 and 20-S-42 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 compliance with Condition D.10.7, 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) All records shall be maintained in accordance with Section C – General Record Keeping Requirements, of this permit.

SECTION D.11 FACILITY OPERATION CONDITIONS – INSIGNIFICANT ACTIVITY

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

Stack IDs 18-S-49 & 18-S-24

1. Unit IDs 49-1 & 24-1: Cleaver Brooks Boiler No. 2 and No. 1

   Each Boiler is rated at 8.4 MMBtu/hr and is fueled by natural gas only. There are no pollution control equipment associated with these units.

   Emission units associated with Unit ID 49-1 were installed in 1990 and those associated with Unit ID 24-1 were installed in 1978.
   [326 IAC 6.8-1-2(b)(3) and 326 IAC 6.8-2-13(b)]

(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.11.1 Particulate Matter (PM) [326 IAC 6.8-1-2(b)(3)] [326 IAC 2-2]

Pursuant to 326 IAC 6.8-1-2(b)(3) (Particulate Emission Limitations), emissions of particulate matter (PM) from each fuel combustion steam generator associated with Stack IDs 18-S-49 and 18-S-24 that burns natural gas only shall be limited to 0.01 grains per dry standard cubic foot (gr/dscf). This requirement will ensure that the source total PM10 emissions stay below 100 tons/yr. Therefore, the requirements of 326 IAC 2-2 (PSD) do not apply.

D.11.2 Particulate Matter less than 10 microns in diameter (PM10) [Hammond Air Quality Control Ordinance No. 3522 (as amended)] [326 IAC 2-8-4] [326 IAC 2-2]

Pursuant to the Hammond Air Quality Control Ordinance No. 3522 (as amended), the PM10 emissions from Stack IDs 18-S-49 and 18-S-24 shall be set equal to the PM emissions limit, 0.01 gr/dscf and 0.129 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.11.3 Particulate Matter less than 2.5 microns in diameter (PM2.5) [Hammond Air Quality Control Ordinance No. 3522 (as amended)] [326 IAC 2-3] [326 IAC 2-1.1-5]

Pursuant to the Hammond Air Quality Control Ordinance No. 3522 (as amended), PM2.5 emissions from Stack IDs 18-S-49 and 18-S-24 shall be set equal to the PM emissions limit, 0.01 gr/dscf and 0.129 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 2-3 (Emission Offset) and 326 IAC 2-1.1-5 (Nonattainment NSR) do not apply.

Compliance Determination Requirements

D.11.4 Particulate Matter (PM) [326 IAC 6.8-1-2(b)(3)] [326 IAC 6.8-2-13(b)]

In order to demonstrate compliance with the particulate matter (PM), particulate matter less than 10 microns in diameter (PM10), and particulate matter less than 2.5 microns in diameter (PM2.5) emission limitations in Conditions D.11.1, D.11.2 and D.11.3, the Cleaver Brooks Boiler No. 2 and No. 1 (Stack IDs 18-S-49 and 18-S-24) shall only burn natural gas.

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

D.11.5 Record Keeping Requirements

(a) To document compliance with Conditions D.11.1, D.11.2 and D.11.3, the Permittee shall maintain monthly records of the fuel usage for each boiler. These records shall be made available upon request by HDEM.

(b) All records shall be maintained in accordance with Section C – General Record Keeping Requirements, of this permit.

SECTION D.12 FACILITY OPERATION CONDITIONS – INSIGNIFICANT ACTIVITY

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

Stack ID 13-S-48

1. Unit IDs 48-1 and 48-2: Wet Mixing North and South Systems

   The Mixing Systems are used for wet-mixing raw ingredients. Liquid is charged to the mixers from drums and holding tanks and then dry materials in bags are manually added to produce slurries. The mixed slurry is then pumped from the mixers to the wet grinding equipment then to further processing.

   Emission units associated with Unit IDs 48-1 and 48-2 were installed in November, 1994.

   Each system is vented to a cartridge filter followed by a HEPA unit.
   [326 IAC 6.8-2-13(a)]

2. Unit ID 48-3: Rust Inhibitor Process

   The Rust Inhibitor Process mixes various chemical powders and liquids. The powders are dumped manually to the bag unloader and fed into the mixing tank. The liquid raw material is added through the drum station. The mixer discharges into 5-gallon pails or 55-gallon drums.

   Emission units associated with Unit ID 48-3 were installed in August, 1997.

   This system is vented to a baghouse which vents into the Wet Mixing South HEPA unit.
   [326 IAC 6.8-2-13(a)]

3. Unit ID 48-4: Liquid Stain Inhibitor Process

   The Liquid Stain Inhibitor Process mixes various chemical powders and liquids. The powders are dumped manually to the bag unloader and fed into the mixing tank. The liquid raw materials are added through the weigh tank. The mixer discharges into the Unit 48-3 filling stations.

   Emission units associated with Unit 48-4 were installed in May, 2000.

   This system is vented to the Rust Inhibitor baghouse.
   [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.12.1 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 13-S-48 shall be limited to 0.022 gr/dscf and 0.471 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.12.2 Particulate Matter (PM) [Hammond Air Quality Control Ordinance No. 3522 (as amended)] [326 IAC 2-2]

Pursuant to the Hammond Air Quality Control Ordinance No. 3522 (as amended), particulate matter emissions from Stack 13-S-48 shall be set equal to the PM10 emission limit, 0.022 gr/dscf and 0.471 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.12.3 Particulate Matter less than 2.5 microns in diameter (PM2.5) [Hammond Air Quality Control Ordinance No. 3522 (as amended)] [326 IAC 2-3] [326 IAC 2-1.1-5]

Pursuant to the Hammond Air Quality Control Ordinance No. 3522 (as amended), PM2.5 emissions from Stack 13-S-48 shall be set equal to the PM10 emission limit, 0.022 gr/dscf and 0.471 lbs/hr. This requirement will ensure that the source total PM2.5 emissions stay below 100 tons/yr. Therefore, the requirements of 326 IAC 2-3 (Emission Offset) and 326 IAC 2-1.1-5 (Nonattainment NSR) do not apply.

D.12.4 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan, in accordance with Section B – Preventive Maintenance Plan, of this permit, is required for these facilities and any control devices.

Compliance Determination Requirements

D.12.5 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.12.1, 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.

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

D.12.6 Visible Emissions Notations

(a) Visible emission notations of the Stack ID 13-S-48 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 steps in accordance with Section C – Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C – Response to Excursions or Exceedances shall be considered a deviation from this permit.

D.12.7 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 13-S-48, at least once per day when the process is in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range of the following:

(*Stack ID 13-S-48*)

Control Unit ID	Pressure Drop (inches of water)
(Unit ID 48-1)	
48-1 F (Cartridge Filter)	1.0 - 9.0
48-1 H (HEPA)	0.1 - 5.0
(Unit ID 48-2)	
48-2 F (Cartridge Filter)	1.0 - 9.0
48-2 H (HEPA)	0.1 - 5.0
(Unit ID 48-3)	
48-3 F (Baghouse)	0.5 - 8.5
48-2 H (HEPA)	0.1 - 5.0
(Unit ID 48-4)	
48-3 F (Baghouse)	0.5 - 8.5
48-2 H (HEPA)	0.1 - 5.0

or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C- Response to Excursions or Exceedances. A pressure reading that is outside the above-mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C – Response to Excursions or Exceedances, 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 HDEM and shall be calibrated at least once every six (6) months.

D.12.8 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.12.9 Record Keeping Requirements

(a) To document compliance with Section C – Opacity and Condition D.12.6, the Permittee shall maintain daily records of the visible emission notations of the Stack ID 13-S-48 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 compliance with Condition D.12.7, 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) All records shall be maintained in accordance with Section C – General Record Keeping Requirements, of this permit.

SECTION D.13 FACILITY OPERATION CONDITIONS – INSIGNIFICANT ACTIVITY

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

Stack ID 14-S-45

1. Unit IDs 45-1 and 45-2: Packing Operation North and South

   Each Packing Operation consists of hoppers, packers, and interconnecting conveyors. Material is conveyed to the hoppers which feeds it to the packers. Packed bags are then sent to a palletizer.

   Emission units associated with Unit IDs 45-1 and 45-2 were installed in June, 1989.

   The two packing systems share a baghouse.
   [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.13.1 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-45 shall be limited to 0.022 gr/dscf and 0.471 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.13.2 Particulate Matter (PM) [Hammond Air Quality Control Ordinance No. 3522 (as amended)] [326 IAC 2-2]

Pursuant to the Hammond Air Quality Control Ordinance No. 3522 (as amended), particulate matter emissions from Stack ID 14-S-45 shall be set equal to the PM10 emission limit, 0.022 gr/dscf and 0.471 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.13.3 Particulate Matter less than 2.5 microns in diameter (PM2.5) [Hammond Air Quality Control Ordinance No. 3522 (as amended)] [326 IAC 2-3] [326 IAC 2-1.1-5]

Pursuant to the Hammond Air Quality Control Ordinance No. 3522 (as amended), PM2.5 emissions from Stack ID 14-S-45 shall be set equal to the PM10 emission limit, 0.022 gr/dscf and 0.471 lbs/hr. This requirement will ensure that the source total PM2.5 emissions stay below 100 tons/yr. Therefore, the requirements of 326 IAC 2-3 (Emission Offset) and 326 IAC 2-1.1-5 (Nonattainment NSR) do not apply.

D.13.4 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan, in accordance with Section B – Preventive Maintenance Plan of this permit, is required for these facilities and any control devices.

Compliance Determination Requirements

D.13.5 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.13.1, 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.

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

D.13.6 Visible Emissions Notations

(a) Visible emission notations of the Stack ID 14-S-45 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 steps in accordance with Section C – Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C – Response to Excursions or Exceedances shall be considered a deviation from this permit.

D.13.7 Baghouse Parametric Monitoring

(a) The Permittee shall record the pressure drop across the baghouse used in conjunction with the processes associated with Stack ID 14-S-45, at least once per day when the process is in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range of the following:

(*Stack ID 14-S-45*)

Control Unit ID	**Pressure Drop** (inches of water)
(Unit IDs 45-1 and 45-2)	
45-1&2F	0.5 - 8.5

or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C- Response to Excursions or Exceedances. A pressure reading that is outside the above-mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C – Response to Excursions or Exceedances, 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 HDEM and shall be calibrated at least once every six (6) months.

D.13.8 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.13.9 Record Keeping Requirements

(a) To document compliance with Section C – Opacity and Condition D.13.6, the Permittee shall maintain daily records of the visible emission notations of the Stack ID 14-S-45 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 compliance with Condition D.13.7, the Permittee shall maintain daily records of the pressure drop across the 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) All records shall be maintained in accordance with Section C – General Record Keeping Requirements, of this permit.

SECTION D.14 FACILITY OPERATION CONDITIONS – INSIGNIFICANT ACTIVITY

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

Stack IDs 17-S-25 and 17-S-40

1. Unit IDs 25-1 and 40-1: North and South Drum Dryer Systems

Each Drum Dryer System consists of a steam heated drum dryer and interconnecting conveyors. The drum dryers are heated by process steam provided by boilers. The wet slurry is pumped onto the drum dryer where the majority of the moisture is removed. A heated vacuum conveyor line then finishes the drying of the product. The dried material is transferred to holding tanks for storage prior to further processing.

Emission units associated with Unit IDs 25-1 were installed in December, 1992 and those associated with Unit ID 40-1 were installed in July, 1990.

The control system on each system is comprised of a dust collecting hood and a scrubber. [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.14.1 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 17-S-25 and 17-S-40 shall be limited to 0.030 gr/dscf and 2.120 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.14.2 Particulate Matter (PM) [Hammond Air Quality Control Ordinance No. 3522 (as amended)] [326 IAC 2-2]

Pursuant to the Hammond Air Quality Control Ordinance No. 3522 (as amended), particulate matter emissions from Stack IDs 17-S-25 and 17-S-40 shall be set equal to the PM10 emission limit, 0.030 gr/dscf and 2.120 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.14.3 Particulate Matter less than 2.5 microns in diameter (PM2.5) [Hammond Air Quality Control Ordinance No. 3522 (as amended)] [326 IAC 2-3] [326 IAC 2-1.1-5]

Pursuant to the Hammond Air Quality Control Ordinance No. 3522 (as amended), PM2.5 emissions from Stack IDs 17-S-25 and 17-S-40 shall be set equal to the PM10 emission limit, 0.030 gr/dscf and 2.120 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 2-3 (Emission Offset) and 326 IAC 2-1.1-5 (Nonattainment NSR) do not apply.

D.14.4 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan, in accordance with Section B – Preventive Maintenance Plan, of this permit, is required for these facilities and any control devices.

Compliance Determination Requirements

D.14.5 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.14.1, the scrubber shall be operated at all times when the associated facility is in operation.

(b) In the event that scrubber failure is observed, if operations will continue for ten (10) days or more after the failure is observed before the failed unit will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed unit 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.14.6 Visible Emissions Notations

(a) Visible emission notations of the Stack IDs 17-S-25 and 17-S-40 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 steps in accordance with Section C – Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C – Response to Excursions or Exceedances shall be considered a deviation from this permit.

D.14.7 Scrubber Parametric Monitoring

(a) The Permittee shall record the pressure drop across each scrubber (Unit IDs 25-1 and 40-1) and verify there is a flow at least once daily when in operation. When for any one reading, the pressure drop across the scrubber is outside the normal range of the following:

(*Stack IDs 17-S-25 & 17-S-40)*

Control Unit ID	Pressure Drop (inches of water)
(Unit ID 25-1)	
25-1S	10.0 - 20.0
(Unit ID 40-1)	
40-1S	5.0 - 15.0

or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C- Response to Excursions or Exceedances. A pressure reading that is outside the above-mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C – Response to Excursions or Exceedances, 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 HDEM and shall be calibrated at least once every six (6) months.

D.14.8 Scrubber Failure Detection [326 IAC 2-8-5(1)] [326 IAC 2-8-4(1)]

(a) For a scrubber 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 scrubber 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).

Scrubber failure can be indicated by a significant drop in the scrubber's pressure reading with abnormal visible emissions, by an opacity violation, or by other means such as gas temperature or flow rate.

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

D.14.9 Record Keeping Requirements

(a) To document compliance with Section C – Opacity and Condition D.14.6 the Permittee shall maintain daily records of the visible emission notations of the Stack IDs 17-S-25 and 17-S-40 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 compliance with Condition D.14.7, the Permittee shall maintain the following:

(1) Daily records of the following operational parameters during normal operation:

(A) Pressure drop; and

(B) Verify presence of flow to the scrubbers.

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

(c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

SECTION D.15 FACILITY OPERATION CONDITIONS – INSIGNIFICANT ACTIVITY

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

Stack ID 20-S-36 and 20-S-41

1. Unit IDs 36-1 and 41-1: South and North Drum Dryer Silo Systems

   The Drum Dryer Silo Systems consist of storage tanks, flash dryer, and interconnecting conveyors. From the drum dryers, the material is air swept and cyclone separated. The separated material is screw conveyed to holding tanks to await further processing. The flash dryers are natural gas fired and provide a heated air stream that completes the drying of the material.

   Emission units associated with Unit IDs 36-1 and 41-1 were installed in March, 1982.

   Each system is controlled by a baghouse.
   [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.15.1 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 20-S-36 shall be limited to 0.022 gr/dscf and 0.395 lbs/hr and for Stack ID 20-S-41 shall be limited to 0.022 gr/dscf and 0.450 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.15.2 Particulate Matter (PM) [Hammond Air Quality Control Ordinance No. 3522 (as amended)] [326 IAC 2-2]

Pursuant to the Hammond Air Quality Control Ordinance No. 3522 (as amended), particulate matter emissions from Stack IDs 20-S-36 and 20-S-41 shall be set equal to the PM10 emission limit, 0.022 gr/dscf and 0.395 lbs/hr and 0.022 gr/dscf and 0.450 lbs/hr, respectively. 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.15.3 Particulate Matter less than 2.5 microns in diameter (PM2.5) [Hammond Air Quality Control Ordinance No. 3522 (as amended)] [326 IAC 2-3] [326 IAC 2-1.1-5]

Pursuant to the Hammond Air Quality Control Ordinance No. 3522 (as amended), PM2.5 emissions from Stack IDs 20-S-36 and 20-S-41 shall be set equal to the PM10 emission limit, 0.022 gr/dscf and 0.395 lbs/hr and 0.022 gr/dscf and 0.450 lbs/hr, respectively. This requirement will ensure that the source total PM2.5 emissions stay below 100 tons/yr. Therefore, the requirements of 326 IAC 2-3 (Emission Offset) and 326 IAC 2-1.1-5 (Nonattainment NSR) do not apply.

D.15.4 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan, in accordance with Section B – Preventive Maintenance Plan, of this permit, is required for these facilities and any control devices.

Compliance Determination Requirements

D.15.5 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.15.1, the baghouse 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.15.6 Visible Emissions Notations

(a) Visible emission notations of the Stack IDs 20-S-36 and 20-S-41 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 steps in accordance with Section C – Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C – Response to Excursions or Exceedances shall be considered a deviation from this permit.

D.15.7 Baghouse Parametric Monitoring

(a) The Permittee shall record the pressure drop across each baghouse used in conjunction with the processes associated with Stack IDs 20-S-36 and 20-S-41, at least once per day when the process is in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range of the following:

(*Stack IDs 20-S-36 and 20-S-41*)

Control Unit ID	Pressure Drop (inches of water)
(Unit ID 36-1)	
36-1F	1.0 - 9.0
(Unit ID 41-1)	
41-1F	1.0 - 9.0

or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C- Response to Excursions or Exceedances. A pressure reading that is outside the above-mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C – Response to Excursions or Exceedances, 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 HDEM and shall be calibrated at least once every six (6) months.

D.15.8 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.15.9 Record Keeping Requirements

(a) To document compliance with Section C – Opacity and Condition D.15.6, the Permittee shall maintain daily records of the visible emission notations of the Stack IDs 20-S-36 and 20-S-41 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 compliance with Condition D.15.7, 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) All records shall be maintained in accordance with Section C – General Record Keeping Requirements, of this permit.

SECTION D.16 FACILITY OPERATION CONDITIONS – TRIVIAL ACTIVITY

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

Stack IDs 20-S-39 & 20-S-44

1. Unit IDs 39-1 and 44-1: South and North Product Packing

   Each packing system consists of an air conveyor, receiver baghouse, hopper, and interconnecting conveyors. Milled products are conveyed to a receiver baghouse and fed to the packing hopper.

   Emission units associated with Unit IDs 39-1 and 44-1 were installed in March, 1982.

   Each system is controlled by a baghouse followed by a HEPA.
   [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.16.1 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 20-S-39 and 20-S-44 shall be limited to 0.022 gr/dscf and 0.496 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.16.2 Particulate Matter (PM) [Hammond Air Quality Control Ordinance No. 3522 (as amended)] [326 IAC 2-2]

Pursuant to the Hammond Air Quality Control Ordinance No. 3522 (as amended), particulate matter emissions from Stack IDs 20-S-39 and 20-S-44 shall be set equal to the PM10 emission limit, 0.022 gr/dscf and 0.496 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.16.3 Particulate Matter less than 2.5 microns in diameter (PM2.5) [Hammond Air Quality Control Ordinance No. 3522 (as amended)] [326 IAC 2-3] [326 IAC 2-1.1-5]

Pursuant to the Hammond Air Quality Control Ordinance No. 3522 (as amended), PM2.5 emissions from Stack IDs 20-S-39 and 20-S-44 shall be set equal to the PM10 emission limit, 0.022 gr/dscf and 0.496 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 2-3 (Emission Offset) and 326 IAC 2-1.1-5 (Nonattainment NSR) do not apply.

D.16.4 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan, in accordance with Section B – Preventive Maintenance Plan, of this permit, is required for these facilities and any control devices.

Compliance Determination Requirements

D.16.5 Particulate Matter less than 10 microns in diameter (PM10) [326 IAC 2-8-5(4)]

(a) Pursuant to FESOP No. F089-5200-00219, issued December 12, 1996, and in order to comply with Condition D.16.1, 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.

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

D.16.6 Visible Emissions Notations

(a) Visible emission notations of the Stack IDs 20-S-39 and 20-S-44 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 steps in accordance with Section C – Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C – Response to Excursions or Exceedances shall be considered a deviation from this permit.

D.16.7 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 20-S-39 and 20-S-44, at least once per day when the process is in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range of the following:

(*Stack IDs 20-S-39 & 20-S-44*)

Control Unit ID	**Pressure Drop** (inches of water)
(Unit ID 39-1)	
39-1F	1.0 - 9.0
39-1H	0.1 - 5.0

(Unit ID 44-1)	
44-1F	1.0 - 9.0
44-1H	0.1 - 5.0

or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C- Response to Excursions or Exceedances. A pressure reading that is outside the above-mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C – Response to Excursions or Exceedances, 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 HDEM and shall be calibrated at least once every six (6) months.

D.16.8 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.16.9 Record Keeping Requirements

(a) To document compliance with Section C – Opacity and Condition D.16.6, the Permittee shall maintain daily records of the visible emission notations of the Stack IDs 20-S-39 and 20-S-44 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 compliance with Condition D.16.7, 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) All records shall be maintained in accordance with Section C – General Record Keeping Requirements, of this permit.

SECTION D.17 FACILITY OPERATION CONDITIONS – TRIVIAL ACTIVITY

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

Stack ID 20-S-38 and 20-S-43

1. Unit IDs 38-1 and 43-1: Finished Product West and East Holding Tanks

   Each system consists of a vacuum conveyor, primary receiver baghouse, interconnecting conveyors and a hopper. The material is vacuum conveyed from dry milling operations to a primary baghouse and from there it is fed to the finished treated product holding tank.

   Emission units associated with Unit IDs 38-1 and 43-1 were installed in March, 1982.

   Emissions from each system is controlled by a baghouse.
   [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.17.1 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 20-S-38 and 20-S-43 shall be limited to 0.022 gr/dscf and 0.087 bs/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.17.2 Particulate Matter (PM) [Hammond Air Quality Control Ordinance No. 3522 (as amended)] [326 IAC 2-2]

Pursuant to the Hammond Air Quality Control Ordinance No. 3522 (as amended), particulate matter emissions from Stack IDs 20-S-38 and 20-S-43 shall be set equal to the PM10 emission limit, 0.022 gr/dscf and 0.087 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.17.3 Particulate Matter less than 2.5 microns in diameter (PM2.5) [Hammond Air Quality Control Ordinance No. 3522 (as amended)] [326 IAC 2-3] [326 IAC 2-1.1-5]

Pursuant to the Hammond Air Quality Control Ordinance No. 3522 (as amended), PM2.5 emissions from Stack IDs 20-S-38 and 20-S-43 shall be set equal to the PM10 emission limit, 0.022 gr/dscf and 0.087 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 2-3 (Emission Offset) and 326 IAC 2-1.1-5 (Nonattainment NSR) do not apply.

D.17.4 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan, in accordance with Section B – Preventive Maintenance Plan, of this permit, is required for these facilities and any control devices.

Compliance Determination Requirements

D.17.5 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.17.1, the baghouse 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.17.6 Visible Emissions Notations

(a) Visible emission notations of the Stack IDs 20-S-38 and 20-S-43 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 steps in accordance with Section C – Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C – Response to Excursions or Exceedances shall be considered a deviation from this permit.

D.17.7 Baghouse Parametric Monitoring

(a) The Permittee shall record the pressure drop across each baghouse used in conjunction with the process associated with Stack IDs 20-S-38 and 20-S-43, at least once per day when the process is in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range of the following:

(*Stack IDs 20-S-38 and 20-S-43*)

Control Unit ID	Pressure Drop (inches of water)
(Unit ID 38-1)	
38-1F	1.0 - 9.0
(Unit ID 43-1)	
43-1F	1.0 - 9.0

or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C- Response to Excursions or Exceedances. A pressure reading that is outside the above-mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C – Response to Excursions or Exceedances, 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 HDEM and shall be calibrated at least once every six (6) months.

D.17.8 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.17.9 Record Keeping Requirements

(a) To document compliance with Section C – Opacity and Condition D.17.6, the Permittee shall maintain daily records of the visible emission notations of the Stack IDs 20-S-38 and 20-S-43 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 compliance with Condition D.17.7, 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) All records shall be maintained in accordance with Section C – General Record Keeping Requirements, of this permit.

SECTION D.18 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.18.1 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.18.2 Particulate Matter (PM) [Hammond Air Quality Control Ordinance No. 3522 (as amended)] [326 IAC 2-2]

Pursuant to the Hammond Air Quality Control Ordinance No. 3522 (as amended), 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.18.3 Particulate Matter less than 2.5 microns in diameter (PM2.5) [Hammond Air Quality Control Ordinance No. 3522 (as amended)] [326 IAC 2-3] [326 IAC 2-1.1-5]

Pursuant to the Hammond Air Quality Control Ordinance No. 3522 (as amended), 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 2-3 (Emission Offset) and 326 IAC (Nonattainment NSR) do not apply.

D.18.4 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.18.5 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan, in accordance with Section B – Preventive Maintenance Plan, of this permit, is required for this facility and any control devices.

Compliance Determination Requirements

D.18.6 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.18.1, 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.18.7 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.18.4, 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.18.8 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 steps in accordance with Section C – Response to Excursions or Exceedances. Failure to take

response steps in accordance with Section C – Response to Excursions or Exceedances shall be considered a deviation from this permit.

D.18.9 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 steps in accordance with Section C- Response to Excursions or Exceedances. A pressure reading that is outside the above-mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C – Response to Excursions or Exceedances, 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 HDEM and shall be calibrated at least once every six (6) months.

D.18.10 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.18.11 Record Keeping Requirements

(a) To document compliance with Section C – Opacity and Condition D.18.8, 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 compliance with Condition D.18.9, 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) All records shall be maintained in accordance with Section C – General Record Keeping Requirements, of this permit.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION
and
HAMMOND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
-AIR POLLUTION CONTROL DIVISION-

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP) CERTIFICATION

Source Name: **Hammond Group, Inc. (HGI)**
Source Address: 2308 – 165th Street, Hammond, Indiana 46320
Mailing Address: 2323 – 165th Street, Hammond, Indiana 46320
FESOP 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 BRANCH
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251
Phone: 317-233-0178
Fax: 317-233-6865

and

HAMMOND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
AIR POLLUTION CONTROL DIVISION
5925 CALUMET AVENUE
HAMMOND, INDIANA 46320

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP) EMERGENCY OCCURRENCE REPORT

Source Name: **Hammond Group, Inc. (HGI)**
Source Address: 2308 – 165th Street, Hammond, Indiana 46320
Mailing Address: 2323 – 165th Street, Hammond, Indiana 46320
FESOP 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) and the Hammond Department of Environmental Management (HDEM), within four (**4**) business hours (1-800-451-6027 or 317-233-0178, ask for IDEM Compliance Section) and (219-853-6306, for HDEM); and
• The Permittee must submit notice in writing or by facsimile within two (**2**) days (Facsimile Number: 317-233-6865, IDEM and 219-853-6343, HDEM), 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, PM10, 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: _____

A certification is not required for this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION

and

HAMMOND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
AIR POLLUTION CONTROL DIVISION

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
Mailing Address: 2323 – 165th Street, Hammond, Indiana 46320
FESOP No.: **F089-14165-00219**

Months: _____ to _____ Year: _____

This report shall be submitted quarterly based on a calendar year. Any deviation from the requirements, 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:

Page 2 of 2

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: _____

Attach a signed certification to complete this report.

Indiana Department of Environmental Management
Office of Air Quality
and
Hammond Department of Environmental Management
- Air Pollution Control Division-

Technical Support Document (TSD) for a
Federally Enforceable State Operating Permit Renewal

Source Background and Description

Source Name:	**Hammond Group, Inc. (HGI)**
Source Location:	**2308 – 165th Street, Hammond, Indiana 46320**
County:	**Lake**
SIC Code:	**2819 – Industrial Inorganic Chemicals, nec** **2869 – Industrial Organic Chemicals, nec** **2816 – Inorganic Pigments**
Permit Renewal No.:	**F089-14165-00219**
Permit Reviewer:	**Debra Malone, HDEM**

The Hammond Department of Environmental Management (HDEM) has reviewed the operating permit renewal application from Hammond Group, Inc. relating to the operation of an Industrial Inorganic Chemicals and Inorganic Pigments Manufacturing Plant.

History

On March 12, 2001, Hammond Group, Inc. submitted applications to the OAQ and HDEM requesting to renew its operating permit. Hammond Group, Inc. was issued a FESOP, F089-5200-00219, on December 12, 1996.

Permitted Emission Units and Pollution Control Equipment

The source consists of the following permitted 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 1-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.

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 IDs 52-2, 52-3, 52-6, 52-7 were installed in 1930.
Emission units associated with Unit ID 52-4 were installed in 1980.
Emission units associated with Unit ID 52-5 were installed in 1971.
Emission units associated with Unit ID 52-8 were installed in 1955.
Emission units associated with Unit ID 52-9 were installed in 1957.
Emission units associated with Unit ID 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 ID 52-20 were installed in 1960.

8. Unit ID 52-21: 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 52-21 were installed in 2002.

Unit 52-21 is controlled by a baghouse followed by a HEPA followed by the Main Control System.

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, & 26-2: No. 2, 3, 4, 5, & 6 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 and those associated with Unit ID 26-2 were installed in July, 1995.

Each 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 ID 56-7 were installed in June, 1999.

This unit is controlled by a 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.

This unit is controlled by a cartridge filter.

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 IDs 34-1 and 34-2: B-Furnace Mill and Blending System

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.

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

Emission units associated with Unit ID 34-1 were installed in 1955 and those associated with Unit ID 34-2 were installed in 2001.

Both units share 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.

Stack ID 6-S-47

1. Unit ID 47-1: S-Furnace Operation

The S-Furnace Operation consists of a mixer, furnace, fritting device, drying screw, sizing screen, packers, and interconnecting conveyors. Lead oxide and other raw materials are batch-mixed in a mixer. This mixture is then charged into the furnace, which 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. The screened material is then conveyed to packing.

Emission units associated with Unit ID 47-1 were installed in February, 1995.

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

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, 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, T-2000, R-2001, and DC-3002 (Trivial Activities except for RB-2000 and DC-3002 which are classified as Insignificant Activities) (Shared unit between Units ID 15-1 & 15-2): R-1001 (Trivial Activity)
   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, bag packer and a sling bag packer (shared between both lines). Various raw materials are mixed in the mill. The blended material is 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.

   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.

Stack IDs 20-S-37 and 20-S-42

1. Unit IDs 37-1 and 42-1: South and North Mill Charging Systems

   Each Mill Charging System consists of an air conveyor system, a primary-receiver baghouse hopper, and interconnecting conveyors. Material is vacuum conveyed from the drum dryer holding tanks to a receiver baghouse and then fed to a mill weigh hopper.

   Emission units associated with Unit IDs 37-1 and 42-1 were installed in March, 1982.

   Each system is controlled by a baghouse.

Emission Units and Pollution Control Equipment Constructed and/or Operated without a Permit

There are no unpermitted emission units operating at this source during this review process.

Emission Units and Pollution Control Equipment Removed From the Source

There are no emission units that were removed from the source.

Insignificant Activities

The source also consists of the following insignificant activities, as defined in 326 IAC 2-7-1(21):

(a) Stack IDs 18-S-49 & 18-S-24

1. Unit ID 49-1 & 24-1: Cleaver Brooks Boiler No. 2 and No. 1

   Each Boiler is rated at 8.4 MMBtu/hr and is fueled by natural gas only. There are no pollution control equipment associated with these units.

   Emission units associated with Unit ID 49-1 were installed in 1990 and those associated with Unit ID 24-1 were installed in 1978.
   [326 IAC 6.8-1-2(b)(3) and 326 IAC 6.8-2-13(b)]

(b) Stack ID 13-S-48

1. Unit IDs 48-1 and 48-2: Wet Mixing North and South Systems

   The Mixing Systems are used for wet-mixing raw ingredients. Liquid is charged to the mixers from drums and holding tanks and then dry materials in bags are manually added to produce slurries. The mixed slurry is then pumped from the mixers to the wet grinding equipment then to further processing.

   Emission units associated with Unit IDs 48-1 and 48-2 were installed in November, 1994.

   Each system is vented to a cartridge filter followed by a HEPA unit.
   [326 IAC 6.8-2-13(a)]

2. Unit ID 48-3: Rust Inhibitor Process

   The Rust Inhibitor Process mixes various chemical powders and liquids. The powders are dumped manually to the bag unloader and fed into the mixing tank. The liquid raw material is added through the drum station. The mixer discharges into 5-gallon pails or 55-gallon drums.

   Emission units associated with Unit ID 48-3 were installed in August, 1997.

   This system is vented to a baghouse which vents into the Wet Mixing South HEPA unit.
   [326 IAC 6.8-2-13(a)]

3. Unit ID 48-4: Liquid Stain Inhibitor Process

   The Liquid Stain Inhibitor Process mixes various chemical powders and liquids. The powders are dumped manually to the bag unloader and fed into the mixing

tank. The liquid raw materials are added through the weigh tank. The mixer discharges into the Unit ID 48-3 filling stations.

Emission units associated with Unit ID 48-4 were installed in May, 2000.

This system is vented to the Rust Inhibitor baghouse.
[326 IAC 6.8-2-13(a)]

(c) Stack ID 14-S-45

1. Unit IDs 45-1 and 45-2: Packing Operation North and South

Each Packing Operation consists of hoppers, packers, and interconnecting conveyors. Material is conveyed to the hoppers which feeds it to the packers. Packed bags are then sent to a palletizer.

Emission units associated with Unit IDs 45-1 and 45-2 were installed in June, 1989.

The two packing systems share a baghouse.
[326 IAC 6.8-2-13(a)]

(d) Stack ID 17-S-25 and 17-S-40

1. Unit IDs 25-1 and 40-1: North and South Drum Dryer Systems

Each Drum Dryer System consists of a steam heated drum dryer and interconnecting conveyors. The drum dryers are heated by process steam provided by boilers. The wet slurry is pumped onto the drum dryer where the majority of the moisture is removed. A heated vacuum conveyor line then finishes the drying of the product. The dried material is transferred to holding tanks for storage prior to further processing.

Emission units associated with Unit ID 25-1 were installed in December, 1992 and those associated with Unit ID 40-1 were installed in July, 1990.

The control system on each system is comprised of a dust collecting hood and a scrubber.
[326 IAC 6.8-2-13(a)]

(e) Stack ID 20-S-36 and 20-S-41

1. Unit IDs 36-1 and 41-1: South and North Drum Dryer Silo Systems

The Drum Dryer Silo Systems consist of storage tanks, flash dryer, and interconnecting conveyors. From the drum dryers, the material is air swept and cyclone separated. The separated material is screw conveyed to holding tanks to await further processing. The flash dryers are natural gas-fired and provide a heated air stream that completes the drying of the material.

Emission units associated with Unit IDs 36-1 and 41-1 were installed in March, 1982.

Each system is controlled by a baghouse.
[326 IAC 6.8-2-13(a)]

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

(g) 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.

(h) Combustion source flame safety purging on startup.

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

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

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

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

(m) 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.

(n) 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]

(o) Closed loop heating and cooling systems.

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

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

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

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

(t) Heat exchanger cleaning and repair.

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

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

(w) 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.

(x) 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.

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

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

(aa) Purge double block and bleed valves.

(bb) Filter or coalescer media changeout.

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

(dd) 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 IDs 20-S-39 & 20-S-44

1. Unit IDs 39-1 and 44-1: South and North Product Packing

Each packing system consists of an air conveyor, receiver baghouse, hopper, and interconnecting conveyors. Milled products are conveyed to a receiver baghouse and fed to the packing hopper.

Emission units associated with Unit IDs 39-1 and 44-1 were installed in March, 1982.

Each system is controlled by a baghouse followed by a HEPA.
[326 IAC 6.8-2-13(a)]

(b) Stack ID 20-S-38 and 20-S-43

1. Unit IDs 38-1 and 43-1: Finished Product West and East Holding Tanks

Each system consists of a vacuum conveyor, primary receiver baghouse, interconnecting conveyors and a hopper. The material is vacuum conveyed from dry milling operations to a primary baghouse and from there it is fed to the finished treated product holding tank.

Emission units associated with Unit IDs 38-1 and 43-1 were installed in March, 1982.

Emissions from each system are controlled by a baghouse.
[326 IAC 6.8-2-13(a)]

(c) 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)]

Existing Approvals

Since the issuance of the FESOP (F089-5200-00219) on December 12, 1996, the source has constructed or has been operating under the following approvals as well:

(a) FESOP 089-5200-00219, issued on December 12, 1996; and expiring on December 12, 2001.

(b) First Significant Permit Modification 089-8517, issued on 9/18/97,

(c) First Administrative Permit Amendment 089-9529, issued on 3/25/98,

(d) Second Administrative Permit Amendment 089-9591, issued on 4/2/98,

(e) Third Administrative Permit Amendment 089-9739, issued on 5/19/98,

(f) Fourth Administrative Permit Amendment 089-10112, issued on 12/4/98,

(g) Fifth Administrative Permit Amendment 089-11101, issued on 8/4/99,

(h) Sixth Administrative Permit Amendment 089-11279, issued on 9/8/99,

(i) Seventh Administrative Permit Amendment 089-11499, issued on 11/5/99,

(j) Eighth Administrative Permit Amendment 089-11790, issued on 2/10/00,

(k) Ninth Administrative Permit Amendment 089-12330, issued on 6/16/00,

(l) Tenth Administrative Permit Amendment 089-12418, issued on 8/7/00,

(m) Eleventh Administrative Permit Amendment 089-13795, issued on 3/13/01,

(n) Twelfth Administrative Permit Amendment 089-14471, issued on 6/28/01,

(o) Thirteenth Administrative Permit Amendment 089-14919, issued on 10/5/01,

(p) Fourteenth Administrative Permit Amendment 089-15040, issued on 12/19/01,

(q) Fifteenth Administrative Permit Amendment 089-15717, issued on 4/25/02, and

(r) Sixteenth Administrative Permit Amendment 089-15660, issued on 2/20/03.

All terms and conditions of previous permits issued pursuant to permitting programs approved into the state implementation plan have been either incorporated as originally stated, revised, or deleted by this permit. All previous registrations and permits are superseded by this permit.

Enforcement Issue

There are no enforcement actions pending

Stack Summary

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (°F)
1-S-52	Main Control System	82	3	22,551	167
4A-S-8	No. 2 Barton System	60	1.25	3,045	167
14-S-16	No. 3 Barton System	60	1.25	3,484	151
1-S-2	No. 4 Barton System	60	1.25	3,691	198
1-S-26	No. 5 & 6 Barton Systems	60	1.25	3,484	198
16-S-56	Various	82	3	28,227	241
4-S-35	B-Furnace Drying System & Packing Stations 3 & 4	61	1.25	5,854	201
1-S-27	Lead Oxide Mill & Tote Bin Mill	61	1.125	2,969	141
6-S-33	B-Furnace	60	2	10,857	232
4B-S-34	Various	61	1.5	3,670	109
6-S-47	Lead Borate Operation	60	1.8	6,827	258
14-S-15	Expander	*	*	*	*
20-S-37	South Mill Charging	38	0.50	525	70
20-S-42	North Mill Charging	38	0.50	525	70
20-S-39	South Product Packing	48	1.25	3,000	70
20-S-44	North Product Packing	43	1.25	1,500	70
13-S-48	Wet Mixing N & S, Rust Inhibitor Process, and Liquid Stain Inhibitor Process	50	2	10,000	70
14-S-45	Packing Operations – North and South	30	1.25	2,500	70

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (°F)
20-S-36	South Drum Dryer Storage Silo	48	1.33	3,000	300
20-S-41	North Drum Dryer Storage Silo	48	1.33	3,000	300
18-S-49	Cleaver Brooks Boiler No. 2	25	1.25	2,300	350
18-S-24	Cleaver Brooks Boiler No. 1	25	1.25	2,300	350
17-S-25	North Drum Dryer System	70	2	9,044	117
17-S-40	South Drum Dryer System	70	2	9,044	117
20-S-38	Finished Treated Product – West Holding Tank	48	1.25	525	70
20-S-43	Finished Treated Product – East Holding Tank	38	0.50	525	70
V-1	General Bldg. Ventilation Control System	76	6	55,679	86

* Various Stack IDs associated with the Expander Operation (previously Stack ID 14-S-15). See Appendix A.

Emission Calculations

See Appendix A of this document for emissions calculations totals (1 page).

County Attainment Status

The following attainment status designations are applicable to Lake County:

Pollutant	Designation
SO_2	Better than national standards.
CO	Attainment effective February 18, 2000, for the part of the city of East Chicago bounded by Columbus Drive on the north; the Indiana Harbor Canal on the west; 148th Street, if extended, on the south; and Euclid Avenue on the east. Unclassifiable or attainment effective November 15, 1990, for the remainder of East Chicago and Lake County.
O_3	Nonattainment Subpart 2 Moderate effective June 15, 2004, for the 8-hour ozone standard.[1]
PM_{10}	Attainment effective March 11, 2003, for the cities of East Chicago, Hammond, Whiting, and Gary. Unclassifiable effective November 15, 1990, for the remainder of Lake County.
NO_2	Cannot be classified or better than national standards.
Pb	Not designated.

[1]Nonattainment Severe 17 effective November 15, 1990, for the Chicago-Gary-Lake County area for the 1-hour ozone standard which was revoked effective June 15, 2005.

Basic nonattainment designation effective federally April 5, 2005, for PM2.5.

(a) Ozone Standards

(1) On October 25, 2006, the Indiana Air Pollution Control Board finalized a rule revision to 326 IAC 1-4-1 revoking the one-hour ozone standard in Indiana.

(2) 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.

(i) 1-hour ozone standard

On December 22, 2006 the United States Court of Appeals, District of Columbia issued a decision which served to partially vacate and remand the U.S. EPA's final rule for implementation of the eight-hour National Ambient Air quality Standard for ozone. *South Coast Air Quality Mgmt. Dist. v. EPA*, 472 F.3d 882 (D.C. Cir., December 22, 2006), *rehearing denied* 2007 U.S. App. LEXIS 13748 (D.C. Cir., June 8, 2007). The U.S. EPA has instructed IDEM to issue permits in accordance with its interpretation of the *South Coast* decision as follows: Gary-Lake-Porter County was previously designated as a severe non-attainment area prior to revocation of the one-hour ozone standard, therefore, pursuant to the anti-backsliding provisions of the Clean Air Act, any new or existing source must be subject to the major source applicability cut-offs and offset ratios under the area's previous one-hour standard designation. This means that a source must achieve the Lowest Achievable Emission Rate (LAER) if it exceeds 25 tons per year of VOC emissions and must offset any increase in VOC emissions by a decrease of 1.3 times that amount.

On January 26, 1996 in 40 CFR 52.777(i), the U.S. EPA granted a waiver of the requirements of Section 182(f) of the CAA for Lake and Porter Counties, including the lower NOx threshold for nonattainment new source review. Therefore, VOC emissions alone are considered when evaluating the rule applicability relating to the 1-hour ozone standards. Therefore, VOC emissions were reviewed pursuant to the requirements for Emission Offset, 326 IAC 2-3. See the State Rule Applicability for the source section.

(ii) 8-hour ozone standard

VOC and NOx emissions are considered when evaluating the rule applicability relating to the 8-hour ozone standard. Lake County has been designated as nonattainment for the 8-hour ozone standard. Therefore, VOC and NOx emissions were reviewed pursuant to the requirements for Emission Offset, 326 IAC 2-3. See the State Rule Applicability – Entire Source section.

(b) PM2.5

U.S. EPA, in the Federal Register Notice 70 FR 943 dated January 5, 2005, has designated Lake County as nonattainment for PM2.5. On March 7, 2005 the Indiana Attorney General's Office, on behalf of IDEM, filed a lawsuit with the Court of Appeals for the District of Columbia Circuit challenging U.S. EPA's designation of nonattainment areas without sufficient data. 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 New Source Review Rule for PM2.5 promulgated on May 8, 2008, and effective on July 15, 2008. Therefore, direct PM2.5 and SO2 emissions were reviewed pursuant to the

requirements of Nonattainment New Source Review, 326 IAC 2-1.1-5. See the State Rule Applicability – Entire Source section.

(c) Other Criteria Pollutants

Lake County has been classified as attainment or unclassifiable in Indiana for PM10, SO2, NOx, CO, and Lead. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

(d) Since this source is classified as a chemical process plant, it is considered one of the twenty-eight (28) listed source categories, as specified in 326 IAC 2-2-1(gg)(1).

(e) Fugitive Emissions
Since this type of operation is in one of the twenty-eight (28) listed source categories under 326 IAC 2-2 or 326 IAC 2-3, fugitive emissions are counted toward the determination of PSD or Emission Offset applicability.

Unrestricted Potential Emissions

This table reflects the unrestricted potential emissions of the source.

Pollutant	Unrestricted Potential Emissions (tons/yr)
PM	> 100
PM_{10}	> 100
$PM_{2.5}$	> 100
SO_2	< 100
VOC	< 25
CO	< 100
NO_x	< 100
Pb*	> 100

HAP's	Unrestricted Potential Emissions (tons/yr)
*Inorganic Lead Compounds as Lead (Pb)	> 25
TOTAL HAPS	> 25

(a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of PM10, PM2.5, and Lead (Pb) is equal to or greater than 100 tons per year. The source is subject to the provisions of 326 IAC 2-7. However, the source has agreed to limit their PM10, PM2.5, and Pb emissions to less than Title V levels; therefore, the source will be issued a FESOP.

(b) The potential to emit (as defined in 326 IAC 2-7-1(29)) of all other criteria pollutants are less than 100 tons per year.

(c) The potential to emit (as defined in 326 IAC 2-7-1(29)) of any single HAP is equal to or greater than ten (10) tons per year and/or the potential to emit (as defined in 326 IAC 2-7-1(29)) of a combination of HAPs is equal to or greater than twenty-five (25) tons per year. However, the source has agreed to limit their single HAP emissions and total HAP emissions below Title V limits. Therefore, the source will be issued a FESOP.

Fugitive Emissions

Since this type of operation is one of the twenty-eight (28) listed source categories under 326 IAC 2-7, fugitive emissions are counted toward the determination of Part 70 applicability.

Actual Emissions

The following table shows the actual emissions from the source. This information reflects the 2006 OAQ emission data.

Pollutant	Actual Emissions (tons/year)
PM	0.31
PM_{10}	0.31
SO_2	0.02
VOC	0.22
CO	1.00
NO_x	4.05
Lead	0.01

Potential to Emit After Issuance

The source has opted to remain a FESOP source. The table below summarizes the potential to emit, reflecting all limits of the emission units. Any control equipment is considered enforceable only after issuance of this FESOP and only to the extent that the effect of the control equipment is made practically enforceable in the permit.

	Potential To Emit (tons/year)							
Process/ Emission Unit	**PM**	**PM_{10}**	**$PM_{2.5}$**	**SO_2**	**VOC**	**CO**	**NO_X**	**HAPs / Pb**
Stack ID 1-S-52	4.380	4.380	4.380	negligible	0.168	0.634	3.171	0.31
Stack ID 4A-S-8	1.10	1.10	1.10	negligible	negligible	0.145	0.725	0.23
Stack ID 14-S-16	1.10	1.10	1.10	negligible	negligible	negligible	0.472	0.23
Stack ID 1-S-2	1.10	1.10	1.10	negligible	negligible	0.143	0.715	0.23
Stack ID 1-S-26	1.10	1.10	1.10	negligible	negligible	0.226	1.130	0.23
Stack ID 16-S-56	4.380	4.380	4.380	negligible	0.203	0765	3.827	0.876
Stack ID 4-S-35	2.50	2.50	2.50	negligible	negligible	0.209	1.045	0.39
Stack ID 1-S-27	1.270	1.270	1.270	-	-	-	-	0.088
Stack ID 6-S-33	3.94	3.94	3.94	negligible	negligible	0.337	1.686	0.31
Stack ID 4B-S-34	1.75	1.75	1.75	negligible	negligible	0.263	1.314	0.35
Stack ID 6-S-47	1.75	1.75	1.75	negligible	0.116	0.438	2.19	0.092
Stack ID 14-S-15	1.40	1.40	1.40	-	-	-	-	-
Stack ID 20-S-37	0.876	0.876	0.876	-	-	-	-	-
Stack ID 20-S-42	0.876	0.876	0.876	-	-	-	-	-
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	negligible	negligible	0.175	0.876	-
Stack ID 20-S-41	1.97	1.97	1.97	negligible	negligible	0.175	0.876	-
Stack ID 18-S-49	0.56	0.56	0.56	negligible	0.202	3.091	3.679	-
Stack ID 18-S-24	0.56	0.56	0.56	negligible	0.202	3.091	3.679	-
Stack ID 17-S-25	9.286	9.286	9.286	-	-	-	-	-
Stack ID 17-S-40	9.286	9.286	9.286	-	-	-	-	-
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	4.380	4.380	4.380	-	-	-	-	0.394
Total PTE After Issuance	64.514	64.514	64.514	negligible	0.891	9.692	25.385	3.73 (*10/25)

PM10 emissions are limited in accordance with 326 IAC 6.8-2-13(a).

PM2.5 and PM emissions are set equal to the PM10 emissions limits per Hammond Air Quality Control Ordinance No. 3522 (as amended).

PM emissions (Stack IDs 18-S-49 and 18-S-24) are limited in accordance with 326 IAC 6.8-1-2(b)(3). PM10 and PM2.5 emissions (Stack IDs 18-S-49 and 18-S-24) are set equal to the PM emissions limits per Hammond Air Quality Control Ordinance No. 3522 (as amended).

Lead emissions are limited in accordance with 326 IAC 15-1-2(a)(6). Therefore, the HAPs emissions are less than 10 tons per year of any individual HAP and less than 25 tons per year of the combination of HAPs making the requirements of 326 IAC 2-7 not applicable.

VOC, CO, and NOx emissions are not limited by any applicable regulations and do not exceed the major source thresholds and therefore are based on unrestricted emissions.

(a) This existing stationary source is not major for 326 IAC 2-2, PSD because the emissions of each attainment pollutant are less than one hundred (<100) tons per year, and it is one of the twenty-eight (28) listed source categories.

(b) This existing stationary source is not major for 326 IAC 2-3, Emission Offset and Nonattainment NSR because the emissions of the nonattainment pollutant, VOC, are less than twenty-five (<25) tons per year and the emissions of PM10 (as a surrogate for PM2.5) and NOx are less than one hundred (<100) tons per year.

(c) Fugitive Emissions
Since this type of operation is one of the twenty-eight (28) listed source categories under 326 IAC 2-2 or 326 IAC 2-3, fugitive emissions are counted toward the determination of PSD and Emission Offset applicability.

Federal Rule Applicability

(a) There are no New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60) included in the permit for this source.

The requirements of the New Source Performance Standard, 326 IAC 12 (40 CFR Part 60 Subpart Db), Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units are not included in the permit for the Cleaver Brooks Boiler No. 1 and Cleaver Brooks Boiler No. 2. Construction of these units commenced prior to June 19, 1984 and they have a heat input capacity of less than 100 million Btu/hr.

The requirements of the New Source Performance Standard, 326 IAC 12 (40 CFR Part 60 Subpart Dc), Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units are not included in the permit for the Cleaver Brooks Boiler No. 1 and Cleaver Brooks Boiler No. 2. Construction of these units commenced prior to June 9, 1989 and they have a heat input capacity of less than 10 million Btu/hr.

The requirements of the New Source Performance Standard, 326 IAC 12 (40 CFR Part 60 Subpart VV), Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemical Manufacturing Industry (SOCMI) are not included in this permit. The source does not produce any of the specified organic chemicals listed in 60.489 as an intermediate or final product. Therefore it is exempt from the New Source Performance Standard, 326 IAC 12 (40 CFR Part 60.480), Subpart VV - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemical Manufacturing Industry (SOCMI).

The requirements of the New Source Performance Standard, 326 IAC 12 (40 CFR Part 60 Subpart III), Standards of Performance for Volatile Organic Compound (VOC) Emissions From the Synthetic Organic Chemical Manufacturing Industry (SOCMI) Air Oxidation Unit Processes are not included in this permit. The source does not operate an Air Oxidation Reactor and it does not produce any of the specified organic chemicals listed in 60.617 as a product, co-product, by-product, or intermediate product. Therefore, it is exempt from the New Source Performance Standard, 326 IAC 12, (40 CFR Part 60.610), Subpart III - Standards of Performance for Volatile Organic Compound (VOC) Emissions From the Synthetic Organic Chemical Manufacturing Industry (SOCMI) Air Oxidation Unit Processes.

(b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs) (326 IAC 14, 326 IAC 20 and 40 CFR Part 63) included in this permit renewal.

The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs), 326 IAC 20 (40 CFR Part 63 Subpart F), National Emission Standards for

Organic Hazardous Air Pollutants From the Synthetic Organic Chemical Manufacturing Industry are not included in this permit. In accordance with section 63.100(b), HGI is not subject to the provisions of Subpart F because HGI does not meet all of the criteria specified in paragraphs (b)(1), (b)(2), and (b)(3). Specifically, HGI does not manufacture any of the chemicals listed in table 1 or Tetrahydrobenzaldehyde or Crotonaldehyde.

The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs), 326 IAC 20 (40 CFR Part 63 Subpart G), National Emission Standards for Organic Hazardous Air Pollutants From the Synthetic Organic Chemical Manufacturing Industry for Process Vents, Storage Vessels, Transfer Operations, and Wastewater are not included in this permit. In accordance with section 63.100(b), HGI is not subject to the provisions of Subpart G because HGI does not meet all of the criteria specified in paragraphs (b)(1), (b)(2), and (b)(3). Specifically, HGI does not manufacture any of the chemicals listed in table 1 or Tetrahydrobenzaldehyde or Crotonaldehyde.

The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs), 326 IAC 20 (40 CFR Part 63 Subpart H), National Emission Standards for Organic Hazardous Air Pollutants for Equipment Leaks are not included in this permit. In accordance with section 63.100(b), HGI is not subject to the provisions of Subpart H because HGI does not meet all of the criteria specified in paragraphs (b)(1), (b)(2), and (b)(3). Specifically, HGI does not manufacture any of the chemicals listed in table 1 or Tetrahydrobenzaldehyde or Crotonaldehyde.

The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs), 326 IAC 20 (40 CFR Part 63, Subpart FFFF), National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing are not included in this permit. The source is not a major source of hazardous air pollutants (HAP) emissions as defined in section 112(a) of the Clean Air Act (CAA). HAPs emissions are limited to less than 10 tons per year of any individual HAP and less than 25 tons per year of the combination of HAPs pursuant to 326 IAC 2-8. Therefore, it is exempt from the National Emission Standards for Hazardous Air Pollutants (NESHAPs), 326 IAC 20 (40 CFR Part 63, Subpart FFFF), National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing.

(c) The degreasing operation is not subject to the 40 CFR Part 63, Subpart T, National Emission Standards for Halogenated Solvent Cleaning because the solvent used in the degreasing operation is not any of the listed regulated solvents; therefore, this NESHAP is not included in this permit.

State Rule Applicability - Entire Source

326 IAC 1-6-3 (Preventive maintenance plans)

The source has submitted a Preventive Maintenance Plan (PMP) on March 2, 2001. This PMP has been verified to fulfill the requirements of 326 IAC 1-6-3 (Preventive Maintenance Plan).

326 IAC 2-1.1-5 (Nonattainment NSR)

Lake County has been designated as nonattainment for PM2.5 in 70 FR 943 dated January 5, 2005. According to the April 5, 2005 EPA memo titled “Implementation of New Source Review Requirements in PM2.5 Nonattainment Areas” authored by Steve Page, Director of OAQPS, until EPA promulgates the PM2.5 major NSR regulations, states should assume that a major stationary source’s PM10 emissions represent PM2.5 emissions. IDEM will use the PM10 nonattainment major NSR program as a surrogate to address the requirements of nonattainment major NSR for the PM2.5 NAAQS. A major source in a nonattainment area is a source that emits or has the potential to emit 100 tpy of any regulated pollutant. Hammond Group, Inc. has a limited potential to emit of 64.514 tpy of PM10, below 100 tpy. Therefore, assuming that PM10 emissions represent PM2.5 emissions, 326 IAC 2-1.1-5 does not apply.

326 IAC 2-2 (Prevention of Significant Deterioration (PSD) Requirements)

This source built in 1930 is one of the 28 listed source categories and is not a major stationary source for the purposes of Prevention of Significant Deterioration (PSD). The source has an unrestricted potential to emit of Lead (Lb) at a rate of 25 TPY or more and Particulate Matter less than 10 microns (PM10) and Particulate Matter (PM), each at a rate of 100 TPY or more. However, 326 IAC 15-1-2(a)(6) Source-specific provisions (for Hammond Lead Products, Inc., HLP-Lead Plant), 326 IAC 6.8-2-13(a) and (b) Lake County: PM10 and total suspended particulates (TSP) emissions for Hammond Group, Inc. (HGI) Halox Division, Lead Products Division, and Hammond Expander Division, and Hammond Air Quality Control Ordinance No. 3522 (as amended) make this source minor for 326 IAC 2-2 (PSD Requirements). The potential to emit Sulfur Dioxide (SO_2) and Carbon Monoxide (CO) from this source is less than the PSD significant levels based on the potential to emit after controls. The source has not been reviewed under the requirements of 326 IAC 2-2 because it was in existence prior to 1977 and there has not been a major modification, as defined in these rules, subject to the requirements of 326 IAC 2-2.

326 IAC 2-3 (Emission Offset)

This source built in 1930 is not a major stationary source for the purposes of Emission Offset because it does not have the potential to emit PM10 (as a surrogate for PM2.5) or Nitrogen Oxides (NOx) at 100 TPY or more, nor does it have the potential to emit Volatile Organic Compounds (VOC) at 25 TPY or more. The source has not been reviewed under the requirements of 326 IAC 2-3 because there has not been a major modification, as defined in these rules, subject to the requirements of 326 IAC 2-3.

326 IAC 2-4.1-1 (New source toxics control)

This source is not subject to 2-4.1-1 (New source toxics control), because it is not a major source of hazardous air pollutants (HAPs) that was constructed or reconstructed after July 27, 1997 because HAPs are limited as discussed below under 326 IAC 2-8.

326 IAC 2-6 (Emission Reporting) and Hammond Ordinance No. 7102

This source, located in Lake County, is not required to have a Part 70 operation permit, it does not emit volatile organic compounds (VOC) or oxides of nitrogen (NOx) at levels equal to or greater than twenty-five (25) tons per year or lead at levels equal to or greater than five (5) tons per year; therefore, it is not subject to 326 IAC 2-6 (Emission Reporting).

Per Hammond Ordinance No. 7102, the source will be required to submit an annual emission inventory containing production information, fuel usage and estimated actual emissions of criteria pollutants. The emission inventory must be received by April 15th of each year. The submittal should cover the twelve (12) consecutive month time period starting January 1 and ending December 31. This is a local requirement only.

Hammond Ordinance No. 7102 is not state or federally enforceable.

326 IAC 2-8 (Federally Enforceable State Operating Permit Program)

This source has limited PM10 emissions to less than 100 tons per year and the source-wide emissions of HAPs (Lead compounds) to less than 4 tons per year to comply with 326 IAC 2-8. This source is subject to 326 IAC 15-1-2(a)(6) Source-specific provisions (for Hammond Lead Products, Inc., HLP-Lead Plant) which specifically states that Hammond Lead Products, Inc., HLP-Lead Plant shall install HEPA filters associated with Stacks 4A-S-8, 14-S-16, 1-S-2, 1-S-26, 16-S-56, 1-S-52, 1-S-27, 4-S-35, 6-S-33, 4B-S-34, 6-S-47, and V-1. These provisions designed to limit the source's potential to emit lead along with the fact that the initial FESOP, F089-5200-00219, issued on December 12, 1996, required the company to use these control devices to meet the Particulate Matter less than 10 microns emission limitations as stated in 326 IAC 6.8-2-13(a)

makes these requirements federally enforceable and therefore limits the source's potential emissions to below the major source threshold for a Part 70 permit. PM10 emissions are determined by using the percentage of lead in the product. In order to demonstrate compliance with the emission limitations the source shall operate the baghouse and HEPA system at all times when the associated facility is in operation and perform Lead and/or PM10 testing on all significant units each permit term. Compliance Monitoring Requirements such as visible emissions notations, parametric monitoring, and baghouse and HEPA filter inspections are also required to show compliance.

326 IAC 5-1 (Opacity Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 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%) 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.

326 IAC 6.8-1-1 (Nonattainment Area Limitations – Applicability)

Pursuant to 326 IAC 6.8-1-1 (Nonattainment Area Limitations – Applicability), sources or facilities located in Lake County shall comply with the emissions limits and meet the requirements in 326 IAC 6.8-2, 326 IAC 6.8-4, 326 IAC 6.8-5, 326 IAC 6.8-8, 326 IAC 6.8-9, 326 IAC 6.8-10, and 326 IAC 6.8-11, if the source or facility is specifically listed in 326 IAC 6.8-2, 326 IAC 6.8-4, 326 IAC 6.8-5, 326 IAC 6.8-8, 326 IAC 6.8-9, 326 IAC 6.8-10, or 326 IAC 6.8-11; or section 2 of this rule, if the source is not specifically listed but has either the potential to emit one hundred (100) tons or more; or actual emissions of ten (10) tons or more; of particulate matter per year.

This rule is applicable to this source because it is located in Lake County; it is specifically listed in 326 IAC 6.8-2-13 of this rule; and the source has the potential to emit 100 tons or more of PM. Therefore this source shall comply with the requirements of 326 IAC 6.8-2-13 Lake County: PM10 and total suspended particulates (TSP) emissions – Hammond Group, Inc. (HGI) Halox Division, Lead Products Division, and Hammond Expander Division.

326 IAC 6.8-1-2(b)(3) (Particulate Emission Limitations - Non-attainment Area)

Pursuant to subsection (b)(3) of this rule, the Cleaver Brooks Boiler No. 2 and No. 1 (Stack IDs 18-S-49 and 18-S-24), each shall have a particulate matter limitation of 0.01 gr/dscf. According to the current stack flow rate and temperature for each boiler, this is equivalent to 0.129 lbs/hr and 0.56 TPY for each.

326 IAC 6.8-2-13(a) (Lake County: PM10 and total suspended particulates (TSP) emissions – Hammond Group, Inc. (HGI) Halox Division, Lead Products Division, and Hammond Expander Division)
PM10 emissions from each stack at the source shall be limited as listed in 326 IAC 6.8-2-13(a). See table below for specific stack limits.

Stack ID	Emission Limit (gr/dscf)	PM10 Limit (lbs/hr)	PM10 Regulation
1) Stack ID 1-S-52	0.022	1.000	326 IAC 6.8-2-13(a)
2) Stack ID 4A-S-8	0.022	0.250	326 IAC 6.8-2-13(a)
3) Stack ID 14-S-16	0.022	0.250	326 IAC 6.8-2-13(a)
4) Stack ID 1-S-2	0.022	0.250	326 IAC 6.8-2-13(a)
5) Stack ID 1-S-26	0.022	0.250	326 IAC 6.8-2-13(a)
6) Stack ID 16-S-56	0.022	1.000	326 IAC 6.8-2-13(a)
7) Stack ID 4-S-35	0.022	0.570	326 IAC 6.8-2-13(a)
8) Stack ID 1-S-27	0.022	0.290	326 IAC 6.8-2-13(a)
9) Stack ID 6-S-33	0.022	0.900	326 IAC 6.8-2-13(a)
10) Stack ID 4B-S-34	0.022	0.400	326 IAC 6.8-2-13(a)
11) Stack ID 6-S-47	0.022	0.400	326 IAC 6.8-2-13(a)
12) Stack ID 14-S-15	0.022	0.320	326 IAC 6.8-2-13(a)
13) Stack ID 20-S-37	0.022	0.200	326 IAC 6.8-2-13(a)
14) Stack ID 20-S-42	0.022	0.200	326 IAC 6.8-2-13(a)
15) Stack ID 20-S-39	0.022	0.496	326 IAC 6.8-2-13(a)
16) Stack ID 20-S-44	0.022	0.496	326 IAC 6.8-2-13(a)
17) Stack ID 13-S-48	0.022	0.471	326 IAC 6.8-2-13(a)
18) Stack ID 14-S-45	0.022	0.471	326 IAC 6.8-2-13(a)
19) Stack ID 20-S-36	0.022	0.395	326 IAC 6.8-2-13(a)
20) Stack ID 20-S-41	0.022	0.450	326 IAC 6.8-2-13(a)
21) Stack ID 17-S-25	0.030	2.120	326 IAC 6.8-2-13(a)
22) Stack ID 17-S-40	0.030	2.120	326 IAC 6.8-2-13(a)
23) Stack ID 20-S-38	0.022	0.087	326 IAC 6.8-2-13(a)
24) Stack ID 20-S-43	0.022	0.087	326 IAC 6.8-2-13(a)
25) Stack ID V-1	0.022	1.000	326 IAC 6.8-2-13(a)
Totals:		**14.473**	

326 IAC 6.8-2-13(b) Combustion sources associated with stack 18-S-24 and stack 18-S-49 shall fire natural gas only.

326 IAC 6.8-8-1 (Lake County: Continuous Compliance Plan – Applicability)
Pursuant to 326 IAC 6.8-8-1(5) (Lake County: Continuous Compliance Plan – Hammond Group, Inc. (HGI), Halox Division, Lead Products Division, Hammond Expander Division, and Halstab Division), the Permittee shall submit to IDEM, OAQ and HDEM, and maintain at the source a copy of the Continuous Compliance Plan (CCP). The Permittee shall perform the inspections, monitoring, and record keeping requirements as specified in 326 IAC 6.8-8-2 through 326 IAC 6.8-8-7 or according to the Permittee's CCP. The source has submitted a CCP on March 12, 2001. The CCP has been verified to fulfill the requirements of 326 IAC 6.8-8-1 (Lake County: Continuous Compliance Plan - Applicability).

326 IAC 6.8-10-3 (Lake County fugitive particulate matter control requirements)
Pursuant to this rule, the Permittee shall be in violation if the opacity of fugitive particulate emissions exceeds ten percent (10%).

326 IAC 6.8-11-1 (Lake County Particulate Matter Contingency Measures)

Pursuant to this rule, the Permittee shall comply with the applicable provisions of 326 IAC 6.8-11-1 (Lake County Particulate Matter Contingency Measures).

326 IAC 6-4 (Fugitive Dust Emissions)

This source is subject to 326 IAC 6-4 for fugitive dust emissions. Pursuant to this rule, fugitive particulate matter emissions shall not be visibly crossing the property lines.

326 IAC 6-5 (Fugitive Particulate Matter Emissions)

326 IAC 6-5, for fugitive particulate matter emissions, does not apply because the source is located in Lake County and does not have the potential fugitive particulate matter emissions of twenty-five (25) tons per year or more.

326 IAC 8-7-2 (Specific VOC Reduction Requirements for Lake, Porter, Clark, and Floyd Counties – Applicability)

This rule does not apply to this source because the source does not emit or have the potential to emit volatile organic compounds (VOCs) at levels equal to or greater than twenty-five (25) tons per year (tpy) in Lake County.

326 IAC 15-1-2 (Source-specific lead provisions)

Pursuant to 326 IAC 15-1-2, this rule limits lead (Pb) emission from stacks associated with the Oxide Division as stipulated in 326 IAC 15-1-2(a)(6). See table below for specific stack limits.

Stack ID	Pb Limit (lbs/hr)	Pb Regulation
1) Stack ID 1-S-52	0.070	326 IAC15-1-2(a)(6)
2) Stack ID 4A-S-8	0.053	326 IAC15-1-2(a)(6)
3) Stack ID 14-S-16	0.053	326 IAC15-1-2(a)(6)
4) Stack ID 1-S-2	0.053	326 IAC15-1-2(a)(6)
5) Stack ID 1-S-26	0.053	326 IAC15-1-2(a)(6)
6) Stack ID 16-S-56	0.200	326 IAC15-1-2(a)(6)
7) Stack ID 4-S-35	0.090	326 IAC15-1-2(a)(6)
8) Stack ID 1-S-27	0.020	326 IAC15-1-2(a)(6)
9) Stack ID 6-S-33	0.070	326 IAC15-1-2(a)(6)
10) Stack ID 4B-S-34	0.080	326 IAC15-1-2(a)(6)
11) Stack ID 6-S-47	0.021	326 IAC15-1-2(a)(6)
12) Stack ID V-1	0.090	326 IAC15-1-2(a)(6)
Totals:	**0.853**	

State Rule Applicability - Individual Facilities

326 IAC 7-4-1.1 (Lake County sulfur dioxide emission limitations)

This rule does not apply to this source because the source does not have the potential to emit twenty-five (25) tons per year or ten (10) pounds per hour of sulfur dioxide.

326 IAC 8-1-6 (New facilities; general reduction requirements)

No facility at this source is subject to this rule because no facility has the potential to emit VOC emissions of 25 tons or more per year.

326 IAC 8-3 (Organic Solvent Degreasing Operations)

This rule does not apply to this source because, although it existed prior to January 1, 1980, it does not have potential emissions of one hundred (100) tons or greater per year of VOC and does not operate a cold cleaner degreaser, open top vapor degreaser, or conveyorized degreaser.

Local Rule Applicability

Hammond Air Quality Control Ordinance No. 3522 (as amended)
Pursuant to the Hammond Air Quality Control Ordinance No. 3522 (as amended), Particulate Matter (PM) and Particulate Matter less than 2.5 microns (PM2.5) emission limits shall be set equal to the PM10 emission limits to ensure that the potential to emit PM and PM2.5 from the entire source shall be limited to less than one hundred (100) tons per year.

Testing Requirements

Compliance stack tests were required on the following facilities to demonstrate compliance with the applicable lead (Pb) emission limits. All performance testing was required initially within three (3) years after receipt of the permit and then periodically, every five (5) years, except for stacks 6-S-47, 1-S-26, and V-1.

(a) Stack ID 1-S-52: Units 52-1 through 52-20
(b) One of Stack IDs 4A-S-8, 14-S-16, 1-S-2, and 1-S-26
(c) Stack ID 16-S-56: Units 56-1, 56-3, 56-4, 56-7, 56-9, and 56-10
(d) Stack ID 4-S-35
(e) Stack ID 1-S-27
(f) Stack ID 6-S-33
(g) Stack ID 6-S-47
(h) Stack ID V-1

All testing requirements from previous approvals were incorporated into this FESOP except for the following:

(a) Stack 1-S-27 (A new requirement to test stack 4B-S-34 has been added. This is redundant of the testing requirement on stack 1-S-27, a similar operation. One of these two should require testing, during any given permit term, not both.)
(b) Stack ID V-1 (qualifies as a trivial activity)

Previous stack tests to comply with this requirement were conducted on:

(a) Stack ID 1-S-52: Units 52-1 through 52-20; Pb test performed on November 17, 1999.
(b) One of Stack IDs 4A-S-8, 14-S-16, 1-S-2, and 1-S-26; Pb test on 1-S-26 performed on November 6, 2001.
(c) Stack ID 16-S-56: Units 56-1 through 56-6; Pb test performed on September 10, 2002.
(d) Stack ID 4-S-35; Pb test performed on September 22, 1998.
(e) Stack ID 1-S-27; Pb test performed on November 17, 1999.
(f) Stack ID 6-S-33; Pb test performed on September 22, 1998.
(g) Stack ID 6-S-47; Pb test performed on May 20, 2003.
(h) Stack ID V-1; Pb test performed on November 6, 2001.

Stack ID	Test Results (lbs/hr)	Permit Limit (lbs/hr)	% of Limit
1-S-52	0.001	0.070	1.43
1-S-26	0.0003	2.053	0.015
16-S-56	0.0073	0.200	3.65
4-S-35	0.0007	0.09	0.78
1-S-27	0.0002	0.02	1.00
6-S-33	0.0014	0.07	2.00
6-S-47	0.0011	0.021	5.23
V-1	0.001	0.090	1.11

A compliance stack test will also be required on Stack ID 4B-S-34 to demonstrate compliance with the applicable lead (Pb) emission limit. This performance test will be required initially within three (3) years after receipt of the permit and then periodically, every five (5) years thereafter.

Compliance Requirements

Permits issued under 326 IAC 2-8 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-8-4. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

The compliance monitoring requirements applicable to this source are as follows:

1. The source has applicable compliance monitoring conditions as specified below:

   (a) Once per day visible emissions notations of Stack IDs 1-S-52, 4A-S-8, 14-S-16, 1-S-2, 1-S-26, 16-S-56, 4-S-35, 1-S-27, 20-S-37, 20-S-42, 20-S-39, 20-S-44, T-1000, T-2000, 6-S-33, 4B-S-34, 6-S-47, 13-S-48, 14-S-45, 20-S-36, 20-S-41, 17-S-25, 17-S-40, 20-S-38, 20-S-43, and V-1 shall be performed during normal daylight operations. A trained employee will record whether emissions are normal or abnormal. 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. 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. 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. If abnormal emissions are observed, the Permittee shall take reasonable response steps in accordance with Section C – Response to Excursions or Exceedances.

(b) The Permittee shall record the pressure drop across the control equipment controlling Stack IDs 1-S-52, 4A-S-8, 14-S-16, 1-S-2, 1-S-26, 16-S-56, 4-S-35, 1-S-27, 20-S-37, 20-S-42, 20-S-39, 20-S-44, 14-S-15, 6-S-33, 4B-S-34, 6-S-47, 13-S-48, 14-S-45, 20-S-36, 20-S-41, 17-S-25, 17-S-40, 20-S-38, 20-S-43, and V-1 at least once per day when the associated process is in operation. The pressure drop across the control equipment shall be maintained within the ranges specified for each stack ID listed in the permit. When for any one reading, the pressure drop across the baghouse or HEPA filter is outside the normal range listed in the permit or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C- Response to Excursions or Exceedances.

(c) For a single compartment baghouse or scrubber 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).

For a single compartment baghouse or scrubber 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 or scrubber failure can be indicated by a significant drop in the control device'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.

These monitoring conditions are necessary because the control equipment must operate properly to ensure compliance with 326 IAC 6.8-2-2 (Lake County: PM10 and total suspended particulates (TSP) emissions), 326 IAC 15-1-2 (Source-specific lead provisions), and 326 IAC 2-8 (FESOP).

Recommendation

The staff recommends to the Commissioner that the FESOP Renewal be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An administratively complete FESOP Renewal application for the purposes of this review was received on March 12, 2001. Additional information was received on December 3, 2001, March 17, 2004, April 1, 2005, October 17, 2005, January 27, 2006, June 1, 2006, September 28, 2006, October 10, 2006, June 8 & 13, 2007, September 19 & 25, 2007, April 22, 2008, and June 13, 2008.

There was no notice of completeness letter mailed to the source.

Conclusion

The operation of this Industrial Inorganic and Organic Chemicals and Inorganic Pigments Manufacturing Plant shall be subject to the conditions of FESOP Renewal No.: F089-14165-00219.

Hammond Department of Environmental Management
-Air Pollution Control Division-

Appendix A: Emission Calculations

Public Copy

Hammond Group, Inc. (HGI)
2308 - 165th Street, Hammond, Indiana 46320
Source ID: 089-00219

Year of Data: 2006
Emission Information Receipt Date: 4/18/07

Point(s):
Segment(s):

Calc By: L. Biscocho, HDEM
Calc Date: 7/17/2007 & 9/14/07
Modified By: D. Malone, HDEM
Calc Date: 4/2/08

NOTES
EF: EMISSION FACTOR
CE: CONTROL EFFICIENCY
MDR: MAXIMUM DESIGN RATE
MDC: MAXIMUM DESIGN CAPACITY
Ts: STACK DISCHARGE TEMPERATURE
UNITS FOR EMISSIONS ARE IN (TPY) EXCEPT WHERE GIVEN

SOURCE TOTALS: HAMMOND GROUP, INC. (HGI)

2006

	POTENTIAL TO EMIT (PTE)						PERMIT LIMIT		ACTUAL EMISSIONS	
	BEFORE CONTROLS			AFTER CONTROLS						
POLLUTANT	(lbs/hr)	(lbs/day)	(TPY)	(lbs/hr)	(TPY)	(gr/dscf)	(lbs/hr)	(TPY)	BEFORE CONTROLS	AFTER CONTROLS
PM	202.1503	4,851.6084	885.4185	0.9141	4.0038	0.0343	14.731	64.520	54.8448	0.3149
PM10	202.1591	4,851.8184	885.4569	0.9142	4.0041	0.0343	14.731	64.520	54.8499	0.3149
SOx	0.0348	0.8346	0.1523	0.0348	0.1523	N/A	N/A	N/A	0.0243	0.0243
NOx	5.7957	139.0963	25.3851	5.7957	25.3851	N/A	N/A	N/A	4.0500	4.0500
VOC	0.3105	7.4527	1.3601	0.3105	1.3601	N/A	N/A	N/A	0.2153	0.2153
CO	2.2343	53.6241	9.7864	2.2343	9.7864	N/A	N/A	N/A	1.0020	1.0020
LEAD	159.8189	3,835.6525	700.0066	0.0187	0.0818	N/A	0.853	3.736	43.8770	0.0123