



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

Mitchell E. Daniels Jr.
Governor

Thomas W. Easterly
Commissioner

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

TO: Interested Parties / Applicant

DATE: September 13, 2011

RE: Quemetco, Inc. / 097 - 27020 - 00079

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

Notice of Decision: Approval – Effective Immediately

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to IC 13-15-5-3, this permit is effective immediately, unless a petition for stay of effectiveness is filed and granted, and may be revoked or modified in accordance with the provisions of IC 13-15-7-1.

If you wish to challenge this decision, IC 4-21.5-3-7 and IC 13-15-6-1(b) or IC 13-15-6-1(a) require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Suite N 501E, Indianapolis, IN 46204.

For an **initial Title V Operating Permit**, a petition for administrative review must be submitted to the Office of Environmental Adjudication within **thirty (30)** days from the receipt of this notice provided under IC 13-15-5-3, pursuant to IC 13-15-6-1(b).

For a **Title V Operating Permit renewal**, a petition for administrative review must be submitted to the Office of Environmental Adjudication within **fifteen (15)** days from the receipt of this notice provided under IC 13-15-5-3, pursuant to IC 13-15-6-1(a).

The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

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

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

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

Pursuant to 326 IAC 2-7-18(d), any person may petition the U.S. EPA to object to the issuance of an initial Title V operating permit, permit renewal, or modification within sixty (60) days of the end of the forty-five (45) day EPA review period. Such an objection must be based only on issues that were raised with reasonable specificity during the public comment period, unless the petitioner demonstrates that it was impracticable to raise such issues, or if the grounds for such objection arose after the comment period.

To petition the U.S. EPA to object to the issuance of a Title V operating permit, contact:

U.S. Environmental Protection Agency
401 M Street
Washington, D.C. 20406

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



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Part 70 Operating Permit Renewal OFFICE OF AIR QUALITY

Quemetco, Inc
7870 West Morris Street
Indianapolis, Indiana 46231

(herein known as the Permittee) is hereby authorized to construct and 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. Noncompliance with any provision of this permit, except any provision specifically designated as not federally enforceable, constitutes a violation of the Clean Air Act. It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. An emergency does constitute an affirmative defense in an enforcement action provided the Permittee complies with the applicable requirements set forth in Section B, Emergency Provisions.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 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.

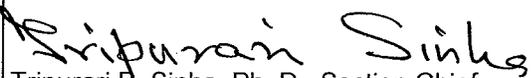
Operation Permit No.: T097-27020-00079	
Issued by:  Tripurari F. Sinha, Ph. D., Section Chief Permits Branch Office of Air Quality	Issuance Date: September 13, 2011 Expiration Date: September 13, 2016

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Emergency Occurrence Report

Quarterly Deviation and Compliance Monitoring Report

SECTION A

SOURCE SUMMARY

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

A.1 General Information [326 IAC 2-7-4(c)][326 IAC 2-7-5(15)][326 IAC 2-7-1(22)]

The Permittee owns and operates a stationary secondary lead smelting and refining operation.

Source Address:	7870 West Morris Street, Indianapolis, Indiana 46231
General Source Phone Number:	317-247-1303
SIC Code:	3341
County Location:	Marion
Source Location Status:	Nonattainment for PM2.5 Attainment for all other criteria pollutants
Source Status:	Part 70 Operating Permit Program Major Source, under PSD and nonattainment NSR Rules Major Source, Section 112 of the Clean Air Act 1 of 28 Source Categories

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

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

- (a) One (1) Reverberatory Furnace, identified as Emission Unit 3.1, used in the smelting of lead from lead acid batteries and scrap lead. The reverberatory furnace receives charge material from the Rotary Dryer in a continuous process. The furnace is heated by an oxygen enriched 32 million Btu per hour natural gas fired burner system. Molten lead is tapped directly into refining kettles or into molds for subsequent placement/refining in the refining kettles. Lead containing slag is tapped for further lead recovery in the Slag Reduction Furnace. Process flue gas emissions and emissions from a ventilation line known as "the Reverb Furnace Flue and Feed end" are controlled by Baghouse #035 and Scrubber #046. The controlled emissions exhaust to one stack identified as Stack/Vent S-111. Stack/Vent S-111 is equipped with a Continuous Emissions Monitor (CEM) for sulfur dioxide (SO₂) emissions. The rated charge capacity for the Reverberatory Furnace is 34.5 tons per hour (828 TPD). This emission unit was installed in 1972.

[Under 40 CFR 60, Subpart L, the Reverberatory Furnace is considered an affected facility.]

[Under 40 CFR 63, Subpart X, the Reverberatory Furnace is considered an affected facility.]

- (b) One (1) 2500 kVA Electric Arc Slag Reduction Furnace (SRF), identified as Emission Unit 3.3, that concurrently processes hot slag from the Reverberatory Furnace and cold slag in a continuous process. Cold slag is taken from storage and is placed in a hopper. Hot slag is conveyed from the Reverberatory Furnace to the SRF. Molten lead is tapped into molds for subsequent placement/refining in the refining kettles. Slag is tapped and stored awaiting proper disposal or reprocessing if the lead content is high enough. Emissions are controlled by Baghouse #037 and Scrubber #046 which exhaust to one stack identified as Stack/Vent S-111. Stack/Vent S-111 is equipped with a Continuous Emissions Monitor (CEM) for sulfur dioxide (SO₂) emissions. The rated charge capacity

for the Slag Reduction Furnace is 5.5 tons per hour (132 TPD). This emission unit was installed in 1995.

[Under 40 CFR 63, Subpart X, the Reverberatory Furnace is considered an affected facility.]

- (c) Process Fugitive Emissions from one (1) Reverberatory Furnace, identified as Emission Unit 3.1, used in the smelting of lead from lead acid batteries and scrap lead. Emissions from lead charging are controlled by Baghouses #038 and #041, respectively, and exhaust to one stack identified as Stack/Vent S-100. General furnace emissions are controlled by Baghouse #041 and exhaust to one stack identified as Stack/Vent S-100. Emissions from lead tapping are controlled by Baghouse #040 which exhaust to one stack identified as Stack/Vent S-100. Stack/Vent S-100 is equipped with a Continuous Emissions Monitor (CEM) for sulfur dioxide (SO₂) emissions. The rated charge capacity for the Reverberatory Furnace is 34.5 tons per hour (828 TPD). This emission unit was installed in 1972.

[Under 40 CFR 63, Subpart X, the Process Fugitive Emissions is considered an affected activity.]

- (d) Eight (8) refining kettles, identified as Emission Unit Kettle #1 through Kettle #8, which are used to refine the lead alloy. The refining kettles receive molten lead, solid lead or scrap lead. Reagents and alloying metals are added to the Kettle(s) and mixed into molten lead. A natural gas fired burner system indirectly heats the lead. The combined heat input capacity for the natural gas fired burners is 32 million Btu per hour. Impurities are removed as dross from the surface of the molten lead. Process emissions are controlled by Baghouse #040 which exhausts to one stack identified as Stack/Vent S-100. Stack/Vent S-100 is equipped with a Continuous Emissions Monitor (CEM) for sulfur dioxide (SO₂) emissions. Combustion emissions from the natural gas burners are vented to separate stacks. Combustion emissions from Kettle #1 are vented to Stack/Vent S-117. Combustion emissions from Kettle #2 are vented to Stack/Vent S-114. Kettle #3 and Kettle #4 are vented to Stack/Vent S-116. Combustion emissions from Kettle #5 and Kettle #6 are vented to Stack/Vent S-115. Combustion emissions from Kettle #7 are vented to Stack/Vent S-113. Combustion emissions from Kettle #8 are vented to Stack/Vent S-112. Kettles #1 through #6 were installed in 1972. Kettles #7 and #8 were installed in 1988 and 1992 respectively. The refining operation is not a time based operation therefore there is no maximum throughput capacity identified. However, an average based on 24 hours of operation and full kettles is 46.3 tons per hour.

[Under 40 CFR 60, Subpart L, Kettles #7 and #8 are considered affected facilities.]

[Under 40 CFR 63, Subpart X, Kettles #7 and #8 are considered affected facilities.]

- (e) Refining Kettle #9, identified as Emission Unit Kettle #9. Kettle #9 has a capacity of 2.14 tons of lead per hour (180 ton capacity with two batches per week) and is heated by a 4.25 million Btu natural gas burner. The kettle is used to refine lead. Emissions from Kettle #9 are controlled by Baghouse #040, which exhaust to one stack identified as Stack/Vent S-100. Stack/Vent S-100 is equipped with a Continuous Emissions Monitor (CEM) for sulfur dioxide (SO₂) emissions. Burner emissions are vented through a combustion flue, Stack/Vent S-118, with no controls. Kettle # 9 was installed in 2002.

[Under 40 CFR 60, Subpart L, Kettle #9 is considered an affected facility.]

[Under 40 CFR 63, Subpart X, Kettle #9 is considered an affected facility.]

- (f) One (1) Casting Machine, identified as Emission Unit 7 which receives refined and alloyed lead metal pumped from the refining kettles and casts the molten lead into lead ingots. The casting machine is equipped with a 0.3 million Btu per hour natural gas burner. Emissions from the casting machine are controlled by Baghouse #040 which exhausts to one stack identified as Stack/Vent S-100. Stack/Vent S-100 is equipped with a Continuous Emissions Monitor (CEM) for sulfur dioxide (SO₂) emissions. The rated process capacity is limited by the refining kettles. This emission unit was installed prior to 1978.
- (g) One (1) Rotary Dryer, identified as Emission Unit 8, used to dry Reverberatory Furnace feed material. Raw material is dumped into a feed hopper which feeds the Rotary Dryer with lead bearing material and furnace additives from lead acid batteries and factory scrap in a continuous process. The Rotary Dryer is heated by an oxygen enriched 14 million Btu per hour natural gas fired burner system. The emissions generated from charging raw material to the feed hopper are controlled by Baghouse #041, which exhausts to one stack identified as Stack/Vent S-100. Process emissions are controlled by Baghouse #041, which exhausts to one stack identified as Stack/Vent S-100. The process fugitive emissions are controlled by Baghouse #038 and by Baghouse #041, which exhaust to one stack identified as Stack/Vent S-100. Stack/Vent S-100 is equipped with a Continuous Emissions Monitor (CEM) for sulfur dioxide (SO₂) emissions. The rated process capacity for the Rotary Dryer is limited by the Reverberatory furnace. This emission unit was installed prior to 1978.

[Under 40 CFR 63, Subpart X, the Rotary Dryer is considered an affected facility.]

- (h) General Building Ventilation of the bin 10 feed storage area, identified as GV101. Portions of process fugitive emissions generated by operations conducted in this area are controlled by Roof Vent Baghouse RV #1 and exhausting to Stack/Vent S-101. These operations potentially generate fugitive emissions from storage and handling of Reverberatory charge materials and general emissions generated by traffic and housekeeping activities. Roof Vent Baghouse RV #1 was installed in 1991.

[Under 40 CFR 63, Subpart X, the General Building Ventilation is considered an affected facility.]

- (i) General Building Ventilation of the bin 10 feed storage area, identified as GV102. Portions of process fugitive emissions generated by operations conducted in this area are controlled by Roof Vent Baghouse RV #2 and exhausting to Stack/Vent S-102. These operations potentially generate emissions, including fugitive emissions from storage and handling of Reverberatory charge materials and general emissions generated by traffic and housekeeping activities. Roof Vent Baghouse RV #2 was installed in 1991.

[Under 40 CFR 63, Subpart X, the General Building Ventilation is considered an affected facility.]

- (j) General Building Ventilation of the bin 10 feed storage area, identified as GV103. Portions of process fugitive emissions generated by operations conducted in this area are controlled by Roof Vent Baghouse RV #3 and exhausting to Stack/Vent S-103. These operations potentially generating fugitive emissions from storage and handling of charge materials and general emissions generated by traffic and housekeeping activities. Roof Vent Baghouse RV #3 was installed in 1991.

[Under 40 CFR 63, Subpart X, the General Building Ventilation is considered an affected facility.]

- (k) General Ventilation for the reverb charge room, identified as GV104. Portions of process fugitive emissions generated by operations conducted in this area are controlled by Roof

Vent Baghouse RV #4 and exhausting to Stack/Vent S-104. These operations potentially generating fugitive emissions include make up of reverberatory charge materials and general emissions generated by traffic and housekeeping activities. Roof Vent Baghouse RV #4 was installed in 1991.

[Under 40 CFR 63, Subpart X, the General Building Ventilation is considered an affected facility.]

- (l) General Ventilation for the slag warehouse dumping bin, identified as GV105. Portions of process fugitive emissions generated by operations conducted in this area are controlled by roof vent Baghouse RV #5 and exhausting to Stack/Vent S-105. These operations potentially generating fugitive emissions include emissions from the Slag Warehouse Dumping Bin and general emissions generated by traffic and housekeeping activities. Roof Vent Baghouse RV #5 was installed in 1991.

[Under 40 CFR 63, Subpart X, the General Building Ventilation is considered an affected facility.]

- (m) General Ventilation for the reverb furnace and slag reduction furnace (SRF), identified as GV106. Portions of process fugitive emissions generated by operations conducted in this area are controlled by Roof Vent Baghouse RV #6 and exhausting to Stack/Vent S-106. These operations potentially generating fugitive emissions include the Reverberatory/Slag Reduction Furnaces - lead and slag tapping, furnace charging, feed conveyor, slag handling, and general emissions generated by traffic and housekeeping activities. Roof Vent Baghouse RV #6 was installed in 1991.

[Under 40 CFR 63, Subpart X, the General Building Ventilation is considered an affected facility.]

- (n) General Ventilation of the north refinery area, identified as GV107. Portions of process fugitive emissions generated by operations conducted in this area are controlled by Roof Vent Baghouse RV #7 and exhausting to Stack/Vent S-107. The operations potentially generating fugitive emissions include the 9 refining kettles, kettle charging, dross skimming, casting, natural gas fired trimmer burners rated at 1.8 million Btu in the casting machine area and general emissions generated by traffic and housekeeping activities. Roof Vent Baghouse RV #7 was installed in 1991.

[Under 40 CFR 63, Subpart X, the General Building Ventilation is considered an affected facility.]

- (o) General Ventilation of the slag reduction furnace area, identified as GV108. Portions of process fugitive emissions generated by operations conducted in this area are controlled by Roof Vent Baghouse RV #8 and exhausting to Stack/Vent S-108. These operations potentially generating fugitive emissions include the slag reduction/ reverberatory furnace - lead and slag tapping, furnace charging, feed conveyor, slag handling and general emissions generated by traffic and housekeeping activities. Roof Vent Baghouse RV #8 was installed in 1992.

[Under 40 CFR 63, Subpart X, the General Building Ventilation is considered an affected facility.]

- (p) General Ventilation of the south refinery area, identified as GV109. Portions of process fugitive emissions generated by operations conducted in this area are controlled by Roof Vent Baghouse RV #9 and exhausting to Stack/Vent S-109. These operations potentially generating fugitive emissions include 9 refining kettles, kettle charging, dross skimming, casting and general emissions generated by traffic and housekeeping activities. Roof Vent Baghouse RV #9 was installed in 1995.

[Under 40 CFR 63, Subpart X, the General Building Ventilation is considered an affected facility.]

A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)]
[326 IAC 2-7-5(15)]

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

- (a) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) Btu per hour [326 IAC 6.5-1-2]
- (1) Maintenance Office HVAC system for natural gas heating at 70,000 Btu per hour.
- (b) Paved and unpaved roads and parking lots with public access. [326 IAC 6-4][326 IAC 20-13][40 CFR 63.541, Subpart X]
- (c) Emergency Gasoline generators not exceeding 110 horsepower. [326 IAC 6.5-1-2]
- (d) Emergency Diesel generators not exceeding 1600 horsepower. [326 IAC 6.5-1-2]
- (e) Battery Wrecker. [326 IAC 6.5-1-2][326 IAC 20-13][40 CFR 63.541, Subpart X]
- (f) Roadway Surface Fugitive Emissions. [326 IAC 6-4][326 IAC 20-13][40 CFR 63.541, Subpart X]
- (g) Outside Storage Bins: Coke Storage Bin, Iron Storage Bin and Limestone Storage Bin. [326 IAC 6.5-1-2][326 IAC 20-13][40 CFR 63.541, Subpart X]
- (h) General Parts Washing: Cold Cleaner Degreaser. Existing as of July 1, 1990. [326 IAC 8-3-5]
- (i) Five (5) Soda Ash Silos equipped with baghouse filters. [326 IAC 6.5-1-2]
- (j) Water Quality Department wet scrubber identified as Unit W W Sly. [326 IAC 6.5-1-2]
- (k) Maintenance Shop, emissions controlled by a cartridge filter identified as MS, which exhausts to one stack identified as Stack/Vent MS-1. [326 IAC 6.5-1-2] The Maintenance Shop includes the following, each exhausted at Stack/Vent MS-1:
- (1) Activities related to routine fabrication, maintenance and repair of buildings, structures, equipment or vehicles at the source where air emissions from those activities would not be associated with any commercial production process, including:
- (A) Brazing, soldering, or welding operations and associated equipment.
- (B) Batteries and battery charging stations, except at battery manufacturing plants.
- (C) Lubrication, including hand-held spray can lubrication, dipping metal parts into lubricating oil, and manual or automated addition of cutting oil in machining operations.

- (2) Activities performed using hand-held equipment including the following:
 - (A) Drilling.
 - (B) Grinding.
 - (C) Machining wood, metal, or plastic.
 - (D) Sanding.
 - (E) Sawing.
 - (F) Turning wood, metal, or plastic.
 - (G) Surface Grinding

A.4 Part 70 Permit Applicability [326 IAC 2-7-2]

This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

- (a) It is a major source, as defined in 326 IAC 2-7-1(22);
- (b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 - Applicability).

SECTION B GENERAL CONDITIONS

B.1 Definitions [326 IAC 2-7-1]

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 2-6.1-7(a)][326 IAC 2-1.1-9.5][IC 13-15-3-6(a)]

- (a) This permit, 039-20994-00002, 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, 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 2-7-7]

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

B.5 Severability [326 IAC 2-7-5(5)]

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 2-7-5(6)(D)]

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

B.7 Duty to Provide Information [326 IAC 2-7-5(6)(E)]

- (a) The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that IDEM, OAQ may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. Upon request, the Permittee shall also furnish to IDEM, OAQ copies of records required to be kept by this permit.
- (b) For information furnished by the Permittee to IDEM, OAQ, the Permittee may include a claim of confidentiality in accordance with 326 IAC 17.1. When furnishing copies of requested records directly to U. S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.

B.8 Certification [326 IAC 2-7-4(f)][326 IAC 2-7-6(1)][326 IAC 2-7-5(3)(C)]

- (a) A certification required by this permit meets the requirements of 326 IAC 2-7-6(1) if:

- (i) it contains a certification by a "responsible official" as defined by 326 IAC 2-7-1(34), and
 - (ii) the certification states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) The Permittee may use the attached Certification Form, or its equivalent with each submittal requiring certification. One (1) certification may cover multiple forms in one (1) submittal.
- (c) A "responsible official" is defined at 326 IAC 2-7-1(34).

B.9 Annual Compliance Certification [326 IAC 2-7-6(5)]

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

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

and

United States Environmental Protection Agency, Region V
Air and Radiation Division, Air Enforcement Branch - Indiana (AE-17J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

- (b) The annual compliance certification report required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.
- (c) The annual compliance certification report shall include the following:
- (1) The appropriate identification of each term or condition of this permit that is the basis of the certification;
 - (2) The compliance status;
 - (3) Whether compliance was continuous or intermittent;
 - (4) The methods used for determining the compliance status of the source, currently and over the reporting period consistent with 326 IAC 2-7-5(3); and
 - (5) Such other facts, as specified in Sections D of this permit, as IDEM, OAQ may require to determine the compliance status of the source.

The submittal by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

B.10 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)][326 IAC 2-7-6(1) and (6)][326 IAC 1-6-3]

- (a) A Preventive Maintenance Plan meets the requirements of 326 IAC 1-6-3 if it includes, at a minimum:
- (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
 - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
 - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

The Permittee shall implement the PMPs.

- (b) If required by specific condition(s) in Section D of this permit where no PMP was previously required, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) no later than ninety (90) days after issuance of this permit or ninety (90) days after initial start-up, whichever is later, including the following information on each facility:
- (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
 - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
 - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

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

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

The PMP extension notification does not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

The Permittee shall implement the PMPs.

- (c) A copy of the PMPs shall be submitted to IDEM, OAQ upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions. The PMPs and their submittal do not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

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

B.11 Emergency Provisions [326 IAC 2-7-16]

- (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.

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

- (1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;
- (2) The permitted facility was at the time being properly operated;
- (3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;
- (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, no later than four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone Number: 1-800-451-6027 (ask for Office of Air Quality, Compliance and Enforcement Branch), or
Telephone Number: 317-233-0178 (ask for Office of Air Quality, Compliance and Enforcement Branch)
Facsimile Number: 317-233-6865

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

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

no later than two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-7-5(3)(C)(ii) and must contain the following:

- (A) A description of the emergency;
- (B) Any steps taken to mitigate the emissions; and
- (C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

- (6) The Permittee immediately took all reasonable steps to correct the emergency.
- (c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
- (d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.
- (e) The Permittee seeking to establish the occurrence of an emergency shall make records available upon request to ensure that failure to implement a PMP did not cause or contribute to an exceedance of any limitations on emissions. However, IDEM, OAQ may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4(c)(9) be revised in response to an emergency.
- (f) Failure to notify IDEM, OAQ by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-7 and any other applicable rules.
- (g) 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.

B.12 Permit Shield [326 IAC 2-7-15][326 IAC 2-7-20][326 IAC 2-7-12]

- (a) Pursuant to 326 IAC 2-7-15, the Permittee has been granted a permit shield. The permit shield provides that compliance with the conditions of this permit shall be deemed compliance with any applicable requirements as of the date of permit issuance, provided that either the applicable requirements are included and specifically identified in this permit or the permit contains an explicit determination or concise summary of a determination that other specifically identified requirements are not applicable. The Indiana statutes from IC 13 and rules from 326 IAC, referenced 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 Part 70 permit under 326 IAC 2-7 or for applicable requirements for which a permit shield has been granted.

This permit shield does not extend to applicable requirements which are promulgated after the date of issuance of this permit unless this permit has been modified to reflect such new requirements.

- (b) If, after issuance of this permit, it is determined that the permit is in nonconformance with an applicable requirement that applied to the source on the date of permit issuance, IDEM, OAQ, shall immediately take steps to reopen and revise this permit and issue a compliance order to the Permittee to ensure expeditious compliance with the applicable requirement until the permit is reissued. The permit shield shall continue in effect so long as the Permittee is in compliance with the compliance order.
- (c) No permit shield shall apply to any permit term or condition that is determined after issuance of this permit to have been based on erroneous information supplied in the permit application. Erroneous information means information that the Permittee knew to

be false, or in the exercise of reasonable care should have been known to be false, at the time the information was submitted.

- (d) Nothing in 326 IAC 2-7-15 or in this permit shall alter or affect the following:
- (1) The provisions of Section 303 of the Clean Air Act (emergency orders), including the authority of the U.S. EPA under Section 303 of the Clean Air Act;
 - (2) The liability of the Permittee for any violation of applicable requirements prior to or at the time of this permit's issuance;
 - (3) The applicable requirements of the acid rain program, consistent with Section 408(a) of the Clean Air Act; and
 - (4) The ability of U.S. EPA to obtain information from the Permittee under Section 114 of the Clean Air Act.
- (e) This permit shield is not applicable to any change made under 326 IAC 2-7-20(b)(2) (Sections 502(b)(10) of the Clean Air Act changes) and 326 IAC 2-7-20(c)(2) (trading based on State Implementation Plan (SIP) provisions).
- (f) This permit shield is not applicable to modifications eligible for group processing until after IDEM, OAQ, has issued the modifications. [326 IAC 2-7-12(c)(7)]
- (g) This permit shield is not applicable to minor Part 70 permit modifications until after IDEM, OAQ, has issued the modification. [326 IAC 2-7-12(b)(8)]

B.13 Prior Permits Superseded [326 IAC 2-1.1-9.5][326 IAC 2-7-10.5]

- (a) All terms and conditions of permits established prior to 097-27020-00079 and issued pursuant to permitting programs approved into the state implementation plan have been either:
- (1) incorporated as originally stated,
 - (2) revised under 326 IAC 2-7-10.5, or
 - (3) deleted under 326 IAC 2-7-10.5.
- (b) Provided that all terms and conditions are accurately reflected in this combined permit, all previous registrations and permits are superseded by this combined new source review and part 70 operating permit, except for permits issued pursuant to Title IV of the Clean Air Act and 326 IAC 21 (Acid Deposition Control)

B.14 Termination of Right to Operate [326 IAC 2-7-10][326 IAC 2-7-4(a)]

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 2-7-3 and 326 IAC 2-7-4(a).

B.15 Permit Modification, Reopening, Revocation and Reissuance, or Termination [326 IAC 2-7-5(6)(C)][326 IAC 2-7-8(a)][326 IAC 2-7-9]

- (a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Part 70 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 2-7-5(6)(C)] The notification by the Permittee does require a certification that

meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAQ determines any of the following:
 - (1) That this permit contains a material mistake.
 - (2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.
 - (3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-7-9(a)(3)]
- (c) Proceedings by IDEM, OAQ to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-7-9(b)]
- (d) The reopening and revision of this permit, under 326 IAC 2-7-9(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAQ at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ may provide a shorter time period in the case of an emergency. [326 IAC 2-7-9(c)]

B.16 Permit Renewal [326 IAC 2-7-3][326 IAC 2-7-4][326 IAC 2-7-8(e)]

- (a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ and shall include the information specified in 326 IAC 2-7-4. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40). The renewal application does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

Request for renewal shall be submitted to:

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

- (b) A timely renewal application is one that is:
 - (1) Submitted at least nine (9) months prior to the date of the expiration of this permit; and
 - (2) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.
- (c) If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-7 until IDEM, OAQ takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the

deadline specified, pursuant to 326 IAC 2-7-4(a)(2)(D), in writing by IDEM, OAQ any additional information identified as being needed to process the application.

B.17 Permit Amendment or Modification [326 IAC 2-7-11][326 IAC 2-7-12] [40 CFR 72]

- (a) Permit amendments and modifications are governed by the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this permit.
- (b) Pursuant to 326 IAC 2-7-11(b) and 326 IAC 2-7-12(a), administrative Part 70 operating permit amendments and permit modifications for purposes of the acid rain portion of a Part 70 permit shall be governed by regulations promulgated under Title IV of the Clean Air Act. [40 CFR 72]
- (c) Any application requesting an amendment or modification of this permit shall be submitted to:
- Indiana Department of Environmental Management
Permit Administration and Support Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251
- Any such application does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).
- (d) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

B.18 Permit Revision Under Economic Incentives and Other Programs [326 IAC 2-7-5(8)] [326 IAC 2-7-12(b)(2)]

- (a) No Part 70 permit revision or notice shall be required under any approved economic incentives, marketable Part 70 permits, emissions trading, and other similar programs or processes for changes that are provided for in a Part 70 permit.
- (b) Notwithstanding 326 IAC 2-7-12(b)(1) and 326 IAC 2-7-12(c)(1), minor Part 70 permit modification procedures may be used for Part 70 modifications involving the use of economic incentives, marketable Part 70 permits, emissions trading, and other similar approaches to the extent that such minor Part 70 permit modification procedures are explicitly provided for in the applicable State Implementation Plan (SIP) or in applicable requirements promulgated or approved by the U.S. EPA.

B.19 Operational Flexibility [326 IAC 2-7-20][326 IAC 2-7-10.5]

- (a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-7-20(b),(c), or (e) 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 preconstruction approval required by 326 IAC 2-7-10.5 has been obtained;
 - (3) The changes do not result in emissions which exceed the limitations provided in this permit (whether expressed herein as a rate of emissions or in terms of total emissions);

- (4) The Permittee notifies the:

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

and

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

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

- (5) The Permittee maintains records on-site, on a rolling five (5) year basis, which document all such changes and emission trades that are subject to 326 IAC 2-7-20(b),(c), or (e). The Permittee shall make such records available, upon reasonable request, for public review.

Such records shall consist of all information required to be submitted to IDEM, OAQ in the notices specified in 326 IAC 2-7-20(b)(1), (c)(1), and (e)(2).

- (b) The Permittee may make Section 502(b)(10) of the Clean Air Act changes (this term is defined at 326 IAC 2-7-1(36)) without a permit revision, subject to the constraint of 326 IAC 2-7-20(a). For each such Section 502(b)(10) of the Clean Air Act change, the required written notification shall include the following:

- (1) A brief description of the change within the source;
- (2) The date on which the change will occur;
- (3) Any change in emissions; and
- (4) Any permit term or condition that is no longer applicable as a result of the change.

The notification which shall be submitted is not considered an application form, report or compliance certification. Therefore, the notification by the Permittee does not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

- (c) Emission Trades [326 IAC 2-7-20(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 2-7-20(c).
- (d) Alternative Operating Scenarios [326 IAC 2-7-20(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 2-7-5(9). No prior notification of IDEM, OAQ, or U.S. EPA is required.

- (e) 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.
- (f) This condition does not apply to emission trades of SO₂ or NO_x under 326 IAC 21 or 326 IAC 10-4.

B.20 Source Modification Requirements [326 IAC 2-7-10.5]

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

B.21 Inspection and Entry [326 IAC 2-7-6][IC 13-14-2-2][IC 13-30-3-1][IC 13-17-3-2]

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

- (a) Enter upon the Permittee's premises where a Part 70 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 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 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 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 2-7-11]

- (a) The Permittee must comply with the requirements of 326 IAC 2-7-11 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.
- (b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:

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

Any such application does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

B.23 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-7-5(7)][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 the applicable fee is due April 1 of each year.
- (b) Except as provided in 326 IAC 2-7-19(e), 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 2-7-5(3)][326 IAC 2-7-6][62 FR 8314] [326 IAC 1-1-6]

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

SECTION C

SOURCE OPERATION CONDITIONS

Entire Source

Emission Limitations and Standards [326 IAC 2-7-5(1)]

C.1 Opacity [326 IAC 5-1]

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

- (a) Opacity shall not exceed an average of thirty percent (30%) 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 non-overlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.2 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.3 Incineration [326 IAC 4-2] [326 IAC 9-1-2]

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

C.4 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). 326 IAC 6-4-2(4) is not federally enforceable.

C.5 Standard Operating Procedures to Control Fugitive Dust [40 CFR Part 63.545(a),(b),(c), & (d)][326 IAC 20-13]

Pursuant to 40 CFR Part 63.545 Subpart X (National Emission Standards for Hazardous Air Pollutants from Secondary Lead Smelting) and 326 IAC 20-13 (Hazardous Air Pollutants: Secondary Lead Smelters), the Permittee shall at all times operate according to the most recent Standard Operating Procedures Manual that describes in detail the measures that will be put in place to control fugitive dust emission sources within the areas of the secondary lead smelter listed below.

- (a) Plant roadways;
- (b) Battery breaking area;
- (c) Furnace area;
- (d) Refining and casting areas; and
- (e) Material storage and handling areas.

The Standard Operating Procedures Manual shall include, at a minimum, the requirements of 40 CFR Part 63.545(b),(c) and (d).

C.6 Standards for Process Fugitive Sources [40 CFR 63.544(a),(b) & (c)][326 IAC 20-13]

Pursuant to 40 CFR 63.544(a) Subpart X (National Emission Standards for Hazardous Air Pollutants from Secondary Lead Smelting) and 326 IAC 20-13 (Hazardous Air Pollutants: Secondary Lead Smelters), the Permittee shall control the process fugitive emission sources listed below in accordance with the operational standards of 40 CFR 63.544(b) and (c).

- (a) Smelting furnace and dryer charging hoppers, chutes, and skip hoists;
- (b) Smelting furnace lead taps and molds during tapping;
- (c) Smelting furnace slag taps and molds during tapping;
- (d) Refining kettles;
- (e) Dryer transition pieces.

C.7 Operation of Equipment [326 IAC 2-7-6(6)]

Except as otherwise provided by statute or rule, or in this permit, all air pollution control equipment listed in this permit and used to comply with an applicable requirement shall be operated at all times that the emission unit(s) vented to the control equipment is (are) in operation.

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. The provisions of 326 IAC 1-7-1(3), 326 IAC 1-7-2, 326 IAC 1-7-3(c) and (d), 326 IAC 1-7-4, and 326 IAC 1-7-5(a), (b), and (d) are not federally enforceable.

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

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

- (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 2-7-6(1)]

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

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

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

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).
- (c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ if the Permittee submits to IDEM, OAQ a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

Compliance Requirements [326 IAC 2-1.1-11]

C.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 2-7-5(1)][326 IAC 2-7-6(1)]

C.12 Compliance Monitoring [326 IAC 2-7-5(3)][326 IAC 2-7-6(1)]

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

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

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

The notification which shall be submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

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

C.13 Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-7-5(3)] [326 IAC 2-7-6(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 2-7-5][326 IAC 2-7-6]

C.14 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]

Pursuant to 326 IAC 1-5-2 (Emergency Reduction Plans; Submission):

- (a) The Permittee shall maintain the most recently submitted written emergency reduction plans (ERPs) consistent with safe operating procedures.
- (b) Upon direct notification by IDEM, OAQ that a specific air pollution episode level is in effect, the Permittee shall immediately put into effect the actions stipulated in the approved ERP for the appropriate episode level. [326 IAC 1-5-3]

C.15 Risk Management Plan [326 IAC 2-7-5(12)] [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.16 Response to Excursions or Exceedances [326 IAC 2-7-5] [326 IAC 2-7-6]

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

- (a) The Permittee shall take reasonable response steps to restore operation of the emissions unit (including any control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing excess emissions.
- (b) The response shall include minimizing the period of any startup, shutdown or malfunction. The response may include, but is not limited to, the following:
 - (1) initial inspection and evaluation;
 - (2) recording that operations returned or are returning to normal without operator action (such as through response by a computerized distribution control system);
or
 - (3) any necessary follow-up actions to return operation to normal or usual manner of operation.
- (c) A determination of whether the Permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include, but is not limited to, the following:
 - (1) monitoring results;
 - (2) review of operation and maintenance procedures and records; and/or
 - (3) inspection of the control device, associated capture system, and the process.
- (d) Failure to take reasonable response steps shall be considered a deviation from the permit.
- (e) The Permittee shall record the reasonable response steps taken.

C.17 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5][326 IAC 2-7-6]

- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall submit a description of its response actions to IDEM, OAQ, no later than seventy-five (75) days after the date of the test.
- (b) A retest to demonstrate compliance shall be performed no later than one hundred eighty (180) days after the date of the test. Should the Permittee demonstrate to IDEM, OAQ that retesting in one hundred eighty (180) days is not practicable, IDEM, OAQ may extend the retesting deadline
- (c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The response action documents submitted pursuant to this condition do require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

C.18 Emission Statement [326 IAC 2-7-5(3)(C)(iii)][326 IAC 2-7-5(7)][326 IAC 2-7-19(c)][326 IAC 2-6]

Pursuant to 326 IAC 2-6-3(b)(1), starting in 2005 and every three years thereafter, the Permittee shall submit by July 1 of each year an emission statement covering the previous calendar year. The emission statement shall contain, at a minimum, the information specified in 326 IAC 2-6-4(c) and shall meet the following requirements:

- (1) Indicate estimated actual emissions of all pollutants listed in 326 IAC 2-6-4(a);
- (2) Indicate estimated actual emissions of regulated pollutants as defined by 326 IAC 2-7-1(32) ("Regulated pollutant, which is used only for purposes of Section 19 of this rule") from the source, for purpose of fee assessment.

The statement must be submitted to:

Indiana Department of Environmental Management
Technical Support and Modeling Section, Office of Air Quality
100 North Senate Avenue
MC 61-50 IGCN 1003
Indianapolis, Indiana 46204-2251

The emission statement does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

C.19 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6][326 IAC 2-2] [326 IAC 2-3]

- (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 makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

- (b) Unless otherwise specified in this permit, for all record keeping requirements not already legally required, the Permittee shall be allowed up to ninety (90) days from the date of permit issuance or the date of initial start-up, whichever is later, to begin such record keeping.
- (c) If there is a reasonable possibility (as defined in 40 CFR 51.165(a)(6)(vi)(A), 40 CFR 51.165(a)(6)(vi)(B), 40 CFR 51.166(r)(6)(vi)(a), and/or 40 CFR 51.166(r)(6)(vi)(b)) that a "project" (as defined in 326 IAC 2-2-1(qq) and/or 326 IAC 2-3-1(II)) at an existing emissions unit, other than projects at a source with a Plantwide Applicability Limitation (PAL), which is not part of a "major modification" (as defined in 326 IAC 2-2-1(ee) and/or 326 IAC 2-3-1(z)) may result in significant emissions increase and the Permittee elects to utilize the "projected actual emissions" (as defined in 326 IAC 2-2-1(rr) and/or 326 IAC 2-3-1(mm)), the Permittee shall comply with following:
- (1) Before beginning actual construction of the "project" (as defined in 326 IAC 2-2-1(qq) and/or 326 IAC 2-3-1(II)) at an existing emissions unit, document and maintain the following records:
- (A) A description of the project.
- (B) Identification of any emissions unit whose emissions of a regulated new source review pollutant could be affected by the project.
- (C) A description of the applicability test used to determine that the project is not a major modification for any regulated NSR pollutant, including:
- (i) Baseline actual emissions;
- (ii) Projected actual emissions;
- (iii) Amount of emissions excluded under section 326 IAC 2-2-1(rr)(2)(A)(iii) and/or 326 IAC 2-3-1 (mm)(2)(A)(iii); and
- (iv) An explanation for why the amount was excluded, and any netting calculations, if applicable.
- (d) If there is a reasonable possibility (as defined in 40 CFR 51.165(a)(6)(vi)(A) and/or 40 CFR 51.166(r)(6)(vi)(a)) that a "project" (as defined in 326 IAC 2-2-1(qq) and/or 326 IAC 2-3-1(II)) at an existing emissions unit, other than projects at a source with a Plantwide Applicability Limitation (PAL), which is not part of a "major modification" (as defined in 326 IAC 2-2-1(ee) and/or 326 IAC 2-3-1(z)) may result in significant emissions increase and the Permittee elects to utilize the "projected actual emissions" (as defined in 326 IAC 2-2-1(rr) and/or 326 IAC 2-3-1(mm)), the Permittee shall comply with following:
- (1) Monitor the emissions of any regulated NSR pollutant that could increase as a result of the project and that is emitted by any existing emissions unit identified in (1)(B) above; and
- (2) Calculate and maintain a record of the annual emissions, in tons per year on a calendar year basis, for a period of five (5) years following resumption of regular operations after the change, or for a period of ten (10) years following resumption of regular operations after the change if the project increases the design capacity of or the potential to emit that regulated NSR pollutant at the emissions unit.

C.20 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11] [326 IAC 2-2]
[326 IAC 2-3]

- (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 except that a deviation required to be reported pursuant to an applicable requirement that exists independent of this permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report. This report shall be submitted not later than thirty (30) days after the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34). A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.
- (b) The address for report submittal is:
- Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251
- (c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.
- (d) Reporting periods are based on calendar years, unless otherwise specified in this permit. For the purpose of this permit "calendar year" means the twelve (12) month period from January 1 to December 31 inclusive.
- (e) If the Permittee is required to comply with the recordkeeping provisions of (d) in Section C - General Record Keeping Requirements for any "project" (as defined in 326 IAC 2-2-1 (qq) and/or 326 IAC 2-3-1 (ll)) at an existing emissions unit, and the project meets the following criteria, then the Permittee shall submit a report to IDEM, OAQ:
- (1) The annual emissions, in tons per year, from the project identified in (c)(1) in Section C- General Record Keeping Requirements exceed the baseline actual emissions, as documented and maintained under Section C- General Record Keeping Requirements (c)(1)(C)(i), by a significant amount, as defined in 326 IAC 2-2-1 (xx) and/or 326 IAC 2-3-1 (qq), for that regulated NSR pollutant, and
 - (2) The emissions differ from the preconstruction projection as documented and maintained under Section C - General Record Keeping Requirements (c)(1)(C)(ii).
- (f) The report for project at an existing emissions unit shall be submitted no later than sixty (60) days after the end of the year and contain the following:
- (1) The name, address, and telephone number of the major stationary source.
 - (2) The annual emissions calculated in accordance with (d)(1) and (2) in Section C - General Record Keeping Requirements.

- (3) The emissions calculated under the actual-to-projected actual test stated in 326 IAC 2-2-2(d)(3) and/or 326 IAC 2-3-2(c)(3).
- (4) Any other information that the Permittee wishes to include in this report such as an explanation as to why the emissions differ from the preconstruction projection.

Reports required in this part shall be submitted to:

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

- (g) 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. The general public may request this information from the IDEM, OAQ under 326 IAC 17.1.

Stratospheric Ozone Protection

C.21 Compliance with 40 CFR 82 and 326 IAC 22-1

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

SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

- (a) One (1) Reverberatory Furnace, identified as Emission Unit 3.1, used in the smelting of lead from lead acid batteries and scrap lead. The reverberatory furnace receives charge material from the Rotary Dryer in a continuous process. The furnace is heated by an oxygen enriched 32 million Btu per hour natural gas fired burner system. Molten lead is tapped directly into refining kettles or into molds for subsequent placement/refining in the refining kettles. Lead containing slag is tapped for further lead recovery in the Slag Reduction Furnace. Process flue gas emissions and emissions from a ventilation line known as "the Reverb Furnace Flue and Feed end" are controlled by Baghouse #035 and Scrubber #046. The controlled emissions exhaust to one stack identified as Stack/Vent S-111. Stack/Vent S-111 is equipped with a Continuous Emissions Monitor (CEM) for sulfur dioxide (SO₂) emissions. The rated charge capacity for the Reverberatory Furnace is 34.5 tons per hour (828 TPD). This emission unit was installed in 1972.

[Under 40 CFR 60, Subpart L, the Reverberatory Furnace is considered an affected facility.]

[Under 40 CFR 63, Subpart X, the Reverberatory Furnace is considered an affected facility.]

- (b) One (1) 2500 kVA Electric Arc Slag Reduction Furnace (SRF), identified as Emission Unit 3.3, that concurrently processes hot slag from the Reverberatory Furnace and cold slag in a continuous process. Cold slag is taken from storage and is placed in a hopper. Hot slag is conveyed from the Reverberatory Furnace to the SRF. Molten lead is tapped into molds for subsequent placement/refining in the refining kettles. Slag is tapped and stored awaiting proper disposal or reprocessing if the lead content is high enough. Emissions are controlled by Baghouse #037 and Scrubber #046 which exhaust to one stack identified as Stack/Vent S-111. Stack/Vent S-111 is equipped with a Continuous Emissions Monitor (CEM) for sulfur dioxide (SO₂) emissions. The rated charge capacity for the Slag Reduction Furnace is 5.5 tons per hour (132 TPD). This emission unit was installed in 1995.

[Under 40 CFR 63, Subpart X, the Reverberatory Furnace is considered an affected facility.]

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

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.1.1 PSD Minor Limits [326 IAC 2-2]

Pursuant to CP Pursuant to Operation Permit T 097-27020-00079 and Construction Permit 960079-04, the following apply to the Slag Reduction Furnace (SRF).

- (a) The PM emissions from the SRF shall not exceed 5.7 pounds per hour.
- (b) The PM₁₀ emissions from the SRF shall not exceed 3.4 pounds per hour.
- (c) The lead emissions from the Slag Reduction Furnace (SRF) shall not exceed 0.136 pounds per hour.

Compliance with these limits will limit the PM, PM₁₀, and lead emissions from the Slag Reduction Furnace (SRF) to less than, 25, 15, and 0.6 tons per year, respectively, and render the requirements of 326 IAC 2-2 (PSD) not applicable to the SRF constructed in 1995.

D.1.2 Emission Offset Sulfur Dioxide Minor Limit [326 IAC 2-3]

Pursuant to Construction Permit 960079-04, SO₂ emissions from the Slag Reduction Furnace (SRF) shall not exceed five and seven tenths (5.7) pounds per hour. This emissions limitation is equivalent to less than twenty five (25) tons of SO₂ per twelve (12) consecutive month period with compliance determined at the end of each month. Therefore, these conditions limit the potential to emit SO₂ to less than the applicable limits pursuant to Construction Permit Amendment A0970079. Compliance with this emissions limitation makes 326 IAC 2-3 (Emission Offset) not applicable.

D.1.3 Particulate (PM) Limit [326 IAC 6.5-6-28]

Pursuant to 326 IAC 6.5-6-28, the allowable particulate emissions from the Reverberatory Furnace shall not exceed sixteen thousandths (0.016) grains per dry standard cubic foot of exhaust and five and eight tenths (5.8) tons per twelve consecutive month period.

D.1.4 Sulfur Dioxide (SO₂) Emissions Limit [326 IAC 7-4-2]

- (a) Pursuant to 325 IAC 7-4-2, SO₂ emissions from the Reverberatory Furnace shall not exceed 24.6 pounds per ton material charged and 617 pounds per hour.
- (b) Pursuant to Construction Permit Amendment A0970079, SO₂ emissions from Stack/Vent S-111 exhaust are limited to fifty (50.0) pounds per hour. Therefore, these conditions limit the potential to emit SO₂ to less than the applicable limits pursuant to Construction Permit Amendment A0970079.

D.1.5 Lead Emissions Limitation [326 IAC 20-13-2]

Pursuant to 326 IAC 20-13-2 (Hazardous Air Pollutants: Secondary Lead Smelters Emission Limitations; Lead Standards for Quemetco, Incorporated), Lead emissions from Stack/Vent S-111 shall not exceed one (1.0) milligram per dry standard cubic meter (0.00044 grains per dry standard cubic feet of exhaust air).

D.1.6 Opacity Limitation [326 IAC 20-13-7]

Pursuant to 326 IAC 20-13-7:

- (a) Stack/Vent S-111 exhaust shall not exceed five percent (5.0%) for any one (1) six (6) minute averaging period as determined by 40 CFR Part 60 Appendix A Method 9 or an acceptable alternative method as defined in Method 9.
- (b) Exterior dust handling systems of dry collectors of Lead emitting processes (augers, hoppers, transfer points) shall not discharge to the atmosphere visible emissions in excess of five percent (5.0%) of an observation period consisting of three (3) twenty (20) minute periods, as determined by 40 CFR 60, Appendix A, Reference Method 22. The provisions under this subdivision for dust handling systems shall not apply during maintenance and repair of the dust handling systems. During maintenance and repair of the dust handling systems, the Permittee shall take reasonable measures to prevent or minimize fugitive dust emissions.
- (c) The opacity limitations shall only apply to particulate matter emissions.

D.1.7 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for the Reverberatory Furnace, Slag Reduction Furnace and any control devices. The Permittee's latest approved SOP's required under 40 CFR Part 63 satisfy the PMP requirement in this case.

Compliance Determination Requirements

D.1.8 Particulate Control [326 IAC 2-7-6(6)]

- (a) In order to comply with Conditions D.1.1, D.1.3, and D.1.5, the Baghouses identified as #035 and #037 for particulate control shall be in operation and control emissions from the Reverberatory Furnace, identified as Emission Unit 3.1, and the Electric Arc Slag Reduction Furnace (SRF), identified as Emission Unit 3.3, at all times that Emission Units 3.1 and 3.3 are 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.1.9 Sulfur Dioxide (SO₂) Control [326 IAC 2-7-6(6)]

In order to comply with Conditions D.1.2 and D.1.4, the Scrubber identified as #046 for Sulfur Dioxide (SO₂) emissions control shall be in operation and control emissions from the Reverberatory Furnace, identified as Emission Unit 3.1, and the Electric Arc Slag Reduction Furnace (SRF), identified as Emission Unit 3.3, at all times that Emission Units 3.1 and 3.3 are in operation.

D.1.10 Testing Requirements [326 IAC 2-1.1-11] [326 IAC 2-7-6(1), (6)] [326 IAC 20-13-6]

- (a) In order to demonstrate compliance with Conditions D.1.1(a) and D.1.3, the Permittee shall perform PM testing of the SRF and the Reverberatory Furnace by April 7, 2015, utilizing methods as approved by the Commissioner. This test shall be conducted at least once every five (5) years from the date of the most recent valid compliance demonstration. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C – Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition.
- (b) Within 180 days after the issuance date of this permit No. T097-27020-00079, the Permittee shall perform PM₁₀ testing of the SRF, utilizing methods approved by the commissioner, at least once every five (5) years from the date of the most recent valid compliance demonstration. PM₁₀ includes filterable and condensable PM₁₀. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C – Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition.
- (c) In order to demonstrate compliance with Condition D.1.5, the Permittee conduct a compliance test for Lead compounds from Stack/Vent S-111, utilizing methods as approved by the Commissioner at least once every year from the date of the most recent valid compliance demonstration. If a compliance test demonstrates a source emitted Lead compounds from Stack /Vent S-111 less than or equal to fifty percent (50.0%) of the applicable limit under this rule during the compliance test, the Permittee shall be allowed up to twenty-four (24) months from the previous compliance test to conduct the next compliance test for Lead compounds. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C – Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition.

D.1.11 Continuous Emissions Monitoring [326 IAC 3-5] [40 CFR 64]

- (a) Pursuant to 326 IAC 3-5 (Continuous Monitoring of Emissions), the SO₂ continuous emission monitoring systems (CEMS) for Stack-Vent S-111 shall be calibrated,

- maintained, and operated for measuring SO₂, and meet the performance specifications of 326 IAC 3-5-2 and 40 CFR 60 when the reverberatory furnace is charged and in operation.
- (b) If the SO₂ continuous emission monitoring system (CEMS) is malfunctioning or down for repairs or adjustments, for twenty-four (24) hours or more, the Permittee shall monitor and record the flow rate and the pH of Scrubber #046 scrubbant when exhausting to Stack/Vent S-111. The Scrubber #046 scrubbant flow shall be maintained at a flow rate established from the most recent compliant test and shall maintain a pH of 6 to 11. The Permittee shall monitor and record the scrubbant flow rate and the pH at least once per shift until the CEMS for Stack/Vent S-111 is returned to operation.
 - (c) The continuous emissions monitoring system(s) (CEMS) for SO₂ emission rates shall be operated at all times the emissions unit or process is operating except for reasonable periods of monitor system downtime due to necessary calibration, maintenance activities or malfunctions. Calibration and maintenance activities shall be conducted pursuant to the standard operating procedures under 326 IAC 3-5-4(a). [326 IAC 2-7-5(3)(A)(iii)] [326 IAC 3-5]
 - (d) All CEMS required by this permit shall meet all applicable performance specifications of 40 CFR 60 or any other applicable performance specifications, and are subject to monitor system certification requirements pursuant to 326 IAC 3-5-3.
 - (e) In the event that a breakdown of a continuous emission monitoring system required by this permit occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem.
 - (f) Nothing in this permit shall excuse the Permittee from complying with the requirements to operate a continuous emission monitoring system pursuant to 326 IAC 3-5 and 40 CFR 60.

Compliance Monitoring Requirements [326 IAC 2-7-5(1)][326 IAC 2-7-6(1)]

D.1.12 Baghouse Leak Detection System [326 IAC 20-13-5]

- (a) Pursuant to 40 CFR 63.548(a) and (b) and 326 IAC 20-13-5, the Permittee shall operate at all times in accordance with the Standard Operating Procedures Manual most recently approved by IDEM, OAQ that describes in detail procedures for inspection, maintenance and bag leak detection and corrective action plans for baghouses #035 and #037. The Standard Operating Procedures Manual shall, at a minimum, include the following requirements of 40 CFR 63.548(c)(d)(e) and (f):
 - (1) Daily monitoring of pressure drop across each baghouse cell.
 - (2) Weekly confirmation that dust is being removed from hoppers through visual inspection or equivalent means of ensuring proper functioning of removal mechanism.
 - (3) For Baghouse #037, a daily check of compressed air supply.
 - (4) An appropriate methodology for monitoring cleaning cycles to ensure proper operation.
 - (5) Monthly check of bag cleaning mechanisms for proper functioning through visual inspection or equivalent means.
 - (6) For Baghouse, #035, a monthly check of bag tension. Such checks are not

required for shaker type baghouses using self tensioning (spring load) devices.

- (7) Quarterly confirmation of the physical integrity of the baghouse through visual inspection of the baghouse interior for air leaks.
- (8) Quarterly inspection of fan for wear, material buildup, and corrosion.
- (9) Continuous operation of a bag leak detection system for baghouse #035 and #037 that meets the following specifications and requirements:
 - (A) The baghouse leak detection system must be certified by the manufacturer to be capable of detecting particulate matter emissions concentrations of ten (10) milligrams per actual cubic meter (0.0044 grains per actual cubic foot) or less.
 - (B) The baghouse leak detection system sensor must provide output of relative particulate matter loadings.
 - (C) The baghouse leak detection system must be equipped with an alarm system that will alarm when an increase in relative particulate loading is detected over a preset level.
 - (D) The bag leak detection system shall be installed and operated in a manner consistent with available written guidance from the U.S. E.P.A. or in the absence of such written guidance, the manufacturer's written specifications and recommendations for installation, operation, and adjustment of the system
 - (E) The initial adjustments of the system shall, at a minimum, consist of establishing a baseline output by adjusting the sensitivity (range) and the averaging period of the device, and establishing the alarm set points and the alarm delay time.
 - (F) Following the initial adjustment, the Permittee shall not adjust the sensitivity or range, averaging period, alarm set points, and alarm delay time only as detailed in the SOP.
 - (G) Whenever the alarm on a bag leak detector is set off, Quemetco, Inc. personnel will implement the procedures outlined in its current SOP Manual.
- (10) The procedures specified in the Standard Operating Procedures manual for maintenance shall, at a minimum, include a preventative maintenance schedule that is consistent with the baghouse manufacturer's instructions for routine and long-term maintenance.
- (11) The Standard Operating Procedures Manual shall include a corrective action plan that specifies the procedures to be followed in the case of a bag leak detection system alarm. The corrective action plan shall include, at a minimum, the procedures used to determine and record the time and cause of the alarm as well as the corrective actions taken to correct the control device malfunction or minimize emissions as specified below:
 - (A) The procedures used to determine the cause of the alarm must be initiated within thirty (30) minutes of the alarm.
 - (B) The cause of the alarm must be alleviated by taking the necessary corrective action(s) which may include but not be limited to:

- (i) Inspecting the baghouse for air leaks, torn or broken filter elements, or any other malfunction that may cause an increase in emissions.
 - (ii) Sealing off defective bags or filter media, or otherwise.
 - (iii) Replacing defective bags or filter media, or otherwise repairing the control device.
 - (iv) Sealing off a defective baghouse compartment.
 - (v) Cleaning the bag leak detection system probe, or otherwise repairing the bag leak detection system.
 - (vi) Shutting down the process producing the particulate emissions.
- (b) Pursuant to 326 IAC 20-13-8, the Permittee shall meet the following requirements for a continuous baghouse leak detection system:
- (1) The bag leak detection system must be certified by the manufacturer to be capable of detecting particulate matter emissions at concentrations of ten (10) milligrams per actual cubic meter (forty-four ten thousandths (0.0044) grains per actual cubic foot) or less.
 - (2) The bag leak detection system sensor must provide output of relative particulate matter loadings, and the Permittee must continuously record the output from the bag leak detection system.
 - (3) The bag leak detection system must be equipped with an alarm system that will alert appropriate plant personnel when an increase in relative particulate loadings is detected over a preset level. The alarm must be located where it can be heard by the appropriate plant personnel.
 - (4) Each bag leak detection system that works based on the triboelectric effect must be installed, calibrated, operated, and maintained consistent with the U.S. Environmental Protection Agency guidance document "Fabric Filter Bag Leak Detection Guidance" (EPA-454/R-98-015, September 1997). Other bag leak detection systems must be installed, calibrated, and maintained consistent with the manufacturer's written specifications and recommendations.
 - (5) The initial adjustment of the system must, at a minimum, consist of establishing:
 - (A) the baseline output by adjusting the sensitivity (range);
 - (B) the averaging period of the device;
 - (C) the alarm set points; and
 - (D) the alarm delay time.
 - (6) Following initial adjustment, the Permittee must not adjust the:
 - (A) sensitivity or range;
 - (B) averaging period;
 - (C) alarm set points; or
 - (D) alarm delay time;

except as detailed in the maintenance plan required under 40 CFR 63.548(a). In

no event must the sensitivity be increased by more than one hundred percent (100%) or decreased by more than fifty percent (50%) over a three hundred and sixty five (365) day period unless a responsible official certifies the baghouse has been inspected and found to be in good operating condition.

- (7) Where multiple detectors are required, the system's instrumentation and alarm may be share among detectors.
- (8) For Baghouse #035 and #037, the bag leak detector must be installed downstream of the baghouse and upstream of the wet acid gas scrubber, Scrubber #046.

D.1.13 Visible Emissions Notations

- (a) Whenever the baghouse leak detection system is malfunctioning or down for repairs or adjustments for a period of twenty-four (24) hours or more, visible emission notations of Stack/Vent S-111 stack exhaust shall be performed once per shift during normal daylight operations until the baghouse leak detection system is repaired or replaced. 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.1.14 Baghouse Parametric Monitoring

Whenever the baghouse leak detection system is malfunctioning or down for repairs or adjustments for a period of twenty-four (24) hours or more, the Permittee shall record the total static pressure drop across individual Baghouse #035 and #037 cells at least once per day when in operation when venting to the atmosphere until the baghouse leak detection system is repaired or replaced. When for any one reading, the pressure drop across the baghouse cell is outside the normal range of 2.0 and 8.0 inches of water 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. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.

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. The instrument shall be checked against a manometer at least once every six (6) months.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.1.15 Record Keeping Requirements

- (a) The Permittee shall keep records on the continuous SO₂ emissions monitoring systems in

accordance with 326 IAC 3-5-6 and 326 IAC 3-5-7.

- (b) To document compliance with Conditions D.1.2 - Emission Offset Limit, D.1.4 - Sulfur Dioxide (SO₂) Emission Limit, and D.1.9 - Sulfur Dioxide (SO₂) Control, the Permittee shall maintain all SO₂ continuous emissions monitoring data, pursuant to 326 IAC 7-2-1(g), with calendar dates and beginning and ending times of any CEM downtime.
- (c) To document the compliance status with Condition D.1.4 - Sulfur Dioxide (SO₂) Emission Limit, the Permittee shall maintain a record of the monthly SO₂ emissions from furnace StackVent S-111.
- (d) To document compliance with Condition D.1.11 - Continuous Emissions Monitoring, the Permittee shall maintain all SO₂ continuous emissions monitoring data, pursuant to 326 IAC 7-2-1(g), with calendar dates and the beginning and ending times of any CEM downtime. The Permittee shall maintain records of the following; CEMS malfunctions, out of control periods, calibration and adjustment activities, and repair or maintenance activities.
- (e) To document compliance with Condition D.1.11(b) - Continuous Emissions Monitoring, the Permittee shall maintain records of the once per shift pH checks of Scrubber #046 if the SO₂ CEMS is down for twenty-four (24) hours or more. The Permittee shall include in its once per shift record when a reading is not taken and the reason for the lack of reading (e.g. the process did not operate that day).
- (f) To document compliance with Condition D.1.12 - Baghouse Leak Detection System, the Permittee shall maintain records for bag leak detection systems on site for a period of three (3) years and be available for an additional two (2) years and shall include the following information:
 - (1) Records of bag leak detection system output.
 - (2) Identification of the date and time of all bag leak detection system alarms.
 - (3) The time that procedures to determine the cause of the alarm were initiated.
 - (4) The cause of the alarm.
 - (5) An explanation of the actions taken.
 - (6) The date and time the alarm was corrected.
 - (7) Records of total operating time of an affected source during smelting operations for each six (6) month period.
 - (8) Any record keeping required as part of the practices described in the Standard Operating Procedures Manual for baghouses required under 40 CFR 63.548(a).
- (g) To document compliance with Condition D.1.13 – Visible Emissions Notations, the Permittee shall maintain records of visible emissions notations of the stack exhaust from Stack/Vent S-111 once per day whenever the baghouse leak detection system is malfunctioning or down for repairs or adjustments for a period of twenty-four (24) hours or more.
- (h) To document compliance with Condition D.1.14 - Baghouse Parametric Monitoring, when the baghouse leak detection system is malfunctioning or down for repairs or adjustments for a period of twenty-four (24) hours or more as specified in Condition D.1.12, , the Permittee shall maintain records of the pressure drop across each baghouse cell once per day during normal operation when venting to the atmosphere.
- (i) Section C - General Record Keeping Requirements contains the Permittee's obligations with regard to the record keeping required by this condition.

D.1.16 Reporting Requirements

- (a) Pursuant to 326 IAC 20-13-8, the Permittee shall submit a report within thirty (30) days after the end of each preceding six (6) month period ending June 30 and December 31 of each year that includes the following:
 - (1) A description of the actions taken following each bag leak detection system alarm.
 - (2) Calculations of the percentage of time the alarm on the bag leak detection system was activated during the reporting period.
- (b) Pursuant to 326 IAC 3-5-7, the Permittee shall submit a quarterly excess emissions report for SO₂ emissions. This report shall be submitted to the addresses listed in Section C - General Reporting Requirements, of this permit, within thirty (30) days after the end of the calendar quarter being reported.

SECTION D.2 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

- (c) Process Fugitive Emissions from one (1) Reverberatory Furnace, identified as Emission Unit 3.1, used in the smelting of lead from lead acid batteries and scrap lead. Emissions from lead charging are controlled by Baghouses #038 and #041, respectively, and exhaust to one stack identified as Stack/Vent S-100. General furnace emissions are controlled by Baghouse #041 and exhaust to one stack identified as Stack/Vent S-100. Emissions from lead tapping are controlled by Baghouse #040 which exhaust to one stack identified as Stack/Vent S-100. Stack/Vent S-100 is equipped with a Continuous Emissions Monitor (CEM) for sulfur dioxide (SO₂) emissions. The rated charge capacity for the Reverberatory Furnace is 34.5 tons per hour (828 TPD). This emission unit was installed in 1972.

[Under 40 CFR 63, Subpart X, the Process Fugitive Emissions is considered an affected activity.]

- (d) Eight (8) refining kettles, identified as Emission Unit Kettle #1 through Kettle #8, which are used to refine the lead alloy. The refining kettles receive molten lead, solid lead or scrap lead. Reagents and alloying metals are added to the Kettle(s) and mixed into molten lead. A natural gas fired burner system indirectly heats the lead. The combined heat input capacity for the natural gas fired burners is 32 million Btu per hour. Impurities are removed as dross from the surface of the molten lead. Process emissions are controlled by Baghouse #040 which exhausts to one stack identified as Stack/Vent S-100. Stack/Vent S-100 is equipped with a Continuous Emissions Monitor (CEM) for sulfur dioxide (SO₂) emissions. Combustion emissions from the natural gas burners are vented to separate stacks. Combustion emissions from Kettle #1 are vented to Stack/Vent S-117. Combustion emissions from Kettle #2 are vented to Stack/Vent S-114. Kettle #3 and Kettle #4 are vented to Stack/Vent S-116. Combustion emissions from Kettle #5 and Kettle #6 are vented to Stack/Vent S-115. Combustion emissions from Kettle #7 are vented to Stack/Vent S-113. Combustion emissions from Kettle #8 are vented to Stack/Vent S-112. Kettles #1 through #6 were installed in 1972. Kettles #7 and #8 were installed in 1988 and 1992 respectively. The refining operation is not a time based operation therefore there is no maximum throughput capacity identified. However, an average based on 24 hours of operation and full kettles is 46.3 tons per hour.

[Under 40 CFR 60, Subpart L, Kettles #7 and #8 are considered affected facilities.]

[Under 40 CFR 63, Subpart X, Kettles #7 and #8 are considered affected facilities.]

- (e) Refining Kettle #9, identified as Emission Unit Kettle #9. Kettle #9 has a capacity of 2.14 tons of lead per hour (180 ton capacity with two batches per week) and is heated by a 4.25 million Btu natural gas burner. The kettle is used to refine lead. Emissions from Kettle #9 are controlled by Baghouse #040, which exhaust to one stack identified as Stack/Vent S-100. Stack/Vent S-100 is equipped with a Continuous Emissions Monitor (CEM) for sulfur dioxide (SO₂) emissions. Burner emissions are vented through a combustion flue, Stack/Vent S-118, with no controls. Kettle # 9 was installed in 2002.

[Under 40 CFR 60, Subpart L, Kettle #9 is considered an affected facility.]

[Under 40 CFR 63, Subpart X, Kettle #9 is considered an affected facility.]

- (f) One (1) Casting Machine, identified as Emission Unit 7 which receives refined and alloyed lead metal pumped from the refining kettles and casts the molten lead into lead ingots. The casting machine is equipped with a 0.3 million Btu per hour natural gas burner. Emissions from the

casting machine are controlled by Baghouse #040 which exhausts to one stack identified as Stack/Vent S-100. Stack/Vent S-100 is equipped with a Continuous Emissions Monitor (CEM) for sulfur dioxide (SO₂) emissions. The rated process capacity is limited by the refining kettles. This emission unit was installed prior to 1978.

- (g) One (1) Rotary Dryer, identified as Emission Unit 8, used to dry Reverberatory Furnace feed material. Raw material is dumped into a feed hopper which feeds the Rotary Dryer with lead bearing material and furnace additives from lead acid batteries and factory scrap in a continuous process. The Rotary Dryer is heated by an oxygen enriched 14 million Btu per hour natural gas fired burner system. The emissions generated from charging raw material to the feed hopper are controlled by Baghouse #041, which exhausts to one stack identified as Stack/Vent S-100. Process emissions are controlled by Baghouse #041, which exhausts to one stack identified as Stack/Vent S-100. The process fugitive emissions are controlled by Baghouse #038 and by Baghouse #041, which exhaust to one stack identified as Stack/Vent S-100. Stack/Vent S-100 is equipped with a Continuous Emissions Monitor (CEM) for sulfur dioxide (SO₂) emissions. The rated process capacity for the Rotary Dryer is limited by the reverberatory furnace. This emission unit was installed prior to 1978.

[Under 40 CFR 63, Subpart X, the Rotary Dryer is considered an affected facility.]

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

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.2.1 Particulate (PM) Limit [326 IAC 6.5-1-2(a)]

- (a) Pursuant to 326 IAC 6.5-1-2(a), particulate emissions from Stack/Vent S-100 shall not exceed three hundredths (0.03) grains per dry standard cubic foot of exhaust air.
- (b) Pursuant to 326 IAC 6.5-1-2(a), particulate emissions from Stack/Vent S-112, S-113, S-114, S-115, S-116, S-117 and S-118 each shall not exceed three hundredths (0.03) grains per dry standard cubic foot of exhaust air.

D.2.2 Lead Emissions Limitation [326 IAC 20-13-2]

Pursuant to 326 IAC 20-13-2 (Hazardous Air Pollutants: Secondary Lead Smelters Emission Limitations; Lead Standards for Quemetco, Incorporated), Lead emissions from Stack/Vent S-100 shall not exceed one (1.0) milligram per dry standard cubic meter (0.00044) grains per dry standard cubic feet of exhaust air).

D.2.3 Process Fugitive Emissions [326 IAC 20-13]

Pursuant to 326 IAC 20-13-7(f), ventilation air from the following shall be conveyed or ventilated to a control device:

- (1) All enclosure hoods and total enclosures.
- (2) All dryer emission vents.

D.2.4 Sulfur Dioxide (SO₂) Emissions Limit [Construction Permit Amendment A0970079]

Pursuant to Construction Permit Amendment A0970079, SO₂ emissions from Stack/Vent S-100 are limited to three hundred sixty six (366.0) pounds per hour.

D.2.5 Opacity Limitation [326 IAC 20-13-7]

Pursuant to 326 IAC 20-13-7;

- (a) Stack/Vent S-100 exhaust shall not exceed five percent (5.0%) opacity for any one (1) six (6) minute averaging period as determined by 40 CFR Part 60 Appendix A Method 9 or an acceptable alternative method as defined in Method 9.
- (b) Exterior dust handling systems of dry collectors of Lead emitting processes (augers, hoppers, transfer points) shall not discharge to the atmosphere visible emissions in excess of five percent (5.0%) of an observation period consisting of three (3) twenty (20) minute periods, as determined by 40 CFR 60, Appendix A, Reference Method 22. The provisions under this subdivision for dust handling systems shall not apply during maintenance and repair of the dust handling systems. During maintenance and repair of the dust handling systems, the Permittee shall take reasonable measures to prevent or minimize fugitive dust emissions.
- (c) The opacity limitations shall only apply to particulate matter emissions.

D.2.6 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for Emission Unit 3.1, 3.2, 7, 8 and Kettles #1 through #9 exhausting at Stack/Vent S-100 and any control devices. The Permittee's latest approved SOP's required under 40 CFR 63 satisfy the PMP requirement in this case.

Compliance Determination Requirements

D.2.7 Particulate Control

- (a) In order to comply with Condition D.2.3 through D.2.7, the Baghouses identified as #038, #040 and #041 for particulate control shall be in operation and control emissions from Emission Units 3.1, 7, 8 and Kettles #1 through #9 at all times that Emission Unit 3.1, 7, 8 and Kettles #1 through #9 are 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 Testing Requirements [326 IAC 2-1.1-11]

Pursuant to 326 IAC 20-13-6, the Permittee shall conduct a compliance test for Lead compounds from Stack/Vent S-100 on an annual basis, no later than twelve (12) calendar months following the previous compliance test. If a compliance test demonstrates a source emitted Lead compounds from Stack /Vent S-100 less than or equal to fifty percent (50.0%) of the applicable limit under this rule during the compliance test, the Permittee shall be allowed up to twenty-four (24) months from the previous compliance test to conduct the next compliance test for Lead compounds. Pursuant to 326 IAC 20-13-6, retesting for Lead compounds from Stack/Vent S-100 shall be conducted no later than February, 11 2012. This test shall be conducted utilizing methods as approved by the commissioner.

D.2.9 Continuous Emissions Monitoring [326 IAC 3-5] [40 CFR 64]

- (a) Pursuant to 326 IAC 3-5 (Continuous Monitoring of Emissions), the SO₂ continuous emission monitoring systems (CEMS) for Stack-Vent S-100 shall be calibrated, maintained, and operated for measuring SO₂, and meet the performance specifications of

326 IAC 3-5-2 and 40 CFR 60 when the reverberatory furnace is charged and in operation.

- (b) The continuous emissions monitoring system(s) (CEMS) for SO₂ emission rates shall be operated at all times the emissions unit or process is operating except for reasonable periods of monitor system downtime due to necessary calibration, maintenance activities or malfunctions. Calibration and maintenance activities shall be conducted pursuant to the standard operating procedures under 326 IAC 3-5-4(a). [326 IAC 2-7-5(3)(A)(iii)] [326 IAC 3-5]
- (c) All CEMS required by this permit shall meet all applicable performance specifications of 40 CFR 60 or any other applicable performance specifications, and are subject to monitor system certification requirements pursuant to 326 IAC 3-5-3.
- (d) In the event that a breakdown of a continuous emission monitoring system required by this permit occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem.
- (e) Nothing in this permit shall excuse the Permittee from complying with the requirements to operate a continuous emission monitoring system pursuant to 326 IAC 3-5 and 40 CFR 60.

Compliance Monitoring Requirements [326 IAC 2-7-5(1)][326 IAC 2-7-6(1)]

D.2.10 Baghouse Leak Detection System [326 IAC 20-13-5]

- (a) Pursuant to 40 CFR 63.548(a) and (b) and 326 IAC 20-13-5, the Permittee shall operate at all times in accordance with the Standard Operating Procedures Manual most recently approved by IDEM, OAQ. The Standard Operating Procedures Manual shall, at a minimum, include the following requirements of 40 CFR 63.548(c)(d)(e) and (f):
 - (1) Daily monitoring of pressure drop across each baghouse cell.
 - (2) Weekly confirmation that dust is being removed from hoppers through visual inspection or equivalent means of ensuring proper functioning of removal mechanism.
 - (3) For Baghouse #041, a daily check of compressed air supply.
 - (4) An appropriate methodology for monitoring cleaning cycles to ensure proper operation.
 - (5) Monthly check of bag cleaning mechanisms for proper functioning through visual inspection or equivalent means.
 - (6) For Baghouse #038 and Baghouse #040, a monthly check of bag tension. Such checks are not required for shaker type baghouses using self tensioning (spring load) devices.
 - (7) Quarterly confirmation of the physical integrity of the baghouse through visual inspection of the baghouse interior for air leaks.
 - (8) Quarterly inspection of fan for wear, material buildup, and corrosion.
 - (9) Continuous operation of a bag leak detection system for Baghouse #038, #040 and #041 that meets the following specifications and requirements:

- (A) The baghouse leak detection system must be certified by the manufacturer to be capable of detecting particulate matter emissions concentrations of ten (10) milligrams per actual cubic meter (0.0044 grains per actual cubic foot) or less.
 - (B) The baghouse leak detection system sensor must provide output of relative particulate matter loadings.
 - (C) The baghouse leak detection system must be equipped with an alarm system that will alarm when an increase in relative particulate loading is detected over a preset level.
 - (D) The bag leak detection system shall be installed and operated in a manner consistent with available written guidance from the U.S. E.P.A. or in the absence of such written guidance, the manufacturer's written specifications and recommendations for installation, operation, and adjustment of the system.
 - (E) The initial adjustments of the system shall, at a minimum, consist of establishing a baseline output by adjusting the sensitivity (range) and the averaging period of the device, and establishing the alarm set points and the alarm delay time.
 - (F) Following the initial adjustment, the Permittee shall not adjust the sensitivity or range, averaging period, alarm set points, and alarm delay time only as detailed in the SOP.
 - (G) Whenever the alarm on a bag leak detector is set off, Quemetco, Inc. personnel will implement the procedures outlined in its current SOP Manual.
- (10) The procedures specified in the Standard Operating Procedures manual for maintenance shall, at a minimum, include a preventative maintenance schedule that is consistent with the baghouse manufacturer's instructions for routine and long-term maintenance.
- (11) The Standard Operating Procedures Manual shall include a corrective action plan that specifies the procedures to be followed in the case of a bag leak detection system alarm. The corrective action plan shall include, at a minimum, the procedures used to determine and record the time and cause of the alarm as well as the corrective actions taken to correct the control device malfunction or minimize emissions as specified below:
- (A) The procedures used to determine the cause of the alarm must be initiated within thirty (30) minutes of the alarm.
 - (B) The cause of the alarm must be alleviated by taking the necessary corrective action(s) which may include but not be limited to:
 - (i) Inspecting the baghouse for air leaks, torn or broken filter elements, or any other malfunction that may cause an increase in emissions.
 - (ii) Sealing off defective bags or filter media, or otherwise.
 - (iii) Replacing defective bags or filter media, or otherwise repairing

the control device.

- (iv) Sealing off a defective baghouse compartment.
- (v) Cleaning the bag leak detection system probe, or otherwise repairing the bag leak detection system.
- (vi) Shutting down the process producing the particulate emissions.

- (b) Pursuant to 326 IAC 20-13-8, the Permittee shall meet the following requirements for a continuous baghouse leak detection system:
- (1) The bag leak detection system must be certified by the manufacturer to be capable of detecting particulate matter emissions at concentrations of ten (10) milligrams per actual cubic meter (forty-four ten thousandths (0.0044) grains per actual cubic foot) or less.
 - (2) The bag leak detection system sensor must provide output of relative particulate matter loadings, and the Permittee must continuously record the output from the bag leak detection system.
 - (3) The bag leak detection system must be equipped with an alarm system that will alert appropriate plant personnel when an increase in relative particulate loadings is detected over a preset level. The alarm must be located where it can be heard by the appropriate plant personnel.
 - (4) Each bag leak detection system that works based on the triboelectric effect must be installed, calibrated, operated, and maintained consistent with the U.S. Environmental Protection Agency guidance document "Fabric Filter Bag Leak Detection Guidance" (EPA-454/R-98-015, September 1997). Other bag leak detection systems must be installed, calibrated, and maintained consistent with the manufacturer's written specifications and recommendations.
 - (5) The initial adjustment of the system must, at a minimum, consist of establishing:
 - (A) the baseline output by adjusting the sensitivity (range);
 - (B) the averaging period of the device;
 - (C) the alarm set points; and
 - (D) the alarm delay time.
 - (6) Following initial adjustment, the Permittee must not adjust the:
 - (A) sensitivity or range;
 - (B) averaging period;
 - (C) alarm set points; or
 - (D) alarm delay time;

except as detailed in the maintenance plan required under 40 CFR 63.548(a). In no event must the sensitivity be increased by more than one hundred percent (100%) or decreased by more than fifty percent (50%) over a three hundred and sixty five (365) day period unless a responsible official certifies the baghouse has been inspected and found to be in good operating condition.
 - (7) Where multiple detectors are required, the system's instrumentation and alarm may be share among detectors.

- (8) For Baghouse #038, #040 and #041, the bag leak detector must be installed downstream of the baghouse.

D.2.11 Visible Emissions Notations

- (a) Whenever the baghouse leak detection system is malfunctioning or down for repairs or adjustments, and the continuous opacity monitor is down for a period of twenty-four (24) hours, visible emission notations of Stack/Vent S-100 stack exhaust shall be performed once per day during normal daylight operations when exhausting to the atmosphere until the baghouse leak detection system is repaired or replaced. 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.2.12 Baghouse Parametric Monitoring

Whenever the baghouse leak detection system is malfunctioning or down for repairs or adjustments, and the continuous opacity monitor is down on Stack/Vent S-100 for a period of twenty-four (24) hours or more, the Permittee shall record the pressure drop across individual Baghouse #038, #040 and #041 cells at least once per day when the associated units are in operation until the baghouse leak detection system is repaired or replaced. When for any one reading, the pressure drop across the baghouse cell is outside the normal range of 2.0 and 8.0 inches of water 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. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.

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. The instrument shall be checked against a manometer at least once every six (6) months.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.2.13 Record Keeping Requirement

- (a) The Permittee shall keep records on the continuous SO₂ emissions monitoring systems in accordance with 326 IAC 3-5-6.
- (b) To document compliance with Condition D.2.8(a) - Continuous Emissions Monitoring, the Permittee shall maintain all SO₂ continuous emissions monitoring data, pursuant to 326 IAC 7-2-1(g), with calendar dates and the beginning and ending times of any CEM downtime. The Permittee shall maintain records of the following; CEMS malfunctions, out of control periods, calibration and adjustment activities, and repair or maintenance activities.

- (c) To document compliance with Condition D.2.9 - Baghouse Leak Detection System, the Permittee shall maintain records for bag leak detection systems on site for a period of three (3) years and be available for an additional two (2) years and shall include the following information:
- (1) Records of bag leak detection system output.
 - (2) Identification of the date and time of all bag leak detection system alarms.
 - (3) The time that procedures to determine the cause of the alarm were initiated.
 - (4) The cause of the alarm.
 - (5) An explanation of the actions taken.
 - (6) The date and time the alarm was corrected.
 - (7) Records of total operating time of an affected source during smelting operations for each six (6) month period.
 - (8) Any record keeping required as part of the practices described in the Standard Operating Procedures Manual for baghouses required under 40 CFR 63.548(a).
- (d) To document compliance with Conditions D.2.10 - Visible Emission Notations, the Permittee shall maintain records of visible emission notations of the stack exhaust from Stack/Vent S-100 once per day for times when the baghouse leak detection system is malfunctioning or down for repairs or adjustments for a period of twenty-four (24) hours or more and the continuous opacity monitor is down. 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).
- (e) To document compliance with Conditions D.2.11 - Parametric Monitoring the Permittee shall maintain records of the pressure drop across the baghouse once per day for times when the baghouse leak detection system is malfunctioning or down for repairs or adjustments for a period of twenty-four hours or more and the continuous opacity monitor is down as specified in Condition D.2.9. The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of pressure drop reading (e.g. the process did not operate that day).
- (f) Section C - General Record Keeping Requirements contains the Permittee's obligations with regard to the record keeping required by this condition.

D.2.14 Reporting Requirements

- (a) Pursuant to 326 IAC 20-13-8, the Permittee shall submit a report within thirty (30) days after the end of each preceding six (6) month period ending June 30 and December 31 of each year that includes the following:
- (1) A description of the actions taken following each bag leak detection system alarm.
 - (2) Calculations of the percentage of time the alarm on the bag leak detection system was activated during the reporting period.
- (b) Pursuant to 326 IAC 3-5-7, the Permittee shall submit a quarterly excess emissions report for SO₂ emissions. This report shall be submitted to the addresses listed in Section C - General Reporting Requirements, of this permit, within thirty (30) days after the end of the calendar quarter being reported.

SECTION D.3 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

- (h) General Building Ventilation of the bin 10 feed storage area, identified as GV101. Portions of process fugitive emissions generated by operations conducted in this area are controlled by Roof Vent Baghouse RV #1 and exhausting to Stack/Vent S-101. These operations potentially generate fugitive emissions from storage and handling of reverberatory charge materials and general emissions generated by traffic and housekeeping activities. Roof Vent Baghouse RV #1 was installed in 1991.

[Under 40 CFR 63, Subpart X, the General Building Ventilation is considered an affected facility.]

- (i) General Building Ventilation of the bin 10 feed storage area, identified as GV102. Portions of process fugitive emissions generated by operations conducted in this area are controlled by Roof Vent Baghouse RV #2 and exhausting to Stack/Vent S-102. These operations potentially generate emissions, including fugitive emissions from storage and handling of Reverberatory charge materials and general emissions generated by traffic and housekeeping activities. Roof Vent Baghouse RV #2 was installed in 1991.

[Under 40 CFR 63, Subpart X, the General Building Ventilation is considered an affected facility.]

- (j) General Building Ventilation of the bin 10 feed storage area, identified as GV103. Portions of process fugitive emissions generated by operations conducted in this area are controlled by Roof Vent Baghouse RV #3 and exhausting to Stack/Vent S-103. These operations potentially generating fugitive emissions from storage and handling of charge materials and general emissions generated by traffic and housekeeping activities. Roof Vent Baghouse RV #3 was installed in 1991.

[Under 40 CFR 63, Subpart X, the General Building Ventilation is considered an affected facility.]

- (k) General Ventilation for the reverb charge room, identified as GV104. Portions of process fugitive emissions generated by operations conducted in this area are controlled by Roof Vent Baghouse RV #4 and exhausting to Stack/Vent S-104. These operations potentially generating fugitive emissions include make up of reverberatory charge materials and general emissions generated by traffic and housekeeping activities. Roof Vent Baghouse RV #4 was installed in 1991.

[Under 40 CFR 63, Subpart X, the General Building Ventilation is considered an affected facility.]

- (l) General Ventilation for the slag warehouse dumping bin, identified as GV105. Portions of process fugitive emissions generated by operations conducted in this area are controlled by roof vent Baghouse RV #5 and exhausting to Stack/Vent S-105. These operations potentially generating fugitive emissions include emissions from the Slag Warehouse Dumping Bin and general emissions generated by traffic and housekeeping activities. Roof Vent Baghouse RV #5 was installed in 1991.

[Under 40 CFR 63, Subpart X, the General Building Ventilation is considered an affected facility.]

- (m) General Ventilation for the reverb furnace and slag reduction furnace (SRF), identified as

GV106. Portions of process fugitive emissions generated by operations conducted in this area are controlled by Roof Vent Baghouse RV #6 and exhausting to Stack/Vent S-106. These operations potentially generating fugitive emissions include the Reverberatory/Slag Reduction Furnaces - lead and slag tapping, furnace charging, feed conveyor, slag handling, and general emissions generated by traffic and housekeeping activities. Roof Vent Baghouse RV #6 was installed in 1991.

[Under 40 CFR 63, Subpart X, the General Building Ventilation is considered an affected facility.]

- (n) General Ventilation of the north refinery area, identified as GV107. Portions of process fugitive emissions generated by operations conducted in this area are controlled by Roof Vent Baghouse RV #7 and exhausting to Stack/Vent S-107. The operations potentially generating fugitive emissions include the 9 refining kettles, kettle charging, dross skimming, casting, natural gas fired trimmer burners rated at 1.8 million Btu in the casting machine area and general emissions generated by traffic and housekeeping activities. Roof Vent Baghouse RV #7 was installed in 1991.

[Under 40 CFR 63, Subpart X, the General Building Ventilation is considered an affected facility.]

Emissions Unit Description:

- (o) General Ventilation of the slag reduction furnace area, identified as GV108. Portions of process fugitive emissions generated by operations conducted in this area are controlled by Roof Vent Baghouse RV #8 and exhausting to Stack/Vent S-108. These operations potentially generating fugitive emissions include the slag reduction/ reverberatory furnace - lead and slag tapping, furnace charging, feed conveyor, slag handling and general emissions generated by traffic and housekeeping activities. Roof Vent Baghouse RV #8 was installed in 1992.

[Under 40 CFR 63, Subpart X, the General Building Ventilation is considered an affected facility.]

- (p) General Ventilation of the south refinery area, identified as GV109. Portions of process fugitive emissions generated by operations conducted in this area are controlled by Roof Vent Baghouse RV #9 and exhausting to Stack/Vent S-109. These operations potentially generating fugitive emissions include 9 refining kettles, kettle charging, dross skimming, casting and general emissions generated by traffic and housekeeping activities. Roof Vent Baghouse RV #9 was installed in 1995.

[Under 40 CFR 63, Subpart X, the General Building Ventilation is considered an affected facility.]

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

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.3.1 Lead Emissions Limitation [326 IAC 20-13][326 IAC 20-13-2]

Pursuant to 326 IAC 20-13-2 (Hazardous Air Pollutants: Secondary Lead Smelters Emission Limitations; Lead Standards for Quemetco, Incorporated), Lead emissions from Stack/Vent S-101, S-102, S-103, S-104, S-105, S-106, S-107, S-108 and S-109 each shall not exceed five tenths (0.5) milligram per dry standard cubic meter of exhaust (0.00022 grains per dry standard cubic feet of exhaust air).

D.3.2 Process Fugitive Emissions [326 IAC 20-13]

Pursuant to 326 IAC 20-13-7(f), ventilation air from the following shall be conveyed or ventilated to a control device:

- (1) All enclosure hoods and total enclosures.
- (2) All dryer emission vents.

D.3.3 Particulate (PM) Limit [326 IAC 6.5-1-2(a)]

Pursuant to 326 IAC 6.5-1-2(a), Particulate emissions from Stack/Vent S-101, S-102, S-103, S-104, S-105, S-106, S-107, S-108 and S-109 each shall not exceed three hundredths (0.03) grains per dry standard cubic foot of exhaust air.

D.3.4 Opacity Limitation [326 IAC 20-13]

Pursuant to 326 IAC 20-13-7;

- (a) Stack/Vent S-101, S-102, S-103, S-104, S-105, S-106, S-107, S-108 and S-109 each shall not exceed five percent (5.0%) opacity as determined by 40 CFR Part 60 Appendix A Method 9 or an acceptable alternative method as defined in Method 9.
- (b) Exterior dust systems of dry collectors of Lead emitting processes (augers, hoppers, transfer points) shall not discharge to the atmosphere visible emissions in excess of five percent (5.0%) of an observation period consisting of three (3) twenty (20) minute periods, as determined by 40 CFR 60, Appendix A, Reference Method 22. The provisions under this subdivision for dust handling systems shall not apply during maintenance and repair of the dust handling systems. During maintenance and repair of the dust handling systems, the Permittee shall take reasonable measures to prevent or minimize fugitive dust emissions.

D.3.5 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for Roof Vent Baghouses RV# 1 through RV #9. The Permittee's latest approved SOP's required under 40 CFR Part 63 satisfy the PMP requirement in this case.

Compliance Determination Requirements

D.3.6 Particulate Control

- (a) In order to comply with Conditions D.3.1, D.3.2 and D.3.3, the Baghouses identified as RV #1, RV #2, RV #3, RV #4, RV #5, RV #6, RV #7, RV #8 and RV #9 for particulate control shall be in operation and control emissions at all times that process fugitive and fugitive emission sources are in operation except for time of maintenance. The Permittee shall not perform maintenance such that more than two (2) of RV#6, RV#7, RV#8, and RV#9 are down at the same time.
- (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.3.7 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11][326 IAC 20-13]

In order to determine compliance with Condition D.3.1- Lead Emissions Limitation, the Permittee shall perform lead testing on Stack/Vents S-106, S-107, S-108 and S-109, utilizing methods as

approved by the Commissioner. These tests shall be repeated at least once every two (2) years from the date of this valid compliance demonstration. Testing shall be conducted in accordance with Section C- Performance Testing.

Compliance Monitoring Requirements [326 IAC 2-7-5(1)][326 IAC 2-7-6(1)]

D.3.8 Visible Emissions Notations

- (a) Visible emission notations of Stack/Vent S-101 through S-109 stack exhaust shall be performed once per day during normal daylight operations when the processes are operating and exhausting to the atmosphere. 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) Failure to take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.

D.3.9 Baghouse Parametric Monitoring

The Permittee shall record the total static pressure drop across Roof Vent individual Baghouses RV #1 through RV #9 at least once per day when in operation when venting to the atmosphere. When for any one reading, the pressure drop across the baghouse is outside the normal range of 2.0 and 8.0 inches of water 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. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.

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. This instrument shall be checked against a manometer at least once every six (6) months.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.3.10 Record Keeping Requirements

- (a) The Permittee shall maintain purchasing records and manufacturer's specifications of HEPA filters installed on all process fugitive and fugitive dust stacks demonstrating the filters have been certified by the manufacturer to meet the definition of HEPA filters in 40 CFR 63.542. The records and manufacturer's specifications shall be maintained on site for three (3) years and shall be available for an additional two (2) years.
- (b) To document compliance with Conditions D.3.8 - Visible Emission Notation, the Permittee shall maintain records of visible emission notations of the baghouse stack exhaust once per day. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g. the process did not operate that day).

- (c) To document compliance with Conditions D.3.9 - Parametric Monitoring, the Permittee shall maintain records of the pressure drop across the baghouse once per day. The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of pressure drop reading (e.g. the process did not operate that day).
- (d) Section C - General Record Keeping Requirements contains the Permittee's obligations with regard to the record keeping required by this condition.

SECTION D.4 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]: Insignificant Activities

- (a) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) Btu per hour [326 IAC 6.5-1-2]
 - (1) Maintenance Office HVAC system for natural gas heating at 70,000 Btu per hour.
- (b) Paved and unpaved roads and parking lots with public access. [326 IAC 6-4][326 IAC 20-13][40 CFR 63.541, Subpart X]
- (c) Emergency Gasoline generators not exceeding 110 horsepower. [326 IAC 6.5-1-2]
- (d) Emergency Diesel generators not exceeding 1600 horsepower. [326 IAC 6.5-1-2]
- (e) Battery Wrecker. [326 IAC 6.5-1-2][326 IAC 20-13][40 CFR 63.541, Subpart X]
- (f) Roadway Surface Fugitive Emissions. [326 IAC 6-4][326 IAC 20-13][40 CFR 63.541, Subpart X]
- (g) Outside Storage Bins: Coke Storage Bin, Iron Storage Bin and Limestone Storage Bin. [326 IAC 6.5-1-2][326 IAC 20-13][40 CFR 63.541, Subpart X]
- (h) General Parts Washing: Cold Cleaner Degreaser. Existing as of July 1, 1990. [326 IAC 8-3-5]
- (i) Five (5) Soda Ash Silos equipped with baghouse filters. [326 IAC 6.5-1-2]
- (j) Water Quality Department wet scrubber identified as Unit W W Sly. [326 IAC 6.5-1-2]
- (k) Maintenance Shop, emissions controlled by a cartridge filter identified as MS, which exhausts to one stack identified as Stack/Vent MS-1. [326 IAC 6.5-1-2] The Maintenance Shop includes the following, each exhausted at Stack/Vent MS-1:
 - (1) Activities related to routine fabrication, maintenance and repair of buildings, structures, equipment or vehicles at the source where air emissions from those activities would not be associated with any commercial production process, including:
 - (A) Brazing, soldering, or welding operations and associated equipment.
 - (B) Batteries and battery charging stations, except at battery manufacturing plants.
 - (C) Lubrication, including hand-held spray can lubrication, dipping metal parts into lubricating oil, and manual or automated addition of cutting oil in machining operations.
 - (2) Activities performed using hand-held equipment including the following:
 - (A) Drilling.
 - (B) Grinding.
 - (C) Machining wood, metal, or plastic.
 - (D) Sanding.

- (E) Sawing.
- (F) Turning wood, metal, or plastic.
- (G) Surface Grinding

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

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.4.1 Particulate (PM) Limit [326 IAC 6.5-1-2(a)]

Pursuant to 326 IAC 6.5-1-2(a), Particulate emissions from the Maintenance Office HVAC system, Emergency Gasoline Generators, Emergency Diesel Generators, Battery Wrecker, Outside Storage Bins, the five (5) Soda Ash Silos, the Water Quality Department wet scrubber and the Maintenance Shop shall each not exceed three hundredths (0.03) grains per dry standard cubic foot of exhaust air.

D.4.2 Volatile Organic Compounds [326 IAC 8-3-5]

- (a) Pursuant to 326 IAC 8-3-5(a) (Cold Cleaner Degreaser Operation and Control), the Permittee shall ensure that the following control equipment requirements are met:
 - (1) Equip the degreaser with a cover. The cover must be designed so that it can be easily operated with one (1) hand if:
 - (A) The solvent volatility is greater than two (2) kiloPascals (fifteen (15) millimeters of mercury or three-tenths (0.3) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F));
 - (B) The solvent is agitated; or
 - (C) The solvent is heated.
 - (2) Equip the degreaser with a facility for draining cleaned articles. If the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury) or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F)), then the drainage facility must be internal such that articles are enclosed under the cover while draining. The drainage facility may be external for applications where an internal type cannot fit into the cleaning system.
 - (3) Provide a permanent, conspicuous label which lists the operating requirements outlined in subsection (b).
 - (4) The solvent spray, if used, must be a solid, fluid stream and shall be applied at a pressure which does not cause excessive splashing.

- (5) Equip the degreaser with one (1) of the following control devices if the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury) or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38^oC) (one hundred degrees Fahrenheit (100^oF)), or if the solvent is heated to a temperature greater than forty-eight and nine-tenths degrees Celsius (48.9^oC) (one hundred twenty degrees Fahrenheit (120^oF)):
 - (A) A freeboard that attains a freeboard ratio of seventy-five hundredths (0.75) or greater.
 - (B) A water cover when solvent is used is insoluble in, and heavier than, water.
 - (C) Other systems of demonstrated equivalent control such as a refrigerated chiller or carbon adsorption. Such systems shall be submitted to the U.S. EPA as a SIP revision.

- (b) Pursuant to 326 IAC 8-3-5(b) (Cold Cleaner Degreaser Operation and Control), the Permittee shall ensure that the following operating requirements are met:
 - (1) Close the cover whenever articles are not being handled in the degreaser.
 - (2) Drain cleaned articles for at least fifteen (15) seconds or until dripping ceases.
 - (3) Store waste solvent only in covered containers and prohibit the disposal or transfer of waste solvent in any manner in which greater than twenty percent (20%) of the waste solvent by weight could evaporate.

SECTION E.1 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

- (d) Eight (8) refining kettles, identified as Emission Unit Kettle #1 through Kettle #8, which are used to refine the lead alloy. The refining kettles receive molten lead, solid lead or scrap lead. Reagents and alloying metals are added to the Kettle(s) and mixed into molten lead. A natural gas fired burner system indirectly heats the lead. The combined heat input capacity for the natural gas fired burners is 32 million Btu per hour. Impurities are removed as dross from the surface of the molten lead. Process emissions are controlled by Baghouse #040 which exhausts to one stack identified as Stack/Vent S-100. Stack/Vent S-100 is equipped with a Continuous Emissions Monitor (CEM) for sulfur dioxide (SO₂) emissions. Combustion emissions from the natural gas burners are vented to separate stacks. Combustion emissions from Kettle #1 are vented to Stack/Vent S-117. Combustion emissions from Kettle #2 are vented to Stack/Vent S-114. Kettle #3 and Kettle #4 are vented to Stack/Vent S-116. Combustion emissions from Kettle #5 and Kettle #6 are vented to Stack/Vent S-115. Combustion emissions from Kettle #7 are vented to Stack/Vent S-113. Combustion emissions from Kettle #8 are vented to Stack/Vent S-112. Kettles #1 through #6 were installed in 1972. Kettles #7 and #8 were installed in 1988 and 1992 respectively. The refining operation is not a time based operation therefore there is no maximum throughput capacity identified. However, an average based on 24 hours of operation and full kettles is 46.3 tons per hour.

[Under 40 CFR 60, Subpart L, Kettles #7 and #8 are considered affected facilities.]

- (e) Refining Kettle #9, identified as Emission Unit Kettle #9. Kettle #9 has a capacity of 2.14 tons of lead per hour (180 ton capacity with two batches per week) and is heated by a 4.25 million Btu natural gas burner. The kettle is used to refine lead. Emissions from Kettle #9 are controlled by Baghouse #040, which exhaust to one stack identified as Stack/Vent S-100. Stack/Vent S-100 is equipped with a Continuous Emissions Monitor (CEM) for sulfur dioxide (SO₂) emissions. Burner emissions are vented through a combustion flue, Stack/Vent S-118, with no controls. Kettle # 9 was installed in 2002.

[Under 40 CFR 60, Subpart L, Kettle #9 is considered an affected facility.]

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

New Source Performance Standards [326 IAC 12-1] [40 CFR 60]

E.1.1 General Provision Relating to New Source Performance Standards [326 IAC 12-1] [40 CFR 60, Subpart A]

- (a) Pursuant to 40 CFR 60.1, the Permittee shall comply with the provisions of 40 CFR Part 60 Subpart A – General Provisions, which are incorporated by reference as 326 IAC 12-1 for the refining kettles, identified as kettle #7, #8 and #9, except as otherwise specified in 40 CFR Part 60, Subpart L.
- (b) Pursuant to 40 CFR 60.19, the Permittee shall submit all required notifications and reports to:

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

E.1.2 Standard of Performance for Secondary Lead Smelters [326 IAC 12-1] [40 CFR 60, Subpart L]

Pursuant to 40 CFR 60 Subpart L, the Permittee shall comply with the applicable provisions of Standard of Performance for Secondary Lead Smelters which are incorporated by reference as 326 IAC 12 as specified as follows:

- (1) 40 CFR 60.120
- (2) 40 CFR 60.121
- (3) 40 CFR 60.122
- (4) 40 CFR 60.123

SECTION E.2 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

Entire Source

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

National Emission Standards Hazardous Air Pollutants [326 IAC 20-1][40 CFR 63]

E.2.1 General Provisions Relating to National Emissions Standard for Hazardous Air Pollutants for from Secondary Lead Smelting [326 IAC 20-1] [40 CFR Part 63, Subpart A]

Pursuant to 40 CFR 63.541, the Permittee shall comply with the provisions of 40 CFR Part 63, Subpart A – General Provisions, which are incorporated by reference as 326 IAC 20-1-1 for the affected source, as specified in Appendix A of 40 CFR Part 63, Subpart X, in accordance with the schedule in 40 CFR 63 Subpart X.

E.2.2 National Emissions Standard for Hazardous Air Pollutants from Secondary Lead Smelting [40 CFR Part 63, Subpart X]

Pursuant to CFR Part 63, Subpart X, the Permittee shall comply with the provisions of 40 CFR Part 63.541, for the affected source, as specified as follows:

- (1) 40 CFR 63.541
- (2) 40 CFR 63.542
- (3) 40 CFR 63.543(a)
- (4) 40 CFR 63.543(h)
- (5) 40 CFR 63.544(a)
- (6) 40 CFR 63.544(b)
- (7) 40 CFR 63.544(c)
- (8) 40 CFR 63.544(d)
- (9) 40 CFR 63.547(e)
- (10) 40 CFR 63.548(a)
- (11) 40 CFR 63.548(b)
- (12) 40 CFR 63.548(c)
- (13) 40 CFR 63.548(d)
- (14) 40 CFR 63.548(e)
- (15) 40 CFR 63.548(f)
- (16) 40 CFR 63.548(g)
- (17) 40 CFR 63.548(h)
- (18) 40 CFR 63.548(i)
- (19) 40 CFR 63.550

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH
PART 70 OPERATING PERMIT
CERTIFICATION**

Source Name: Quemetco, Inc
Source Address: 7870 West Morris Street, Indianapolis, Indiana 46231
Part 70 Permit No.: 097-27020-00079

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:

Phone:

Date:

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251
Phone: (317) 233-0178
Fax: (317) 233-6865**

**PART 70 OPERATING PERMIT
EMERGENCY OCCURRENCE REPORT**

Source Name: Quemetco, Inc
Source Address: 7870 West Morris Street, Indianapolis, Indiana 46231
Part 70 Permit No.: 097-27020-00079

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) for events lasting more than one (1) hour, within four (4) business hours (1-800-451-6027 or 317-233-0178, ask for Compliance Section); and
 - The Permittee must submit notice in writing or by facsimile within two (2) working days (Facsimile Number: 317-233-6865) for events lasting more than one (1) hour, 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
Type of Pollutants Emitted: TSP, PM-10, SO ₂ , VOC, NO _x , CO, Pb, other:
Estimated amount of pollutant(s) emitted during emergency:
Describe the steps taken to mitigate the problem:
Describe the corrective actions/response steps taken:
Describe the measures taken to minimize emissions:
If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value:

Form Completed by: _____

Title / Position: _____

Date: _____

Phone: _____

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
 OFFICE OF AIR QUALITY
 COMPLIANCE AND ENFORCEMENT BRANCH
 PART 70 OPERATING PERMIT
 QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT**

Source Name: Quemetco, Inc
 Source Address: 7870 West Morris Street, Indianapolis, Indiana 46231
 Part 70 Permit No.: 097-27020-00079

Months: _____ to _____ Year: _____

<p>This report shall be submitted quarterly based on a calendar year. Any deviation from the requirements of this permit, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. A deviation required to be reported pursuant to an applicable requirement that exists independent of the permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".</p>	
<input type="checkbox"/> NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.	
<input type="checkbox"/> THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD	
Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

Form Completed by: _____

Title / Position: _____

Date: _____

Phone: _____

Indiana Department of Environmental Management
Office of Air Quality

Attachment A:

**Secondary Lead Smelters
NSPS Requirements
[40 CFR Part 60, Subpart L]**

Source Name:	Quemetco, Inc.
Source Location:	7870 W. Morris St
County:	Marion
SIC Code:	3341
Permit Renewal No.:	T097-27020-00079
Permit Reviewer:	James Mackenzie

§ 60.120 Applicability and designation of affected facility.

(a) The provisions of this subpart are applicable to the following affected facilities in secondary lead smelters: Pot furnaces of more than 250 kg (550 lb) charging capacity, blast (cupola) furnaces, and reverberatory furnaces.

(b) Any facility under paragraph (a) of this section that commences construction or modification after June 11, 1973, is subject to the requirements of this subpart.

[42 FR 37937, July 25, 1977]

§ 60.121 Definitions.

As used in this subpart, all terms not defined herein shall have the meaning given them in the Act and in subpart A of this part.

(a) *Reverberatory furnace* includes the following types of reverberatory furnaces: stationary, rotating, rocking, and tilting.

(b) *Secondary lead smelter* means any facility producing lead from a leadbearing scrap material by smelting to the metallic form.

(c) *Lead* means elemental lead or alloys in which the predominant component is lead.

(d) *Blast furnace* means any furnace used to recover metal from slag.

[39 FR 9317, Mar. 8, 1974; 39 FR 13776, Apr. 17, 1974, as amended at 65 FR 61756, Oct. 17, 2000]

§ 60.122 Standard for particulate matter.

(a) On and after the date on which the performance test required to be conducted by §60.8 is completed, no owner or operator subject to the provisions of this subpart shall discharge or cause the discharge into the atmosphere from a blast (cupola) or reverberatory furnace any gases which:

(1) Contain particulate matter in excess of 50 mg/dscm (0.022 gr/dscf).

(2) Exhibit 20 percent opacity or greater.

Quemetco, Inc.
Indianapolis, Indiana
Permit Reviewer: James Mackenzie

(b) On and after the date on which the performance test required to be conducted by §60.8 is completed, no owner or operator subject to the provisions of this subpart shall discharge or cause the discharge into the atmosphere from any pot furnace any gases which exhibit 10 percent opacity or greater.

[39 FR 9317, Mar. 8, 1974, as amended at 40 FR 46259, Oct. 6, 1975]

§ 60.123 Test methods and procedures.

(a) In conducting the performance tests required in §60.8, the owner or operator shall use as reference methods and procedures the test methods in appendix A of this part or other methods and procedures as specified in this section, except as provided in §60.8(b).

(b) The owner or operator shall determine compliance with the particulate matter standards in §60.122 as follows:

(1) Method 5 shall be used to determine the particulate matter concentration during representative periods of furnace operation, including charging and tapping. The sampling time and sample volume for each run shall be at least 60 minutes and 0.90 dscm (31.8 dscf).

(2) Method 9 and the procedures in §60.11 shall be used to determine opacity.

Indiana Department of Environmental Management
Office of Air Quality

Attachment B:

**Subpart X—National Emission Standards for Hazardous Air Pollutants
from Secondary Lead Smelting**

**NESHAP Requirements
[40 CFR Part 63, Subpart X]**

Source Name:	Quemetco
Source Location:	7870 West Morris Street
County:	Marion
SIC Code:	3341
Permit Renewal No.:	T097-27020-00079
Permit Reviewer:	James Mackenzie

§ 63.541 Applicability.

(a) The provisions of this subpart apply to the following affected sources at all secondary lead smelters: blast, reverberatory, rotary, and electric smelting furnaces; refining kettles; agglomerating furnaces; dryers; process fugitive sources; and fugitive dust sources. The provisions of this subpart do not apply to primary lead smelters, lead refiners, or lead remelters.

(b) Table 1 of this subpart specifies the provisions of subpart A that apply and those that do not apply to owners and operators of secondary lead smelters subject to this subpart.

Table 1—General Provisions Applicability to Subpart X

Reference	Applies to subpart X	Comment
63.1	Yes	
63.2	Yes	
63.3	Yes	
63.4	Yes	
63.5	Yes	
63.6 (a), (b), (c), (e), (f), (g), (i) and (j)	Yes	
63.6 (d) and (h)	No	No opacity limits in rule.
63.7	Yes	

63.8	Yes	
63.9 (a), (b), (c), (d), (e), (g), (h)(1-3), (h)(5-6), and (j)	Yes	
63.9 (f) and (h)(4)	No	No opacity or visible emission limits in subpart X.
63.10	Yes	
63.11	No	Flares will not be used to comply with the emission limits.
63.12 to 63.15	Yes	

(c) If you are the owner or operator of a source subject to the provisions of this subpart, you are also subject to title V permitting requirements under 40 CFR parts 70 or 71, as applicable. Your title V permitting authority may defer your source from these permitting requirements until December 9, 2004, if your source is not a major source and is not located at a major source as defined under 40 CFR 63.2, 70.2, or 71.2, and is not otherwise required to obtain a title V permit. If you receive a deferral under this section, you must submit a title V permit application by December 9, 2005. You must continue to comply with the provisions of this subpart applicable to area sources, even if you receive a deferral from title V permitting requirements.

[62 FR 32216, June 13, 1997, as amended at 64 FR 4572, Jan. 29, 1999; 64 FR 69643, Dec. 14, 1999]

§ 63.542 Definitions.

Terms used in this subpart are defined in the Act, in subpart A of this part, or in this section as follows:

Agglomerating furnace means a furnace used to melt into a solid mass flue dust that is collected from a baghouse.

Bag leak detection system means an instrument that is capable of monitoring particulate matter (dust) loadings in the exhaust of a baghouse in order to detect bag failures. A bag leak detection system includes, but is not limited to, an instrument that operates on triboelectric, light scattering, transmittance or other effect to monitor relative particulate matter loadings.

Battery breaking area means the plant location at which lead-acid batteries are broken, crushed, or disassembled and separated into components.

Blast furnace means a smelting furnace consisting of a vertical cylinder atop a crucible, into which lead-bearing charge materials are introduced at the top of the furnace and combustion air is introduced through tuyeres at the bottom of the cylinder, and that uses coke as a fuel source and that is operated at such a temperature in the combustion zone (greater than 980 °C) that lead compounds are chemically reduced to elemental lead metal.

Blast furnace charging location means the physical opening through which raw materials are introduced into a blast furnace.

Collocated blast furnace and reverberatory furnace means operation at the same location of a blast furnace and a reverberatory furnace with the volumetric flow rate discharged from the blast furnace being at equal to or less than that discharged from the reverberatory furnace.

Dryer means a chamber that is heated and that is used to remove moisture from lead-bearing materials before they are charged to a smelting furnace.

Dryer transition piece means the junction between a dryer and the charge hopper or conveyor, or the junction between the dryer and the smelting furnace feed chute or hopper located at the ends of the dryer.

Electric furnace means a smelting furnace consisting of a vessel into which reverberatory furnace slag is introduced and that uses electrical energy to heat the reverberatory furnace slag to such a temperature (greater than 980 °C) that lead compounds are reduced to elemental lead metal.

Enclosure hood means a hood that covers a process fugitive emission source on the top and on all sides, with openings only for access to introduce or remove materials to or from the source and through which an induced flow of air is ventilated.

Fugitive dust source means a stationary source of hazardous air pollutant emissions at a secondary lead smelter that is not associated with a specific process or process fugitive vent or stack. Fugitive dust sources include, but are not limited to, roadways, storage piles, materials handling transfer points, materials transport areas, storage areas, process areas, and buildings.

Furnace and refining/casting area means any area of a secondary lead smelter in which:

- (1) Smelting furnaces are located; or
- (2) Refining operations occur; or
- (3) Casting operations occur.

High efficiency particulate air (HEPA) filter means a filter that has been certified by the manufacturer to remove 99.97 percent of all particles 0.3 micrometers and larger.

Lead alloy means an alloy in which the predominant component is lead.

Materials storage and handling area means any area of a secondary lead smelter in which lead-bearing materials (including, but not limited to, broken battery components, reverberatory furnace slag, flue dust, and dross) are stored or handled between process steps including, but not limited to, areas in which materials are stored in piles, bins, or tubs, and areas in which material is prepared for charging to a smelting furnace. Materials storage and handling area does not include areas used exclusively for storage of blast furnace slag.

Partial enclosure means a structure comprised of walls or partitions on at least three sides or three-quarters of the perimeter surrounding stored materials or process equipment to prevent the entrainment of particulate matter into the air.

Pavement cleaning means the use of vacuum equipment, water sprays, or a combination thereof to remove dust or other accumulated material from the paved areas of a secondary lead smelter.

Plant roadway means any area of a secondary lead smelter that is subject to vehicle traffic, including traffic by fork lifts, front-end loaders, or vehicles carrying whole batteries or cast lead ingots. Excluded from this definition are employee and visitor parking areas, provided they are not subject to traffic by vehicles carrying lead-bearing materials.

Pressurized dryer breaching seal means a seal system connecting the dryer transition pieces which is maintained at a higher pressure than the inside of the dryer.

Process fugitive emission source means a source of hazardous air pollutant emissions at a secondary lead smelter that is associated with lead smelting or refining, but is not the primary exhaust stream from a smelting furnace, and is not a fugitive dust source. Process fugitive sources include, but are not limited to, smelting furnace charging points, smelting furnace lead and slag taps, refining kettles, agglomerating furnaces, and drying kiln transition pieces.

Refining kettle means an open-top vessel that is constructed of cast iron or steel and is indirectly heated from below and contains molten lead for the purpose of refining and alloying the lead. Included are pot furnaces, receiving kettles, and holding kettles.

Reverberatory furnace means a refractory-lined furnace that uses one or more flames to heat the walls and roof of the furnace and lead-bearing scrap to such a temperature (greater than 980 °C) that lead compounds are chemically reduced to elemental lead metal.

Rotary furnace (also known as a rotary reverberatory furnace) means a furnace consisting of a refractory-lined chamber that rotates about a horizontal axis and that uses one or more flames to heat the walls of the furnace and lead-bearing scrap to such a temperature (greater than 980 °C) that lead compounds are chemically reduced to elemental lead metal.

Secondary lead smelter means any facility at which lead-bearing scrap material, primarily, but not limited to, lead-acid batteries, is recycled into elemental lead or lead alloys by smelting.

Smelting means the chemical reduction of lead compounds to elemental lead or lead alloys through processing in high-temperature (greater than 980 °C) furnaces including, but not limited to, blast furnaces, reverberatory furnaces, rotary furnaces, and electric furnaces.

Total enclosure means a roofed and walled structure with limited openings to allow access and egress for people and vehicles that meets the requirements of 40 CFR 265.1101(a)(1), (a)(2)(i), and (c)(1)(i).

Vehicle wash means a device for removing dust and other accumulated material from the wheels, body, and underside of a vehicle to prevent the inadvertent transfer of lead contaminated material to another area of a secondary lead smelter or to public roadways.

Wet suppression means the use of water, water combined with a chemical surfactant, or a chemical binding agent to prevent the entrainment of dust into the air from fugitive dust sources.

[62 FR 32216, June 13, 1997, as amended at 63 FR 45011, Aug. 24, 1998]

§ 63.543 Standards for process sources.

(a) No owner or operator of a secondary lead smelter shall discharge or cause to be discharged into the atmosphere from any existing, new, or reconstructed blast, reverberatory, rotary, or electric smelting furnace any gases that contain lead compounds in excess of 2.0 milligrams of lead per dry standard cubic meter (0.00087 grains of lead per dry standard cubic foot).

(b) [Reserved]

(c) No owner or operator of a secondary lead smelter with a collocated blast furnace and reverberatory furnace shall discharge or cause to be discharged into the atmosphere from any existing, new, or

reconstructed blast furnace or reverberatory furnace any gases that contain total hydrocarbons in excess of 20 parts per million by volume, expressed as propane corrected to 4 percent carbon dioxide, except as allowed under Paragraphs (c)(1) and (c)(2) of this section.

(1) No owner or operator of a secondary lead smelter with a collocated blast furnace and reverberatory furnace shall discharge or cause to be discharged into the atmosphere from any existing blast furnace any gases that contain total hydrocarbons in excess of 360 parts per million by volume, expressed as propane corrected to 4 percent carbon dioxide, during periods when the reverberatory furnace is not operating.

(2) No owner or operator of a secondary lead smelter with a collocated blast furnace and reverberatory furnace shall discharge or cause to be discharged into the atmosphere from any blast furnace that commences construction or reconstruction after June 9, 1994, any gases that contain total hydrocarbons in excess of 70 parts per million by volume, expressed as propane corrected to 4 percent carbon dioxide, during periods when the reverberatory furnace is not operating.

(d) No owner or operator of a secondary lead smelter with only blast furnaces shall discharge or cause to be discharged into the atmosphere from any existing blast furnace any gases that contain total hydrocarbons in excess of 360 parts per million by volume, expressed as propane corrected to 4 percent carbon dioxide.

(e) No owner or operator of a secondary lead smelter with only blast furnaces shall discharge or cause to be discharged into the atmosphere from any blast furnace that commences construction or reconstruction after June 9, 1994, any gases that contain total hydrocarbons in excess of 70 parts per million by volume, expressed as propane corrected to 4 percent carbon dioxide.

(f) If the owner or operator of a blast furnace or collocated blast furnace and reverberatory furnace combines the blast furnace charging process fugitive emissions with the blast furnace process emissions and discharges them to the atmosphere through a common emission point, then compliance with the applicable total hydrocarbon concentration limit under paragraph (c) of this section shall be determined downstream from the point at which the two emission streams are combined.

(g) If the owner or operator of a blast furnace or a collocated blast furnace and reverberatory furnace does not combine the blast furnace charging process fugitive emissions with the blast furnace process emissions and discharges such emissions to the atmosphere through separate emission points, then exhaust shall not contain total hydrocarbons in excess of 20 parts per million by volume, expressed as propane.

(h) Except as provided in paragraph (i) of this section, following the initial test to demonstrate compliance with paragraph (a) of this section, the owner or operator of a secondary lead smelter shall conduct a compliance test for lead compounds on an annual basis (no later than 12 calendar months following the previous compliance test).

(i) If a compliance test demonstrates a source emitted lead compounds at 1.0 milligram of lead per dry standard cubic meter (0.00044 grains of lead per dry standard cubic foot) or less during the time of the compliance test, the owner or operator of a secondary lead smelter shall be allowed up to 24 calendar months from the previous compliance test to conduct the next annual compliance test for lead compounds.

(j) The standards for process sources are summarized in table 2.

Table 2—Summary of Standards for Process Sources

Furnace configuration	Lead compounds (milligrams per dry standard cubic meter)	Total hydrocarbons	Citation
Collocated blast furnace and reverberatory furnace:			
When both furnaces operating	2.0	20 parts per million by volume ¹	§63.543(a),(c).
When reverberatory furnace not operating	2.0	360 parts per million by volume ¹ (existing)	§63.543(a),(c)(1).
		70 parts per million by volume ¹ (new) ²	§63.543(a),(c)(2).
Blast	2.0	360 parts per million by volume ¹ (existing)	§63.543(a),(d).
		70 parts per million by volume ¹ (new) ²	§63.543(e).
		0.20 kilograms per hour ³	§63.543(g).
Reverberatory, rotary, and electric	2.0	Not applicable	§63.543(a).

¹Total hydrocarbons emission limits are as propane at 4 percent carbon dioxide to correct for dilution, based on a 3-hour average.

²New sources include those furnaces that commence construction or reconstruction after June 9, 1994.

³Applicable to blast furnace charging process fugitive emissions that are not combined with the blast furnace process emissions prior to the point at which compliance with the total hydrocarbons concentration standard is determined.

[62 FR 32216, June 13, 1997, as amended at 63 FR 45011, Aug. 24, 1998]

§ 63.544 Standards for process fugitive sources.

(a) Each owner or operator of a secondary lead smelter shall control the process fugitive emission sources listed in paragraphs (a)(1) through (a)(6) of this section in accordance with the equipment and operational standards presented in paragraphs (b) and (c) of this section.

- (1) Smelting furnace and dryer charging hoppers, chutes, and skip hoists;
- (2) Smelting furnace lead taps, and molds during tapping;
- (3) Smelting furnace slag taps, and molds during tapping;
- (4) Refining kettles;
- (5) Dryer transition pieces; and
- (6) Agglomerating furnace product taps.

(b) Process fugitive emission sources shall be equipped with an enclosure hood meeting the requirements of paragraphs (b)(1), (b)(2), or (b)(3) of this section, or be located in a total enclosure subject to general ventilation that maintains the building at a lower than ambient pressure to ensure in-draft through any doorway opening.

(1) All process fugitive enclosure hoods except those specified for refining kettles and dryer transition pieces shall be ventilated to maintain a face velocity of at least 90 meters per minute (300 feet per minute) at all hood openings.

(2) Process fugitive enclosure hoods required for refining kettles in paragraph (a) of this section shall be ventilated to maintain a face velocity of at least 75 meters per minute (250 feet per minute).

(3) Process fugitive enclosure hoods required over dryer transition pieces in paragraph (a) of this section shall be ventilated to maintain a face velocity of at least 110 meters per minute (350 feet per minute).

(c) Ventilation air from all enclosure hoods and total enclosures shall be conveyed to a control device. Gases discharged to the atmosphere from these control devices shall not contain lead compounds in excess of 2.0 milligrams of lead per dry standard cubic meter (0.00087 grains per dry standard cubic foot).

(d) All dryer emission vents and agglomerating furnace emission vents shall be ventilated to a control device that shall not discharge to the atmosphere any gases that contain lead compounds in excess of 2.0 milligrams of lead per dry standard cubic meter (0.00087 grains per dry standard cubic foot).

(e) Except as provided in paragraph (f) of this section, following the date of the initial test to demonstrate compliance with paragraphs (c) and (d) of this section, the owner or operator of a secondary lead smelter shall conduct a compliance test for lead compounds on an annual basis (no later than 12 calendar months following the previous compliance test).

(f) If a compliance test demonstrates a source emitted lead compounds at 1.0 milligram of lead per dry standard cubic meter (0.00044 grains of lead per dry standard cubic foot) or less during the time of the compliance test, the owner or operator of a secondary lead smelter shall be allowed up to 24 calendar months from the previous compliance test to conduct the next annual compliance test for lead compounds.

(g) As an alternative to paragraph (a)(5) of this section, an owner or operator may elect to control the process fugitive emissions from dryer transition pieces by installing and operating pressurized dryer breaching seals at each transition piece.

(h) The standards for process fugitive sources are summarized in table 3.

Table 3—Summary of Standards for Process Fugitive Sources

Fugitive emission source	Control device lead compound emission limit (milligrams per dry standard cubic meter)	Enclosed hood or doorway face velocity (meters/minute)	Citation
Control Option I			
Smelting furnace and dryer charging hoppers, chutes, and skip hoists	2.0	¹ 90	§63.544 (b), (c).

Smelting furnace lead taps and molds during tapping	2.0	¹ 90	§63.544 (b), (c).
Smelting furnace slag taps and molds during tapping	2.0	¹ 90	§63.544 (b), (c).
Refining kettles	2.0	¹ 75	§63.544 (b), (c).
Dryer transition pieces	2.0	¹ 110	§63.544 (b), (c).
Agglomerating furnace process vents and product taps	2.0	¹ 90	§63.544 (b), (c).
Control Option II			
Enclosed building ventilated to a control device	2.0		§63.544 (b), (c).
Applicable to Both Control Options			
Dryer and agglomerating furnace emission vents	2.0		§63.544(d).

¹Enclosure hood face velocity applicable to those process fugitive sources not located in an enclosed building ventilated to a control device.

[62 FR 32216, June 13, 1997, as amended at 63 FR 45011, Aug. 24, 1998]

§ 63.545 Standards for fugitive dust sources.

(a) Each owner or operator of a secondary lead smelter shall prepare and at all times operate according to a standard operating procedures manual that describes in detail the measures that will be put in place to control fugitive dust emission sources within the areas of the secondary lead smelter listed in paragraphs (a)(1) through (a)(5) of this section.

- (1) Plant roadways;
- (2) Battery breaking area;
- (3) Furnace area;
- (4) Refining and casting area; and
- (5) Materials storage and handling area.

(b) The standard operating procedures manual shall be submitted to the Administrator or delegated authority for review and approval.

(c) The controls specified in the standard operating procedures manual shall at a minimum include the requirements of paragraphs (c)(1) through (c)(5) of this section, unless the owner or operator satisfies the requirements in paragraph (f) of this section.

- (1) Plant roadways—paving of all areas subject to vehicle traffic and pavement cleaning twice per day of those areas, except on days when natural precipitation makes cleaning unnecessary or when sand or a similar material has been spread on plant roadways to provide traction on ice or snow.
 - (2) Battery breaking area—partial enclosure of storage piles, wet suppression applied to storage piles with sufficient frequency and quantity to prevent the formation of dust, and pavement cleaning twice per day; or total enclosure of the battery breaking area.
 - (3) Furnace area—partial enclosure and pavement cleaning twice per day; or total enclosure and ventilation of the enclosure to a control device.
 - (4) Refining and casting area—partial enclosure and pavement cleaning twice per day; or total enclosure and ventilation of the enclosure to a control device.
 - (5) Materials storage and handling area—partial enclosure of storage piles, wet suppression applied to storage piles with sufficient frequency and quantity to prevent the formation of dust, vehicle wash at each exit from the area, and paving of the area; or total enclosure of the area and ventilation of the enclosure to a control device, and a vehicle wash at each exit.
- (d) The standard operating procedures manual shall require that daily records be maintained of all wet suppression, pavement cleaning, and vehicle washing activities performed to control fugitive dust emissions.
- (e) No owner or operator of a secondary lead smelter shall discharge or cause to be discharged into the atmosphere from any building or enclosure ventilation system any gases that contain lead compounds in excess of 2.0 milligrams of lead per dry standard cubic meter (0.00087 grains of lead per dry standard cubic foot).
- (f) Demonstrate to the Administrator (or delegated State, local, or Tribal authority) that an alternative measure(s) is equivalent or better than a practice(s) described in paragraphs (c)(1) through (c)(5) of this section.

[62 FR 32216, June 13, 1997, as amended at 68 FR 37350, June 23, 2003]

§ 63.546 Compliance dates.

- (a) Each owner or operator of an existing secondary lead smelter shall achieve compliance with the requirements of this subpart no later than December 23, 1997. Existing sources wishing to apply for an extension of compliance pursuant to section §63.6(i) of this part must do so no later than June 23, 1997.
- (b) Each owner or operator of a secondary lead smelter that commences construction or reconstruction after June 9, 1994, shall achieve compliance with the requirements of this subpart by June 13, 1997 or upon startup of operations, whichever is later.

[62 FR 32216, June 13, 1997, as amended at 64 FR 4572, Jan. 29, 1999]

§ 63.547 Test methods.

- (a) The following test methods in appendix A of part 60 listed in paragraphs (a)(1) through (a)(5) of this section shall be used to determine compliance with the emission standards for lead compounds under §§63.543(a), 63.544 (c), and (d), and 63.545(e):

(1) Method 1 shall be used to select the sampling port location and the number of traverse points.

(2) Method 2 shall be used to measure volumetric flow rate.

(3) Method 3 shall be used for gas analysis to determine the dry molecular weight of the stack gas.

(4) Method 4 shall be used to determine moisture content of the stack gas.

(5) Method 12 shall be used to determine compliance with the lead compound emission standards. The minimum sample volume shall be 0.85 dry standard cubic meters (30 dry standard cubic feet) and the minimum sampling time shall be 60 minutes for each run. Three runs shall be performed and the average of the three runs shall be used to determine compliance.

(b) The following tests methods in appendix A of part 60 listed in paragraphs (b)(1) through (b)(4) of this section shall be used, as specified, to determine compliance with the emission standards for total hydrocarbons §63.543(c), (d), (e), and (g).

(1) Method 1 shall be used to select the sampling port location to determine compliance under §63.543(c), (d), (e), and (g).

(2) The Single Point Integrated Sampling and Analytical Procedure of Method 3B shall be used to measure the carbon dioxide content of the stack gases to determine compliance under §63.543(c), (d), and (e).

(3) Method 4 shall be used to measure moisture content of the stack gases to determine compliance under §63.543(c), (d), (e), and (g).

(4) Method 25A shall be used to measure total hydrocarbon emissions to determine compliance under §63.543(c), (d), (e), and (g). The minimum sampling time shall be 1 hour for each run. A minimum of three runs shall be performed. A 1-hour average total hydrocarbon concentration shall be determined for each run and the average of the three 1-hour averages shall be used to determine compliance. The total hydrocarbon emissions concentrations for determining compliance under §63.543(c), (d), and (e) shall be expressed as propane and shall be corrected to 4 percent carbon dioxide, as described in paragraph (c) of this section.

(c) For the purposes of determining compliance with the emission limits under §63.543 (c), (d), and (e), the measured total hydrocarbon concentrations shall be corrected to 4 percent carbon dioxide as listed in paragraphs (c)(1) through (c)(2) of this section in the following manner:

(1) If the measured percent carbon dioxide is greater than 0.4 percent in each compliance test, the correction factor shall be determined by using equation (1).

$$F = \frac{4.0}{CO_2} \quad (1)$$

where:

F = correction factor (no units)

CO₂ = percent carbon dioxide measured using Method 3B, where the measured carbon dioxide is greater than 0.4 percent.

(2) If the measured percent carbon dioxide is equal to or less than 0.4 percent, then a correction factor (F) of 10 shall be used.

(3) The corrected total hydrocarbon concentration shall be determined by multiplying the measured total hydrocarbon concentration by the correction factor (F) determined for each compliance test.

(d) Compliance with the face velocity requirements under §63.544(b) for process fugitive enclosure hoods shall be determined by the following test methods in paragraphs (d)(1) or (d)(2) of this section.

(1) Owners and operators shall calculate face velocity using the procedures in paragraphs (d)(1)(i) through (d)(1)(iv) of this section.

(i) Method 1 shall be used to select the sampling port location in the duct leading from the process fugitive enclosure hood to the control device.

(ii) Method 2 shall be used to measure the volumetric flow rate in the duct from the process fugitive enclosure hood to the control device.

(iii) The face area of the hood shall be determined from measurement of the hood. If the hood has access doors, then face area shall be determined with the access doors in the position they are in during normal operating conditions.

(iv) Face velocity shall be determined by dividing the volumetric flow rate determined in paragraph (d)(1)(ii) of this section by the total face area for the hood determined in paragraph (d)(1)(iii) of this section.

(2) The face velocity shall be measured directly using the procedures in paragraphs (d)(2)(i) through (d)(2)(v) of this section.

(i) A propeller anemometer or equivalent device shall be used to measure hood face velocity.

(ii) The propeller of the anemometer shall be made of a material of uniform density and shall be properly balanced to optimize performance.

(iii) The measurement range of the anemometer shall extend to at least 300 meters per minute (1,000 feet per minute).

(iv) A known relationship shall exist between the anemometer signal output and air velocity, and the anemometer must be equipped with a suitable readout system.

(v) Hood face velocity shall be determined for each hood open during normal operation by placing the anemometer in the plane of the hood opening. Access doors shall be positioned consistent with normal operation.

(e) Owners and operators shall determine compliance with the doorway in-draft requirement for enclosed buildings in §63.544(b) using the procedures in paragraphs (e)(1) or (e)(2) of this section.

(1)(i) Owners and operators shall use a propeller anemometer or equivalent device meeting the requirements of paragraphs (d)(2)(ii) through (d)(2)(iv) of this section.

(ii) Doorway in-draft shall be determined by placing the anemometer in the plane of the doorway opening near its center.

(iii) Doorway in-draft shall be demonstrated for each doorway that is open during normal operation with all remaining doorways in the position they are in during normal operation.

(2)(i) Owners and operators shall install a differential pressure gage on the leeward wall of the building to measure the pressure difference between the inside and outside of the building.

(ii) The pressure gage shall be certified by the manufacturer to be capable of measuring pressure differential in the range of 0.02 to 0.2 mm Hg.

(iii) Both the inside and outside taps shall be shielded to reduce the effects of wind.

(iv) Owners and operators shall demonstrate the inside of the building is maintained at a negative pressure as compared to the outside of the building of no less than 0.02 mm Hg when all doors are in the position they are in during normal operation.

[62 FR 32216, June 13, 1997, as amended at 63 FR 45011, Aug. 24, 1998]

§ 63.548 Monitoring requirements.

(a) Owners and operators of secondary lead smelters shall prepare, and at all times operate according to, a standard operating procedures manual that describes in detail procedures for inspection, maintenance, and bag leak detection and corrective action plans for all baghouses (fabric filters) that are used to control process, process fugitive, or fugitive dust emissions from any source subject to the lead emission standards in §§63.543, 63.544, and 63.545, including those used to control emissions from building ventilation. This provision shall not apply to process fugitive sources that are controlled by wet scrubbers.

(b) The standard operating procedures manual for baghouses required by paragraph (a) of this section shall be submitted to the Administrator or delegated authority for review and approval.

(c) The procedures specified in the standard operating procedures manual for inspections and routine maintenance shall, at a minimum, include the requirements of paragraphs (c)(1) through (c)(9) of this section.

(1) Daily monitoring of pressure drop across each baghouse cell.

(2) Weekly confirmation that dust is being removed from hoppers through visual inspection, or equivalent means of ensuring the proper functioning of removal mechanisms.

(3) Daily check of compressed air supply for pulse-jet baghouses.

(4) An appropriate methodology for monitoring cleaning cycles to ensure proper operation.

(5) Monthly check of bag cleaning mechanisms for proper functioning through visual inspection or equivalent means.

(6) Monthly check of bag tension on reverse air and shaker-type baghouses. Such checks are not required for shaker-type baghouses using self-tensioning (spring loaded) devices.

- (7) Quarterly confirmation of the physical integrity of the baghouse through visual inspection of the baghouse interior for air leaks.
- (8) Quarterly inspection of fans for wear, material buildup, and corrosion through visual inspection, vibration detectors, or equivalent means.
- (9) Except as provided in paragraphs (g) and (h) of this section, continuous operation of a bag leak detection system.
- (d) The procedures specified in the standard operating procedures manual for maintenance shall, at a minimum, include a preventative maintenance schedule that is consistent with the baghouse manufacturer's instructions for routine and long-term maintenance.
- (e) The bag leak detection system required by paragraph (c)(9) of this section, shall meet the specification and requirements of paragraphs (e)(1) through (e)(8) of this section.
- (1) The bag leak detection system must be certified by the manufacturer to be capable of detecting particulate matter emissions at concentrations of 10 milligram per actual cubic meter (0.0044 grains per actual cubic foot) or less.
- (2) The bag leak detection system sensor must provide output of relative particulate matter loadings.
- (3) The bag leak detection system must be equipped with an alarm system that will alarm when an increase in relative particulate loadings is detected over a preset level.
- (4) The bag leak detection system shall be installed and operated in a manner consistent with available written guidance from the U.S. Environmental Protection Agency or, in the absence of such written guidance, the manufacturer's written specifications and recommendations for installation, operation, and adjustment of the system.
- (5) The initial adjustment of the system shall, at a minimum, consist of establishing the baseline output by adjusting the sensitivity (range) and the averaging period of the device, and establishing the alarm set points and the alarm delay time.
- (6) Following initial adjustment, the owner or operator shall not adjust the sensitivity or range, averaging period, alarm set points, or alarm delay time, except as detailed in the approved SOP required under paragraph (a) of this section. In no event shall the sensitivity be increased by more than 100 percent or decreased more than 50 percent over a 365 day period unless such adjustment follows a complete baghouse inspection which demonstrates the baghouse is in good operating condition.
- (7) For negative pressure, induced air baghouses, and positive pressure baghouses that are discharged to the atmosphere through a stack, the bag leak detector must be installed downstream of the baghouse and upstream of any wet acid gas scrubber.
- (8) Where multiple detectors are required, the system's instrumentation and alarm may be shared among detectors.
- (f) The standard operating procedures manual required by paragraph (a) of this section shall include a corrective action plan that specifies the procedures to be followed in the case of a bag leak detection system alarm. The corrective action plan shall include, at a minimum, the procedures used to determine and record the time and cause of the alarm as well as the corrective actions taken to correct the control device malfunction or minimize emissions as specified in paragraphs (f)(1) and (f)(2) of this section.

(1) The procedures used to determine the cause of the alarm must be initiated within 30 minutes of the alarm.

(2) The cause of the alarm must be alleviated by taking the necessary corrective action(s) which may include, but not be limited to, paragraphs (f)(2)(i) through (f)(2)(vi) of this section.

(i) Inspecting the baghouse for air leaks, torn or broken filter elements, or any other malfunction that may cause an increase in emissions.

(ii) Sealing off defective bags or filter media.

(iii) Replacing defective bags or filter media, or otherwise repairing the control device.

(iv) Sealing off a defective baghouse compartment.

(v) Cleaning the bag leak detection system probe, or otherwise repairing the bag leak detection system.

(vi) Shutting down the process producing the particulate emissions.

(g) Baghouses equipped with HEPA filters as a secondary filter used to control process, process fugitive, or fugitive dust emissions from any source subject to the lead emission standards in §63.543, 63.544, or 63.545 are exempt from the requirement in §63.548(c)(9) of this section to be equipped with a bag leak detector. The owner or operator of an affected source that uses a HEPA filter shall monitor and record the pressure drop across the HEPA filter system daily. If the pressure drop is outside the limit(s) specified by the filter manufacturer, the owner or operator must take appropriate corrective measures, which may include but not be limited to those given in paragraphs (g)(1) through (g)(4) of this section.

(1) Inspecting the filter and filter housing for air leaks and torn or broken filters.

(2) Replacing defective filter media, or otherwise repairing the control device.

(3) Sealing off a defective control device by routing air to other control devices.

(4) Shutting down the process producing the particulate emissions.

(h) Baghouses that are used exclusively for the control of fugitive dust emissions from any source subject to the lead emissions standard in §63.545 are exempt from the requirement in §63.548(c)(9) of this section to be equipped with a bag leak detector.

(i) The owner or operator of a secondary lead smelter that uses a wet scrubber to control particulate matter and metal hazardous air pollutant emissions from a process fugitive source shall monitor and record the pressure drop and water flow rate of the wet scrubber during the initial test to demonstrate compliance with the lead emission limit under §63.544(c) and (d). Thereafter, the owner or operator shall monitor and record the pressure drop and water flow rate at least once every hour and shall maintain the pressure drop and water flow rate no lower than 30 percent below the pressure drop and water flow rate measured during the initial compliance test.

(j) The owner or operator of a blast furnace or collocated blast furnace and reverberatory furnace subject to the total hydrocarbon standards in §63.543 (c), (d), or (e), must comply with the requirements of either paragraph (j)(1) or (j)(2) of this section, to demonstrate continuous compliance with the total hydrocarbon emission standards.

(1) *Continuous temperature monitoring.* (i) The owner or operator of a blast furnace or a collocated blast furnace and reverberatory furnace subject to the total hydrocarbon emission standards in §63.543 (c), (d), or (e) shall install, calibrate, maintain, and continuously operate a device to monitor and record the temperature of the afterburner or the combined blast furnace and reverberatory furnace exhaust streams consistent with the requirements for continuous monitoring systems in subpart A, General Provisions.

(ii) Prior to or in conjunction with the initial compliance test to determine compliance with §63.543 (c), (d), or (e), the owner or operator shall conduct a performance evaluation for the temperature monitoring device according to §63.8(e) of the General Provisions. The definitions, installation specifications, test procedures, and data reduction procedures for determining calibration drift, relative accuracy, and reporting described in Performance Specification 2, 40 CFR part 60, appendix B, sections 2, 3, 5, 7, 8, 9, and 10 shall be used to conduct the evaluation. The temperature monitoring device shall meet the following performance and equipment specifications:

(A) The recorder response range must include zero and 1.5 times the average temperature identified in paragraph (j)(1)(iii) of this section.

(B) The monitoring system calibration drift shall not exceed 2 percent of 1.5 times the average temperature identified in paragraph (j)(1)(iii) of this section.

(C) The monitoring system relative accuracy shall not exceed 20 percent.

(D) The reference method shall be an National Institute of Standards and Technology calibrated reference thermocouple-potentiometer system or an alternate reference, subject to the approval of the Administrator.

(iii) The owner or operator of a blast furnace or a collocated blast furnace and reverberatory furnace subject to the total hydrocarbon emission standards shall monitor and record the temperature of the afterburner or the combined blast furnace and reverberatory furnace exhaust streams every 15 minutes during the total hydrocarbon compliance test and determine an arithmetic average for the recorded temperature measurements.

(iv) To remain in compliance with the standards for total hydrocarbons, the owner or operator must maintain an afterburner or combined exhaust temperature such that the average temperature in any 3-hour period does not fall more than 28 °C (50 °F) below the average established in paragraph (j)(1)(iii) of this section. An average temperature in any 3-hour period that falls more than 28 °C (50 °F) below the average established in paragraph (j)(1)(iii) of this section, shall constitute a violation of the applicable emission standard for total hydrocarbons under §63.543 (c), (d), or (e).

(2) *Continuous monitoring of total hydrocarbon emissions.* (i) The owner or operator of a secondary lead smelter shall install, operate, and maintain a total hydrocarbon continuous monitoring system and comply with all of the requirements for continuous monitoring systems found in subpart A, General Provisions.

(ii) Prior to or in conjunction with the initial compliance test to determine compliance with §63.543 (c), (d), or (e), the owner or operator shall conduct a performance evaluation for the total hydrocarbon continuous monitoring system according to §63.8(e) of the General Provisions. The monitor shall meet the performance specifications of Performance Specification 8, 40 CFR part 60, appendix B.

(iii) Allowing the 3-hour average total hydrocarbon concentration to exceed the applicable total hydrocarbon emission limit under §63.543 shall constitute a violation of the applicable emission standard for total hydrocarbons under §63.543 (c), (d), or (e).

(k) The owner or operator of a secondary lead smelter who uses pressurized dryer breaching seals in order to comply with the requirements of §63.544(g) shall equip each seal with an alarm that will “sound” or “go off” if the pressurized dryer breaching seal malfunctions.

[62 FR 32216, June 13, 1997, as amended at 63 FR 45011, Aug. 24, 1998]

§ 63.549 Notification requirements.

(a) The owner or operator of a secondary lead smelter shall comply with all of the notification requirements of §63.9 of subpart A, General Provisions.

(b) The owner or operator of a secondary lead smelter shall submit the fugitive dust control standard operating procedures manual required under §63.545(a) and the standard operating procedures manual for baghouses required under §63.548(a) to the Administrator or delegated authority along with a notification that the smelter is seeking review and approval of these plans and procedures. Owners or operators of existing secondary lead smelters shall submit this notification no later than July 23, 1997. The owner or operator of a secondary lead smelter that commences construction or reconstruction after June 9, 1994, shall submit this notification no later than 180 days before startup of the constructed or reconstructed secondary lead smelter, but no sooner than June 13, 1997. An affected source that has received a construction permit from the Administrator or delegated authority on or before June 23, 1995, shall submit this notification no later than July 23, 1997.

§ 63.550 Recordkeeping and reporting requirements.

(a) The owner or operator of a secondary lead smelter shall comply with all of the recordkeeping requirements under §63.10 of the General Provisions. In addition, each owner or operator of a secondary lead smelter shall maintain for a period of 5 years, records of the information listed in paragraphs (a)(1) through (a)(6) of this section.

(1) An identification of the date and time of all bag leak detection system alarms, their cause, and an explanation of the corrective actions taken.

(2) If an owner or operator chooses to demonstrate continuous compliance with the total hydrocarbon emission standards under §63.543 (c), (d), or (e) by employing the method allowed in §63.548(j)(1), the records shall include the output from the continuous temperature monitor, an identification of periods when the 3-hour average temperature fell below the minimum established under §63.548(j)(1), and an explanation of the corrective actions taken.

(3) If an owner or operator chooses to demonstrate continuous compliance with the total hydrocarbon emission standard under §63.543 (c), (d), or (e) by employing the method allowed in §63.548(j)(2), the records shall include the output from the total hydrocarbon continuous monitoring system, an identification of the periods when the 3-hour average total hydrocarbon concentration exceeded the applicable standard and an explanation of the corrective actions taken.

(4) Any recordkeeping required as part of the practices described in the standard operating procedures manual required under §63.545(a) for the control of fugitive dust emissions.

(5) Any recordkeeping required as part of the practices described in the standard operating procedures manual for baghouses required under §63.548(a).

(6) Records of the pressure drop and water flow rate for wet scrubbers used to control metal hazardous air pollutant emissions from process fugitive sources.

(b) The owner or operator of a secondary lead smelter shall comply with all of the reporting requirements under §63.10 of the General Provisions. The submittal of reports shall be no less frequent than specified under §63.10(e)(3) of the General Provisions. Once a source reports a violation of the standard or excess emissions, the source shall follow the reporting format required under §63.10(e)(3) until a request to reduce reporting frequency is approved.

(c) In addition to the information required under §63.10 of the General Provisions, reports required under paragraph (b) of this section shall include the information specified in paragraphs (c)(1) through (c)(6) of this section.

(1) The reports shall include records of all alarms from the bag leak detection system specified in §63.548(e).

(2) The reports shall include a description of the procedures taken following each bag leak detection system alarm pursuant to §63.548(f) (1) and (2).

(3) The reports shall include the information specified in either paragraph (c)(3)(i) or (c)(3)(ii) of this section, consistent with the monitoring option selected under §63.548(h).

(i) A record of the temperature monitor output, in 3-hour block averages, for those periods when the temperature monitored pursuant to §63.548(j)(1) fell below the level established in §63.548(j)(1).

(ii) A record of the total hydrocarbon concentration, in 3-hour block averages, for those periods when the total hydrocarbon concentration being monitored pursuant to §63.548(j)(2) exceeds the relevant limits established in §63.543 (c), (d), and (e).

(4) The reports shall contain a summary of the records maintained as part of the practices described in the standard operating procedures manual for baghouses required under §63.548(a), including an explanation of the periods when the procedures were not followed and the corrective actions taken.

(5) The reports shall contain an identification of the periods when the pressure drop and water flow rate of wet scrubbers used to control process fugitive sources dropped below the levels established in §63.548(i), and an explanation of the corrective actions taken.

(6) The reports shall contain a summary of the fugitive dust control measures performed during the required reporting period, including an explanation of the periods when the procedures outlined in the standard operating procedures manual pursuant to §63.545(a) were not followed and the corrective actions taken. The reports shall not contain copies of the daily records required to demonstrate compliance with the requirements of the standard operating procedures manuals required under §§63.545(a) and 63.548(a).

§ 63.551 Implementation and enforcement.

(a) This subpart can be implemented and enforced by the U.S. EPA, or a delegated authority such as the applicable State, local, or Tribal agency. If the U.S. EPA Administrator has delegated authority to a State, local, or Tribal agency, then that agency, in addition to the U.S. EPA, has the authority to implement and enforce this subpart. Contact the applicable U.S. EPA Regional Office to find out if this subpart is delegated to a State, local, or Tribal agency.

(b) In delegating implementation and enforcement authority of this subpart to a State, local, or Tribal agency under subpart E of this part, the authorities contained in paragraph (c) of this section are retained by the Administrator of U.S. EPA and cannot be transferred to the State, local, or Tribal agency.

(c) The authorities that cannot be delegated to State, local, or Tribal agencies are as specified in paragraphs (c)(1) through (4) of this section.

(1) Approval of alternatives to the requirements in §§63.541, 63.543 through 63.544, 63.545(a) and (c) through (e), and 63.546.

(2) Approval of major alternatives to test methods for under §63.7(e)(2)(ii) and (f), as defined in §63.90, and as required in this subpart.

(3) Approval of major alternatives to monitoring under §63.8(f), as defined in §63.90, and as required in this subpart.

(4) Approval of major alternatives to recordkeeping and reporting under §63.10(f), as defined in §63.90, and as required in this subpart.

[68 FR 37350, June 23, 2003]

**Indiana Department of Environmental Management
Office of Air Quality**

Addendum to the Technical Support Document (TSD)
for a
Part 70 Operating Permit Renewal

Source Description and Location

Source Name:	Quemetco, Inc.
Source Location:	7870 W Morris St., Indianapolis, IN 46231
County:	Marion
SIC Code:	3341
Renewal Part 70 Operation Permit No.:	T 097-27020-00079
Permit Reviewer:	James Mackenzie

Public Notice Information

On March 4, 2011, the Office of Air Quality (OAQ) had a notice published in Indianapolis Star, in Indianapolis, Indiana, stating that the Quemetco, Inc. had applied for a renewal to their Part 70 Operating Permit issued on June 30, 2004. The notice also stated that OAQ proposed to issue a permit for this operation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

Comments Received

The comments are summarized in the subsequent pages, with IDEM's corresponding responses. The IDEM does not amend the Technical Support Document (TSD). The TSD is maintained to document the original review. This addendum to the TSD is used to document comments, responses to comments and changes made from the time the permit was drafted until a final decision is made.

Quemetco Inc. Comments and IDEM's Responses

On March 29, 2011, OAQ received comments from Quemetco, Inc. The summary of the comments and IDEM, OAQ responses, including changes to the permit (language deleted is shown in ~~strikeout~~ and language added is shown in **bold**) are as follows:

Comment 1: Section A.2(k) should match section D.3(k) verbatim.

IDEM Response: IDEM agrees. The permit is revised as follows:

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)]
[326 IAC 2-7-5(15)]

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

... ..
(k) ~~General Ventilation for the reverb charge room, identified as GV104. Portions of~~

~~process fugitive emissions generated by operations conducted in this area are controlled by Roof Vent Baghouse RV #4 and exhausting to Stack/Vent S-104. These operations potentially generating potential fugitive emissions include emissions from the Slag Warehouse Dumping Bin and general emissions generated by traffic and housekeeping activities. Roof Vent Baghouse RV #4 was installed in 1991.~~

General Ventilation for the reverb charge room, identified as GV104. Portions of process fugitive emissions generated by operations conducted in this area are controlled by Roof Vent Baghouse RV #4 and exhausting to Stack/Vent S-104. These operations potentially generating fugitive emissions include make up of reverberatory charge materials and general emissions generated by traffic and housekeeping activities. Roof Vent Baghouse RV #4 was installed in 1991.

... ..
... ..

Comment 2: Stack testing for the SRF was last performed in 2010, making testing due in 2015.

IDEM Response: IDEM agrees. The period for testing of the SRF is five (5) years, and passing test results were attained in April 7, 2010. The permit is revised as follows:

D.1.10 Testing Requirements [326 IAC 2-1.1-11] [326 IAC 2-7-6(1), (6)] [326 IAC 20-13-6]

(a) In order to demonstrate compliance with Conditions D.1.1(a) and D.1.3, the Permittee shall perform PM testing of the SRF and the Reverberatory Furnace by ~~April 2012~~ **April 7, 2015**, utilizing methods as approved by the Commissioner. This test shall be conducted at least once every five (5) years from the date of the most recent valid compliance demonstration. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C – Performance Testing contains the Permittee’s obligation with regard to the performance testing required by this condition.

... ..

Comment 3: Stack testing for the SRF was last performed in 2010, making testing due in 2015.

IDEM Response: IDEM agrees. The period for Pb testing for Stack may be as long as 24 months; test results of less than 50% of the limit were attained February 11, 2010. The permit is revised as follows:

D.2.8 Testing Requirements [326 IAC 2-1.1-11]

Pursuant to 326 IAC 20-13-6, the Permittee shall conduct a compliance test for Lead compounds from Stack/Vent S-100 on an annual basis, no later than twelve (12) calendar months following the previous compliance test. If a compliance test demonstrates a source emitted Lead compounds from Stack /Vent S-100 less than or equal to fifty percent (50.0%) of the applicable limit under this rule during the compliance test, the Permittee shall be allowed up to twenty-four (24) months from the previous compliance test to conduct the next compliance test for Lead compounds. Pursuant to 326 IAC 20-13-6, retesting for Lead compounds from Stack/Vent S-100 shall be conducted no later than ~~March 31, 2014~~ **February, 11 2012**. This test shall be conducted utilizing methods as approved by the commissioner.

Comment 4: "Hours" is needed to define the time frame in D.2.11 - Visible Emissions Notations

IDEM Response: IDEM agrees. The permit is revised as follows:

D.2.11 Visible Emissions Notations

- (a) Whenever the baghouse leak detection system is malfunctioning or down for repairs or adjustments, and the continuous opacity monitor is down for a period of twenty-four (24) **hours**, visible emission notations of Stack/Vent S-100 stack exhaust shall be performed once per day during normal daylight operations when exhausting to the atmosphere until the baghouse leak detection system is repaired or replaced. A trained employee shall record whether emissions are normal or abnormal.

... ..

Comment 5: There is inconsistency in the descriptive language between Sections A.2(j) and D.2(j). The description should include, "These operations potentially generating fugitive emissions from storage and handling of charge materials and general emissions generated by traffic and housekeeping activities."

IDEM Response: The permit is revised as follows:

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)]
[326 IAC 2-7-5(15)]

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

... ..

- (j) General Building Ventilation of the bin 10 feed storage area, identified as GV103. Portions of process fugitive emissions generated by operations conducted in this area are controlled by Roof Vent Baghouse RV #3 and exhausting to Stack/Vent S-103. ~~These operations potentially generating fugitive emissions include the electric arc furnace, slag and lead tapping, furnace charging, feed hopper, feed conveyor, charge make-up, slag handling (shaking), and general emissions generated by traffic and housekeeping activities.~~ **These operations potentially generating fugitive emissions from storage and handling of charge materials and general emissions generated by traffic and housekeeping activities.** Roof Vent Baghouse RV #3 was installed in 1991.

... ..

... ..

Comment 6: Sections D.3(n) and D.3(p) should refer to nine (9) refining kettles instead of eight (8).

IDEM Response: IDEM agrees. The permit is revised as follows:

SECTION D.3 EMISSIONS UNIT OPERATION CONDITIONS

Emission Unit Description:	
...	...
(n)	General Ventilation of the north refinery area, identified as GV107. Portions of process fugitive emissions generated by operations conducted in this area are controlled by Roof Vent Baghouse RV #7 and exhausting to Stack/Vent S-107. The operations potentially generating fugitive emissions include the 8 9 refining kettles, kettle charging, dross skimming, casting, natural gas fired trimmer burners rated at 1.8 million Btu in the casting machine area and general emissions generated by traffic and housekeeping activities. Roof Vent Baghouse RV #7 was installed in 1991.
...	...
(p)	General Ventilation of the south refinery area, identified as GV109. Portions of process fugitive emissions generated by operations conducted in this area are controlled by Roof Vent Baghouse RV #9 and exhausting to Stack/Vent S-109. These operations potentially generating fugitive emissions include 8 9 refining kettles, kettle charging, dross skimming, casting and general emissions generated by traffic and housekeeping activities. Roof Vent Baghouse RV #9 was installed in 1995.
...	...
...	...

Comment 7: Section D.3.5 should allow for an established Preventive Maintenance Plan.

IDEM Response: The permit is revised as follows:

D.3.5 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for Roof Vent Baghouses RV# 1 through RV #9. **The Permittee's latest approved SOP's required under 40 CFR Part 63 satisfy the PMP requirement in this case.**

Comment 8: The source requests the removal of a month for testing in section D.3.7.

IDEM Response: The timeframe for testing of lead emissions from process fugitive stacks, as specified in 326 IAC 20-13, is "no later than twenty-four (24) months following the previous compliance test." The permit is revised as follows:

D.3.7 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11][326 IAC 20-13]

In order to compliance with Condition D.3.1- Lead Emissions Limitation, the Permittee shall perform lead testing ~~before April 2014~~ on Stack/Vents S-106, S-107, S-108 and S-109, utilizing methods as approved by the Commissioner. These tests shall be repeated at least once every two (2) years from the date of this valid compliance demonstration. Testing shall be conducted in accordance with Section C- Performance Testing.

Comment 9: Equipment listed in Section D.4 are defined as insignificant activities and should be titled as such.

IDEM Response: The permit is revised as follows:

SECTION D.4 EMISSIONS UNIT OPERATION CONDITIONS
FACILITY OPERATION CONDITIONS

<p>Emissions Unit Description: Facility Description [326 IAC 2-7-5(15)]: Insignificant Activities</p>

... ..

Comment 10: Kettles #1 - #6, constructed prior to June 11, 1973, should not be listed section E.1 because the provisions of the Standards of Performance for Secondary Lead Smelters, 40 CFR 60, Subpart L, are not applicable to them.

IDEM Response: The available descriptive language for kettles #1 - #6 is integrated with that of kettles #7, #8 and #9; however, the correct applicability for the performance standard is clearly noted in the description block. Additionally, condition E.1.1 specifies only kettles #7, #8 and #9 for compliance with 40 CFR 60, Subpart L. Section E.1 of the permit remains unchanged.

<p>IDEM Clarification about Changes from the Previous Permit No.: T 097-6201-00079</p>

IDEM has revised some sections of the standard language contained in the B and C sections of the permit. Additional changes to some of the D sections are implemented. Changes to the permit (language deleted is shown in ~~strikeout~~ and language added is shown in **bold**, relative to the previous permit) are as shown below. Explanation for Title 1 changes have been clarified in the following conditions.

Change (1) B.14. Deviations from Permit Requirements and Conditions.
IDEM, OAQ has decided that having a separate condition for the reporting of deviations is unnecessary. Therefore, IDEM, OAQ has removed Section B - Deviation from Permit Requirements and Conditions and added the requirements of that condition to Section C - General Reporting Requirements. The permit is revised as follows:

Old permit:

~~B.14 — Deviations from Permit Requirements and Conditions [326 IAC 2-7-5(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 and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003

~~Indianapolis, Indiana 46204-2251~~

~~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 "responsible official" as defined by 326 IAC 2-7-1(34).~~

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

New permit:

**C.20 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11]
[326 IAC 2-2] [326 IAC 2-3]**

-
- (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 except that a deviation required to be reported pursuant to an applicable requirement that exists independent of this permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report. This report shall be submitted not later than thirty (30) days after the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34). A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.
- (b) The address for report submittal is:
- Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251
- (c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.
- (d) Reporting periods are based on calendar years, unless otherwise specified in this permit. For the purpose of this permit "calendar year" means the twelve (12) month period from January 1 to December 31 inclusive.

... ..

- Change (2)** C.13. Maintenance of CEMs.
IDEM, OAQ has decided to move Section C - Maintenance of CEMs into Section D - Continuous Emissions Monitoring, since both conditions cover the Permittee's requirement for CEMs. The permit is revised as follows.

Old permit:

- ~~C.13 Maintenance of Continuous Emission Monitoring Equipment [326 IAC 2-7-5(3)(A)(iii)]~~
- ~~(a) The Permittee shall install, calibrate, maintain, and operate all necessary continuous emission monitoring systems (CEMS) and related equipment.~~
 - ~~(b) In the event that a breakdown of a continuous emission monitoring system occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem.~~
 - ~~(c) Whenever a continuous emission monitor other than an opacity monitor is malfunctioning or will be down for calibration, maintenance, or repairs for a period of four (4) hours or more, a calibrated backup CEMS shall be brought online within four (4) hours of shutdown of the primary CEMS, and shall be operated until such time as the primary CEMS is back in operation.~~
 - ~~(d) Nothing in this permit shall excuse the Permittee from complying with the requirements to operate a continuous emission monitoring system for sulfur dioxide (SO₂) emissions for Stack/Vent S-100 pursuant to Construction Permit 960079-03 Condition 7(e) issued May 13, 1996 and for Stack/Vent S-111 pursuant to Construction Permit 970079-04 Condition 6(d) issued April 30, 1996.~~

New permit:

- D.1.11 Continuous Emissions Monitoring [326 IAC 3-5] [40 CFR 64]**
- (a) Pursuant to 326 IAC 3-5 (Continuous Monitoring of Emissions), the SO₂ continuous emission monitoring systems (CEMS) for Stack-Vent S-111 shall be calibrated, maintained, and operated for measuring SO₂, and meet the performance specifications of 326 IAC 3-5-2 and 40 CFR 60 when the reverberatory furnace is charged and in operation.**
 - (b) If the SO₂ continuous emission monitoring system (CEMS) is malfunctioning or down for repairs or adjustments, for twenty-four (24) hours or more, the Permittee shall monitor and record the flow rate and the pH of Scrubber #046 scrubbant when exhausting to Stack/Vent S-111. The Scrubber #046 scrubbant flow shall be maintained at a flow rate established from the most recent compliant test and shall maintain a pH of 6 to 11. The Permittee shall monitor and record the scrubbant flow rate and the pH at least once per shift until the CEMS for Stack/Vent S-111 is returned to operation.**
 - (c) The continuous emissions monitoring system(s) (CEMS) for SO₂ emission rates shall be operated at all times the emissions unit or process is operating except for reasonable periods of monitor system downtime due to necessary calibration, maintenance activities or malfunctions. Calibration and maintenance activities shall be conducted pursuant to the standard operating procedures under 326 IAC 3-5-4(a). [326 IAC 2-7-5(3)(A)(iii)] [326 IAC 3-5]**
 - (d) All CEMS required by this permit shall meet all applicable performance specifications of 40 CFR 60 or any other applicable performance**

specifications, and are subject to monitor system certification requirements pursuant to 326 IAC 3-5-3.

- (e) In the event that a breakdown of a continuous emission monitoring system required by this permit occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem.**
- (f) Nothing in this permit shall excuse the Permittee from complying with the requirements to operate a continuous emission monitoring system pursuant to 326 IAC 3-5 and 40 CFR 60.**

Change (3) C.14. — Monitoring Methods.
IDEM, OAQ has removed Section C - Monitoring Methods. The conditions that require the monitoring or testing, if required, state what methods shall be used.

Old permit:

~~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.~~

Change (4) C.15 — Pressure Gauge and Other Instrument Specifications.
IDEM realizes that these specifications can only be practically applied to analog units, and has therefore clarified the condition to state that the condition only applies to analog units. Upon further review, IDEM has also determined that the accuracy of the instruments is not nearly as important as whether the instrument has a range that is appropriate for the normal expected reading of the parameter. Therefore, the accuracy requirements have been removed from the condition.

Old permit:

~~C.15 — Pressure Gauge and Other Instrument Specifications [326 IAC 2 1.1 11] [326 IAC 2 7-5(3)] [326 IAC 2-7-6(1)]~~

- ~~(a) Whenever a condition in this permit requires the measurement of pressure drop across any part of the unit or its control device, the gauge employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent (2%) of full scale reading.~~
- ~~(b) Whenever a condition in this permit requires the measurement of a flow rate or pH level, the instrument employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent (2%) of full scale reading.~~
- ~~(c) The Preventive Maintenance Plan for the pH meter shall include calibration using known standards. The frequency of calibration shall be adjusted such that the typical error found at calibration is less than one pH point.~~
- ~~(d) The Permittee may request the IDEM, OAQ, and OES to approve the use of a pressure gauge or other instrument that does not meet the above specifications provided the Permittee can demonstrate an alternative pressure gauge or other instrument specification will adequately ensure compliance with permit conditions requiring the measurement of pressure drop or other parameters.~~

New permit:

C.13 Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-7-5(3)] [326 IAC 2-7-6(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.

Change (5) Section C.24 — Total Enclosure Requirements does not appear in the renewal permit. The applicable provisions are contained in Section E of the new permit.

Old permit:

C.24 Total Enclosure Requirements

In addition to the requirements of 40 CFR 63.8, 40 CFR 63.10 and 40 CFR 63.547(e), a secondary lead smelter using a total enclosure shall do the following:

- (a) Pursuant to 40 CFR 63.547(e), the Permittee shall determine compliance with the doorway in draft requirement of 40 CFR 63.544(b) for enclosed buildings by:
 - (1) The Permittee shall use a propeller anemometer or equivalent pressure gauge.
 - (2) The pressure gauge shall be certified by the manufacturer to be capable of measuring pressure differential in a range of 0.02 to 0.2 mm Hg.
 - (3) Both the inside and outside taps shall be shielded to reduce the effect of wind.
 - (4) The Permittee shall demonstrate the inside of the building is maintained at a negative pressure as compared to the outside of the building of no less than two hundredths (0.02) mm Hg when all doors are in the position they are in during normal operation.
- (b) Pursuant to 326 IAC 20-13-7, submit a plan describing the installation and operation of a continuous monitoring system that meets the requirements of 40 CFR 63.547(e)(2) within ninety (90) days following Permit issuance.
 - (1) The Permittee shall operate a continuous monitoring system to measure and record pressure differential. The continuous monitoring system shall consist of the following:
 - (A) A differential pressure sensor capable of measuring pressure within a range of two hundredths (0.02) to two tenths (0.2) millimeter of mercury (one hundredth (0.01) to one tenth (0.1) inch of water).
 - (B) A processor.
 - (C) An alarm.
 - (D) A continuous recording device.
 - The pressure differential sensor that is located on the east wall of the Bin #10 storage area meets the requirements of section (b)(1) above. Any changes to the location or operation of the system shall require prior written approval by IDEM, OAQ and/or OES.
 - (2) Initiate corrective actions within thirty (30) minutes of a monitoring system alarm.

- ~~(3) Request, if desired, to cease monitoring pressure differential under this subsection twelve (12) months from the commencement date of approved monitoring or the effective date of this rule, whichever is later.~~
- ~~(4) Notify IDEM, OAQ and/or OES of any physical changes including, but not limited to, ventilation capacity and building size. If the IDEM, OAQ and/or OES determines the net effect of any such changes may potentially affect air pressure readings of the building, then the Permittee shall resume monitoring for an additional twelve (12) months. Monitoring may be discontinued in accordance with the procedures under subdivision (4).~~
- ~~(5) Maintain the following on site for a period of three (3) years and have available for an additional two (2) years:
 - ~~(A) Records of the pressure differential.~~
 - ~~(B) Logs of monitoring system alarms, including date and time.~~
 - ~~(C) Logs of corrective actions, including date and time.~~~~

New permit:

E.2.2 National Emissions Standard for Hazardous Air Pollutants from Secondary Lead Smelting
[40 CFR Part 63, Subpart X]

Pursuant to CFR Part 63, Subpart X, the Permittee shall comply with the provisions of 40 CFR Part 63.541, for the affected source, as specified as follows:

- (1) 40 CFR 63.541
- (2) 40 CFR 63.542
- (3) 40 CFR 63.543(a)
- (4) 40 CFR 63.543(h)
- (5) 40 CFR 63.544(a)
- (6) 40 CFR 63.544(b)
- (7) 40 CFR 63.544(c)
- (8) 40 CFR 63.544(d)
- (9) 40 CFR 63.547(e)
- (10) 40 CFR 63.548(a)
- (11) 40 CFR 63.548(b)
- (12) 40 CFR 63.548(c)
- (13) 40 CFR 63.548(d)
- (14) 40 CFR 63.548(e)
- (15) 40 CFR 63.548(f)
- (16) 40 CFR 63.548(g)
- (17) 40 CFR 63.548(h)
- (18) 40 CFR 63.548(i)
- (19) 40 CFR 63.550

Change (6) Upon further review, IDEM has determined that it is the Permittee's responsibility to include routine control device inspection requirements in the applicable preventive maintenance plan. Since the Permittee is in the best position to determine the appropriate frequency of control device inspections and the details regarding which components of the control device should be inspected, the conditions requiring control device inspections have been removed from the permit. In addition, the requirement to keep records of the inspections has also been removed.

Old permit:

D.1.17 Scrubber Operation

- ~~(a) — An inspection of the scrubber shall be performed at least once every two years, in accordance with the Preventive Maintenance Plan prepared in accordance with Section B — Preventive Maintenance Plan. Defective parts shall be replaced. A record shall be kept of the results of the inspection and the part(s) replaced.~~
- ~~(b) — Inspections shall be made whenever there is an outage of any nature lasting more than three (3) days unless such measurements have been taken within the past twelve (12) months.~~
- ~~(c) — Reasonable response steps shall be taken in accordance with Section C — Compliance Response Plan — Preparation, Implementation, Records, and Reports for any improper or abnormal conditions found during an inspection. Discovery of an abnormal or improper condition is not a deviation from this permit. Failure to take response steps in accordance with Section C — Compliance Response Plan — Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit.~~

Change (7)

D.1.18 & D.2.15 — SO₂ Monitor Downtime

Continuous Emissions Monitor (CEM) for sulfur dioxide (SO₂) is required on Stack/vent 111 in order to demonstrate compliance with the Sulfur Dioxide (SO₂) Emissions Limit. The language of the condition requiring monitoring of the SO₂ scrubber solution during CEMS downtime has been revised for clarity and operational parameters.

Previously, Continuous Emissions Monitor (CEM) for sulfur dioxide (SO₂) was required for the Stack/Vent S-100 because of the Electric Arc Furnace (EAF) in operation at the time of issuance of the operating permit T097-6201-00079, with a PSD Minor Sulfur Dioxide (SO₂) Limit in place for Stack/vent 100. This emission unit is no longer a part of any facility at this source. The Permittee maintains the SO₂ CEM voluntarily at Stack/Vent S-100, and thus bears no responsibility to follow any prescribed action when the CEM is inoperative. This condition is not included in the renewal permit.

Old permit:

D.1.18 SO₂ Monitor Downtime [326 IAC 2-7-6][326 IAC 2-7-5(1)]

~~Whenever the SO₂ Continuous Emission Monitor (CEM) is malfunctioning or will be down for repairs or adjustments for a period of four (4) hours or more, one of the following methods shall be used to provide information related to SO₂ emissions:~~

- ~~(a) — A calibrated backup CEM for Stack/Vent S-111 shall be brought online within four (4) hours of shutdown of the primary CEM, or~~
- ~~(b) — The Permittee shall monitor and record the water flow rate and the pH of Scrubber #046 water at least once every hour when exhausting to Stack/Vent S-111. The Scrubber #046 water flow rate shall be maintained at a flow rate of greater than 90 gallons per minute and shall maintain a pH of 6 to 9. The Permittee shall monitor and record the water flow rate and the pH at least once every hour until the CEM for Stack/Vent S-111 is returned to operation.~~

~~These monitoring conditions are necessary because the facilities and associated control devices must function properly to ensure compliance with SO₂ limits under 326 IAC 7-4-2 (Sulfur Dioxide Emission Limitations: Marion County), 326 IAC 2-3 (Emissions Offset) and Construction Permit Amendment A0970079.~~

~~D.2.15 SO₂ Monitor Downtime [326 IAC 2-7-6] [326 IAC 2-7-5(1)]~~

~~Whenever the SO₂ Continuous Emission Monitor (CEM) is malfunctioning or will be down for repairs or adjustments for a period of four (4) hours or more, a calibrated backup CEM for Stack/Vent S-100 shall be brought online within four (4) hours of shutdown of the primary CEM.~~

D.1.11 Continuous Emissions Monitoring [326 IAC 3-5] [40 CFR 64]

... ..

(b) If the SO₂ continuous emission monitoring system (CEMS) is malfunctioning or down for repairs or adjustments, for twenty-four (24) hours or more, the Permittee shall monitor and record the w flow rate and the pH of Scrubber #046 scrubbant when exhausting to Stack/Vent S-111. The Scrubber #046 scrubbant flow shall be maintained at a rate of greater than 90 gallons per minute and shall maintain a pH of 6 to 11. The Permittee shall monitor and record the scrubbant flow rate and the pH at least once per shift until the CEMS for Stack/Vent S-111 is returned to operation.

... ..

Change (8)

C.13 — Instrument Specifications

IDEM realizes that these specifications can only be practically applied to analog units, and has therefore clarified the condition to state that the condition only applies to analog units. Upon further review, IDEM has also determined that the accuracy of the instruments is not nearly as important as whether the instrument has a range that is appropriate for the normal expected reading of the parameter. Therefore, the accuracy requirements have been removed from the condition.

Old permit:

~~C.15 Pressure Gauge and Other Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]~~

~~(a) Whenever a condition in this permit requires the measurement of pressure drop across any part of the unit or its control device, the gauge employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent ($\pm 2\%$) of full scale reading.~~

~~(b) Whenever a condition in this permit requires the measurement of a flow rate or pH level, the instrument employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent ($\pm 2\%$) of full scale reading.~~

~~(c) The Preventive Maintenance Plan for the pH meter shall include calibration using known standards. The frequency of calibration shall be adjusted such that the typical error found at calibration is less than one pH point.~~

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

New permit:

C.13 Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-7-5(3)] [326 IAC 2-7-6(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.**

Change (9)

In the last permit, 120 days were allowed for retest to demonstrate compliance. This period has been changed to 180 days. Current IDEM practice allows 180 days for retest, when necessary, to demonstrate compliance. This period should better provide adequate time for rescheduling than the previous 120 day period.

Prevention of Significant Deterioration (PSD) Minor Limits were established in Construction Permit 960079-04 for both PM₁₀ and Pb, and were maintained in operating permit 097-26466-00079. There was no PM limit; therefore, a PSD avoidance limit has been included in this permit.

The previous PSD Minor Lead Limit of seven ten thousandths (0.0007) grains per dry standard cubic foot of exhaust was not practically enforceable per twelve month period. Similarly, the previous PSD Minor PM₁₀ Limit condition requiring a twelve month rolling average was not practically determinable or enforceable. These conditions have been replaced by new practically enforceable conditions. These limits can be revised, if needed, as long as the PSD Minor Limits are maintained.

Compliance with a SO₂ twelve month rolling average limit may be demonstrated through the use of CEMS. The Emission Offset Sulfur Dioxide Minor Limit remains unchanged In Section D.1.

Old permit:

~~D.1.3 PSD Minor Lead Limit [326 IAC 2-2][Construction Permit 960079-04]~~

~~Pursuant to Construction Permit 960079-04, Lead emissions from the Slag Reduction Furnace (SRF) shall be limited to seven ten thousandths (0.0007) grains per dry standard cubic foot of exhaust and one hundred thirty six thousandths (0.136) pounds per hour. This emissions limitation is equivalent to less than six tenths (0.6) tons of Lead per twelve (12) consecutive month period with compliance determined at the end of each month. Compliance with these emissions limitations makes 326 IAC 2-2 (Prevention of Significant Deterioration (PSD) Requirements) not applicable.~~

... ..

~~D.1.5 PSD Minor PM-10 Limit [326 IAC 2-2] [Construction Permit 960079-04]~~

~~Pursuant to Construction Permit 960079-04, filterable and condensible PM-10 emissions from the Slag Reduction Furnace (SRF) shall be limited to one hundred seventy two ten thousandths (0.0172) grains per dry standard cubic foot of exhaust and three and four tenths (3.4) pounds per hour. This emissions limitation is equivalent to less than fifteen (15) tons of PM-10 per twelve consecutive month period with compliance determined at the end of each month. Therefore, these conditions limit the potential to emit filterable and condensible PM-10 to less than the applicable emission limit pursuant to Construction Permit 960079-04. Compliance with this emission limitation makes 326 IAC 2-2 (Prevention of Significant Deterioration (PSD) Requirements) not applicable.~~

New Permit

D.1.1 PSD Minor Limits [326 IAC 2-2]

Pursuant to CP Pursuant to Operation Permit T 097-27020-00079 and Construction Permit 960079-04, the following apply to the Slag Reduction Furnace (SRF).

- (a) The PM emissions from the SRF shall not exceed 5.7 pounds per hour.**
- (b) The PM₁₀ emissions from the SRF shall not exceed 3.4 pounds per hour.**
- (c) The lead emissions from the Slag Reduction Furnace (SRF) shall not exceed 0.136 pounds per hour.**

Compliance with these limits will limit the PM, PM₁₀, and lead emissions from the Slag Reduction Furnace (SRF) to less than, 25, 15, and 0.6 tons per year, respectively, and render the requirements of 326 IAC 2-2 (PSD) not applicable to the SRF constructed in 1995.

Change (10) The IDEM OAQ has revised the guidelines for frequency of some monitoring conditions. The following frequencies are sufficient to monitor the parameters for compliance:

- Recirculation pH for SO₂ control - once per shift
- Visible emissions - once per day
- Baghouse pressure drop - once per day

Change (11) A Continuous Emissions Monitoring System (CEMS) is required to monitor SO₂ from both the Reverberatory Furnace and the Slag Reduction Furnace because the SO₂ scrubber is necessary to comply with the SO₂ Emissions Limit pursuant to 326 IAC 7-4-2.

Record of downtime for this monitoring equipment is a condition of the permit. An acceptable alternative parametric indication for compliance during downtime is performed through notation of the pH value of the scrubber liquid. Record keeping of pH values must be performed during this time, and must be available for inspection upon request. Downtime for CEMS does not constitute an emergency; therefore, reporting is not required for the event of this alternative monitoring method.

Continuous emissions monitoring at Stack 100 is required to demonstrate compliance with the SO₂ limit established in construction permit No. A0970079. No control devices are used to comply with this SO₂ Emission Limit. Consequently, downtime for the Stack 100 CEMS does not constitute an emergency or reportable event.

Change (12) Additional provisions of 40 CFR 63 Subpart X may apply to the source. The permit is revised as follows:

E.2.2 National Emissions Standard for Hazardous Air Pollutants from Secondary Lead Smelting
[40 CFR Part 63, Subpart X]

Pursuant to CFR Part 63, Subpart X, the Permittee shall comply with the provisions of 40 CFR Part 63.541, for the affected source, as specified as follows:

... ..

(11) 40 CFR 63.548(b)

(12) 40 CFR 63.548(c)

(13) 40 CFR 63.548(d)

(14) 40 CFR 63.548(e)

(15) 40 CFR 63.548(f)

(16) 40 CFR 63.548(g)

(17) 40 CFR 63.548(h)

(18) 40 CFR 63.548(i)

... ..

IDEM Contact

Questions regarding this proposed permit can be directed to James Mackenzie at the Indiana Department Environmental Management, Office of Air Quality, MC 61-53, Room 1003, 100 North Senate Avenue, Indianapolis, Indiana 46204-2251 or by telephone at (317) 233-2641 or toll free at 1-800-451-6027 extension 3-2641.

Indiana Department of Environmental Management
Office of Air Quality

Technical Support Document (TSD) for a Part 70 Operating Permit Renewal

Source Background and Description

Source Name:	Quemetco, Inc.
Source Location:	7870 West Morris Street, Indianapolis Indiana 46231
County:	Marion
SIC Code:	3341
Permit Renewal No.:	T097-27020-00079
Permit Reviewer:	James Mackenzie

The Office of Air Quality (OAQ) has reviewed the operating permit renewal application from Quemetco, Inc. relating to the operation of a stationary secondary lead smelting and refining operation.

History

On September 25, 2008, Quemetco, Inc. submitted an application to the OAQ requesting to renew its operating permit. Quemetco, Inc. was issued a Part 70 Operating Permit on June 30, 2004.

Permitted Emission Units and Pollution Control Equipment

- (a) One (1) Reverberatory Furnace, identified as Emission Unit 3.1, used in the smelting of lead from lead acid batteries and scrap lead. The reverberatory furnace receives charge material from the Rotary Dryer in a continuous process. The furnace is heated by an oxygen enriched 32 million Btu per hour natural gas fired burner system. Molten lead is tapped directly into refining kettles or into molds for subsequent placement/refining in the refining kettles. Lead containing slag is tapped for further lead recovery in the Slag Reduction Furnace. Process flue gas emissions and emissions from a ventilation line known as "the Reverb Furnace Flue and Feed end" are controlled by Baghouse #035 and Scrubber #046. The controlled emissions exhaust to one stack identified as Stack/Vent S-111. Stack/Vent S-111 is equipped with a Continuous Emissions Monitor (CEM) for sulfur dioxide (SO₂) emissions. The rated charge capacity for the Reverberatory Furnace is 34.5 tons per hour (828 TPD). This emission unit was installed in 1972.

[Under 40 CFR 60, Subpart L, the Reverberatory Furnace is considered an affected facility.]

[Under 40 CFR 63, Subpart X, the Reverberatory Furnace is considered an affected facility.]

- (b) One (1) 2500 kVA Electric Arc Slag Reduction Furnace (SRF), identified as Emission Unit 3.3, that concurrently processes hot slag from the Reverberatory Furnace and cold slag in a continuous process. Cold slag is taken from storage and is placed in a hopper. Hot slag is conveyed from the Reverberatory Furnace to the SRF. Molten lead is tapped into molds for subsequent placement/refining in the refining kettles. Slag is tapped and stored awaiting proper disposal or reprocessing if the lead content is high enough. Emissions are controlled by Baghouse #037 and Scrubber #046 which exhaust to one stack identified as Stack/Vent S-111. Stack/Vent S-111 is equipped with a Continuous

Emissions Monitor (CEM) for sulfur dioxide (SO₂) emissions. The rated charge capacity for the Slag Reduction Furnace is 5.5 tons per hour (132 TPD). This emission unit was installed in 1995.

[Under 40 CFR 63, Subpart X, the Reverberatory Furnace is considered an affected facility.]

- (c) Process Fugitive Emissions from one (1) Reverberatory Furnace, identified as Emission Unit 3.1, used in the smelting of lead from lead acid batteries and scrap lead. Emissions from lead charging are controlled by Baghouses #038 and #041, respectively, and exhaust to one stack identified as Stack/Vent S-100. General furnace emissions are controlled by Baghouse #041 and exhaust to one stack identified as Stack/Vent S-100. Emissions from lead tapping are controlled by Baghouse #040 which exhaust to one stack identified as Stack/Vent S-100. Stack/Vent S-100 is equipped with a Continuous Emissions Monitor (CEM) for sulfur dioxide (SO₂) emissions. The maximum charge capacity for the Reverberatory Furnace is 34.5 tons per hour. This emission unit was installed in 1972.

[Under 40 CFR 63, Subpart X, the Process Fugitive Emissions is considered an affected activity.]

- (d) Eight (8) refining kettles, identified as Emission Unit Kettle #1 through Kettle #8, which are used to refine the lead alloy. The refining kettles receive molten lead, solid lead or scrap lead. Reagents and alloying metals are added to the Kettle(s) and mixed into molten lead. A natural gas fired burner system indirectly heats the lead. The combined heat input capacity for the natural gas fired burners is 32 million Btu per hour. Impurities are removed as dross from the surface of the molten lead. Process emissions are controlled by Baghouse #040 which exhausts to one stack identified as Stack/Vent S-100. Stack/Vent S-100 is equipped with a Continuous Emissions Monitor (CEM) for sulfur dioxide (SO₂) emissions. Combustion emissions from the natural gas burners are vented to separate stacks. Combustion emissions from Kettle #1 are vented to Stack/Vent S-117. Combustion emissions from Kettle #2 are vented to Stack/Vent S-114. Kettle #3 and Kettle #4 are vented to Stack/Vent S-116. Combustion emissions from Kettle #5 and Kettle #6 are vented to Stack/Vent S-115. Combustion emissions from Kettle #7 are vented to Stack/Vent S-113. Combustion emissions from Kettle #8 are vented to Stack/Vent S-112. Kettles #1 through #6 were installed in 1972. Kettles #7 and #8 were installed in 1988 and 1992 respectively. The refining operation is not a time based operation therefore there is no maximum throughput capacity identified. However, an average based on 24 hours of operation and full kettles is 46.3 tons per hour.

[Under 40 CFR 60, Subpart L, Kettles #7 and #8 are considered affected facilities.]

[Under 40 CFR 63, Subpart X, Kettles #7 and #8 are considered affected facilities.]

- (e) Refining Kettle #9, identified as Emission Unit Kettle #9. Kettle #9 has a capacity of 2.14 tons of lead per hour (180 ton capacity with two batches per week) and is heated by a 4.25 million Btu natural gas burner. The kettle is used to refine lead. Emissions from Kettle #9 are controlled by Baghouse #040, which exhaust to one stack identified as Stack/Vent S-100. Stack/Vent S-100 is equipped with a Continuous Emissions Monitor (CEM) for sulfur dioxide (SO₂) emissions. Burner emissions are vented through a combustion flue, Stack/Vent S-118, with no controls. Kettle # 9 was installed in 2002.

[Under 40 CFR 60, Subpart L, Kettle #9 is considered an affected facility.]

[Under 40 CFR 63, Subpart X, Kettle #9 is considered an affected facility.]

- (f) One (1) Casting Machine, identified as Emission Unit 7 which receives refined and alloyed lead metal pumped from the refining kettles and casts the molten lead into lead ingots. The casting machine is equipped with a 0.3 million Btu per hour natural gas burner. Emissions from the casting machine are controlled by Baghouse #040 which exhausts to one stack identified as Stack/Vent S-100. Stack/Vent S-100 is equipped with a Continuous Emissions Monitor (CEM) for sulfur dioxide (SO₂) emissions. The maximum process capacity is limited by the refining kettles. This emission unit was installed prior to 1978.
- (g) One (1) Rotary Dryer, identified as Emission Unit 8, used to dry Reverberatory Furnace feed material. Raw material is dumped into a feed hopper which feeds the Rotary Dryer with lead bearing material and furnace additives from lead acid batteries and factory scrap in a continuous process. The Rotary Dryer is heated by an oxygen enriched 14 million Btu per hour natural gas fired burner system. The emissions generated from charging raw material to the feed hopper are controlled by Baghouse #041, which exhausts to one stack identified as Stack/Vent S-100. Process emissions are controlled by Baghouse #041, which exhausts to one stack identified as Stack/Vent S-100. The process fugitive emissions are controlled by Baghouse #038 and by Baghouse #041, which exhaust to one stack identified as Stack/Vent S-100. Stack/Vent S-100 is equipped with a Continuous Emissions Monitor (CEM) for sulfur dioxide (SO₂) emissions. The maximum process capacity for the Rotary Dryer is limited by the reverberatory furnace. This emission unit was installed prior to 1978.

[Under 40 CFR 63, Subpart X, the Rotary Dryer is considered an affected facility.]

- (h) General Building Ventilation of the bin 10 feed storage area, identified as GV101. Portions of process fugitive emissions generated by operations conducted in this area are controlled by Roof Vent Baghouse RV #1 and exhausting to Stack/Vent S-101. These operations potentially generate fugitive emissions from storage and handling of reverberatory charge materials and general emissions generated by traffic and housekeeping activities. Roof Vent Baghouse RV #1 was installed in 1991.

[Under 40 CFR 63, Subpart X, the General Building Ventilation is considered an affected facility.]

- (i) General Building Ventilation of the bin 10 feed storage area, identified as GV102. Portions of process fugitive emissions generated by operations conducted in this area are controlled by Roof Vent Baghouse RV #2 and exhausting to Stack/Vent S-102. These operations potentially generate fugitive emissions from storage and handling of reverberatory charge materials and general emissions generated by traffic and housekeeping activities. Roof Vent Baghouse RV #2 was installed in 1991.

[Under 40 CFR 63, Subpart X, the General Building Ventilation is considered an affected facility.]

- (j) General Building Ventilation of the bin 10 feed storage area, identified as GV103. Portions of process fugitive emissions generated by operations conducted in this area are controlled by Roof Vent Baghouse RV #3 and exhausting to Stack/Vent S-103. These operations potentially generating fugitive emissions include the electric arc furnace, slag and lead tapping, furnace charging, feed hopper, feed conveyor, charge make-up, slag handling (shaking), and general emissions generated by traffic and housekeeping activities. Roof Vent Baghouse RV #3 was installed in 1991.

[Under 40 CFR 63, Subpart X, the General Building Ventilation is considered an affected facility.]

- (k) General Ventilation for the reverb charge room, identified as GV104. Portions of process

fugitive emissions generated by operations conducted in this area are controlled by Roof Vent Baghouse RV #4 and exhausting to Stack/Vent S-104. These operations potentially generating fugitive emissions include make up of reverberatory charge materials and general emissions generated by traffic and housekeeping activities. Roof Vent Baghouse RV #4 was installed in 1991.

[Under 40 CFR 63, Subpart X, the General Building Ventilation is considered an affected facility.]

- (l) General Ventilation for the cold charge electric arc furnace slag room, identified as GV105. Portions of process fugitive emissions generated by operations conducted in this area are controlled by roof vent Baghouse RV #5 and exhausting to Stack/Vent S-105. These operations potentially generating fugitive emissions include general handling and storage of charge materials such as slag, iron, limestone and coke, and general emissions generated by traffic and housekeeping activities. Roof Vent Baghouse RV #5 was installed in 1991.

[Under 40 CFR 63, Subpart X, the General Building Ventilation is considered an affected facility.]

- (m) General Ventilation for the reverb furnace and slag reduction furnace (SRF), identified as GV106. Portions of process fugitive emissions generated by operations conducted in this area are controlled by Roof Vent Baghouse RV #6 and exhausting to Stack/Vent S-106. These operations potentially generating fugitive emissions include the Reverberatory/Slag Reduction Furnaces - lead and slag tapping, furnace charging, feed conveyor, slag handling, and general emissions generated by traffic and housekeeping activities. Roof Vent Baghouse RV #6 was installed in 1991.

[Under 40 CFR 63, Subpart X, the General Building Ventilation is considered an affected facility.]

- (n) General Ventilation of the north refinery area, identified as GV107. Portions of process fugitive emissions generated by operations conducted in this area are controlled by Roof Vent Baghouse RV #7 and exhausting to Stack/Vent S-107. The operations potentially generating fugitive emissions include the 8 refining kettles, kettle charging, dross skimming, casting, natural gas fired trimmer burners rated at 1.8 million Btu in the casting machine area and general emissions generated by traffic and housekeeping activities. Roof Vent Baghouse RV #7 was installed in 1991.

[Under 40 CFR 63, Subpart X, the General Building Ventilation is considered an affected facility.]

- (o) General Ventilation of the slag reduction furnace area, identified as GV108. Portions of process fugitive emissions generated by operations conducted in this area are controlled by Roof Vent Baghouse RV #8 and exhausting to Stack/Vent S-108. These operations potentially generating fugitive emissions include the slag reduction/ reverberatory furnace - lead and slag tapping, furnace charging, feed conveyor, slag handling and general emissions generated by traffic and housekeeping activities. Roof Vent Baghouse RV #8 was installed in 1992.

[Under 40 CFR 63, Subpart X, the General Building Ventilation is considered an affected facility.]

- (p) General Ventilation of the south refinery area, identified as GV109. Portions of process fugitive emissions generated by operations conducted in this area are controlled by Roof Vent Baghouse RV #9 and exhausting to Stack/Vent S-109. These operations potentially generating fugitive emissions include 8 refining kettles, kettle charging, dross skimming, casting and general emissions generated by traffic and housekeeping activities. Roof Vent Baghouse RV #9 was installed in 1995.

[Under 40 CFR 63, Subpart X, the General Building Ventilation is considered an affected facility.]

Emission Units and Pollution Control Equipment Removed From the Source

The source has removed the following emission unit:

One (1) Electric Arc Furnace (EAF), identified as Emission Unit 3.2, used to recover lead from Reverberatory Furnace slag. The EAF is charged with lead containing materials, and flux, reagents and additives in a continuous process. The charge is heated and melted by passing an electric current through the charge. Molten lead is tapped into molds for subsequent placement/refining in the refining kettles. Slag is tapped and sent to storage to await proper disposal or reprocessing if the lead content is high enough. Process flue gas emissions within the furnace are controlled by Baghouse #036 which exhausts to one stack identified as Stack/Vent S-100. Emissions from lead tapping and slag tapping are controlled by Baghouse #036 which exhausts to one stack identified as Stack/Vent S-100. Process emissions not captured by furnace hoods are controlled by Baghouse #041 which exhausts to one stack identified as Stack/Vent S-100. Stack/Vent S-100 is equipped with a Continuous Emissions Monitor (CEM) for sulfur dioxide (SO₂) emissions. The maximum charge capacity is 6.5 tons per hour. This emission unit was installed in 1984.

Insignificant Activities

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

- (a) Natural gas-fired combustion sources with heat input equal to or less than ten million 10,000,000) Btu per hour [326 IAC 6.5-1-2]
- (1) Maintenance Office HVAC system for natural gas heating at 70,000 Btu per hour.
- (b) Paved and unpaved roads and parking lots with public access. [326 IAC 6-4][326 IAC 20-13][40 CFR 63.541, Subpart X]
- (c) Emergency Gasoline generators not exceeding 110 horsepower. [326 IAC 6.5-1-2]
- (d) Emergency Diesel generators not exceeding 1600 horsepower. [326 IAC 6.5-1-2]
- (e) Battery Wrecker. [326 IAC 6.5-1-2][326 IAC 20-13][40 CFR 63.541, Subpart X]
- (f) Roadway Surface Fugitive Emissions. [326 IAC 6-4][326 IAC 20-13][40 CFR 63.541, Subpart X]
- (g) Outside Storage Bins: Coke Storage Bin, Iron Storage Bin and Limestone Storage Bin. [326 IAC 6.5-1-2][326 IAC 20-13][40 CFR 63.541, Subpart X]

- (h) General Parts Washing: Cold Cleaner Degreaser. Existing as of July 1, 1990. [326 IAC 8-3-5]
- (i) Five (5) Soda Ash Silos equipped with baghouse filters. [326 IAC 6.5-1-2]
- (j) Water Quality Department wet scrubber identified as Unit W W Sly. [326 IAC 6.5-1-2]
- (k) Maintenance Shop, emissions controlled by a cartridge filter identified as MS, which exhausts to one stack identified as Stack/Vent MS-1. [326 IAC 6.5-1-2] The Maintenance Shop includes the following, each exhausted at Stack/Vent MS-1:
 - (1) Activities related to routine fabrication, maintenance and repair of buildings, structures, equipment or vehicles at the source where air emissions from those activities would not be associated with any commercial production process, including:
 - (A) Brazing, soldering, or welding operations and associated equipment.
 - (B) Batteries and battery charging stations, except at battery manufacturing plants.
 - (C) Lubrication, including hand-held spray can lubrication, dipping metal parts into lubricating oil, and manual or automated addition of cutting oil in machining operations.
 - (2) Activities performed using hand-held equipment including the following:
 - (A) Drilling.
 - (B) Grinding.
 - (C) Machining wood, metal, or plastic.
 - (D) Sanding.
 - (E) Sawing.
 - (F) Turning wood, metal, or plastic.
 - (G) Surface Grinding

Existing Approvals

Since the issuance of the Part 70 Operating Permit 097-6201-00079 on June 30, 2004, the source has constructed or has been operating under the following approvals as well:

- (a) Significant Permit Modification No. 097-26466-00079, issued: August 14, 2008;
- (b) Administrative Amendment No. 097-24073-00079, issued: January 17, 2007;
- (c) Administrative Amendment No. 097-23220-00079, issued: September 14, 2006;
- (d) Administrative Amendment No. 097-21347-00079, issued: February 21, 2006; and
- (e) Minor Permit Modification No. 097-19787-00079, issued: September 7, 2005.

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.

Emission Calculations

The calculations submitted by the applicant have been verified and found to be accurate and correct. These calculations are provided in Appendix A of this document.

County Attainment Status

The source is located in Marion County

Pollutant	Designation
SO ₂	Better than national standards.
CO	Attainment effective February 18, 2000, for the part of the city of Indianapolis bounded by 11 th Street on the north; Capitol Avenue on the west; Georgia Street on the south; and Delaware Street on the east. Unclassifiable or attainment effective November 15, 1990, for the remainder of Indianapolis and Marion County.
O ₃	Attainment effective November 8, 2007, for the 8-hour ozone standard. ¹
PM ₁₀	Unclassifiable effective November 15, 1990.
NO ₂	Cannot be classified or better than national standards.
Pb	Attainment effective July 10, 2000, for the part of Franklin Township bounded by Thompson Road on the south; Emerson Avenue on the west; Five Points Road on the east; and Troy Avenue on the north. Attainment effective July 10, 2000, for the part of Wayne Township bounded by Rockville Road on the north; Girls School Road on the east; Washington Street on the south; and Bridgeport Road on the west. The remainder of the county is not designated.
¹ Attainment effective October 18, 2000, for the 1-hour ozone standard for the Indianapolis area, including Marion County, and is a maintenance area for the 1-hour ozone National Ambient Air Quality Standards (NAAQS) for purposes of 40 CFR 51, Subpart X*. The 1-hour designation was revoked effective June 15, 2005. Basic nonattainment designation effective federally April 5, 2005, for PM2.5.	

- (a) **Ozone Standards**
 Volatile organic compounds (VOC) and Nitrogen Oxides (NOx) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC and NOx emissions are considered when evaluating the rule applicability relating to ozone. Marion County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NOx emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

- (b) **PM2.5**
 Marion County has been classified as nonattainment for PM2.5 in 70 FR 943 dated January 5, 2005. On May 8th, 2008, U.S. EPA promulgated specific New Source Review rules for PM2.5 emissions, and the effective date of these rules was July 15th, 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**
 Marion County has been classified as attainment or unclassifiable in Indiana for SO₂, CO, PM₁₀, NO₂, and Pb. 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 secondary metal production 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 and Emission Offset applicability.

Unrestricted Potential Emissions

This table reflects the unrestricted potential emissions of the source.

Pollutant	tons/year
PM	greater than 100
PM ₁₀	greater than 100
PM _{2.5}	greater than 100
SO ₂	greater than 100
VOC	less than 100
CO	greater than 100
NO _x	greater than 100

HAPs	tons/year
Single HAP	greater than 10
Total HAPs	greater than 25

- (a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of PM₁₀, SO₂, CO, and NO_x is equal to or greater than 100 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.
- (b) The potential to emit (as defined in 326 IAC 2-7-1(29)) of VOC is 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. Therefore, the source is subject to the provisions of 326 IAC 2-7.
- (d) 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.

Part 70 Permit Conditions

This source is subject to the requirements of 326 IAC 2-7, pursuant to which the source has to meet the following:

- (a) Emission limitations and standards, including those operational requirements and limitations that assure compliance with all applicable requirements at the time of issuance of Part 70 permits.

- (b) Monitoring and related record keeping requirements which assume that all reasonable information is provided to evaluate continuous compliance with the applicable requirements.

Potential to Emit After Issuance

The table below summarizes the potential to emit, reflecting all limits, of the emission units. Any control equipment is considered federally enforceable only after issuance of this Part 70 permit renewal, and only to the extent that the effect of the control equipment is made practically enforceable in the permit.

Emission unit	Potential To Emit								
	PM (ton/yr)	PM ₁₀ (ton/yr)	PM _{2.5} (ton/yr)	SO ₂ (ton/yr)	VOC (ton/yr)	CO (ton/yr)	NO _x (ton/yr)	Pb (ton/yr)	HAPs (ton/yr)
<u>Stack S-111:</u> Reverb Furn. SRF	5.8 24.9	29285 14.9	29285 14.9	2702 5.8	0.6	22.8 24.1	45.3 0.4	0.78	Single HAP > 10 Total HAP's > 25
<u>Stack S-100:</u> Reverb Proc. Fug.	21.3	21.3	21.3	0.0	0.0	0.0	0.0	4.9	
Kettles: #1 - #8	6.1	6.1	6.1	87.2	0.0	0.0	0.0		
Kettle #9	0.28	0.28	0.28	0.0	0.0	0.0	0.0		
Casting Machine	8.0	185	185	0.0	0.0	0.0	0.0		
Rotary Dryer	4730	4730	4730	0.0	0.0	0.0	0.0		
<u>Stacks S101 - S109</u> (Roof Vents GV:101 - 109) (Roof Baghouse #'s 1-9)	398	2089	2089	0.0	0.0	0.0	0.0	2.9	
Natural Gas Combustion	0.69	2.8	2.8	0.2	2.0	30.4	36.2	0.0	
Total PTE	5195	36334	36319	2800	3	77	82	7.8	Single HAP > 10 Total HAP's > 25

Note:

The limited emissions were derived from the TSD and Permit No. 097-6201-00079, issued on June 30, 2004. The Gen Building Vent limits were calculated based on the 0.03gr/dscf and a flow rate of 39259.

- (a) This existing stationary source is major for PSD because the emissions of at least one regulated pollutant are greater 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 major for nonattainment NSR for PM 2.5 because the emissions of the nonattainment pollutant PM 2.5 and SO₂ are greater than one (>100) hundred tons per year, and it is one of the twenty-eight (28) listed source categories.
- (c) 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 and Emission Offset applicability.

Federal Rule Applicability

New Source Performance Standards

- (a) This source is subject to the New Source Performance Standard for Secondary Lead Smelters (40 CFR 60.120, Subpart L), which is incorporated by reference as 326 IAC 12. Kettles #7, #8, and #9 are subject because they were constructed after June 11, 1973, and have a charging capacity of greater than 550 lb.

The Kettles are subject to the following portions of Subpart L.

- (1) 40 CFR 60.120
- (2) 40 CFR 60.121
- (3) 40 CFR 60.122
- (4) 40 CFR 60.123

- (b) This source is not subject to the New Source Performance Standard for Primary Lead Smelters (40 CFR 60.180 Subpart R) because the source does not engage in the production of lead from lead sulfide ore through the use of pyrometallurgical techniques. This source is a stationary secondary lead smelting operation whereby lead is recovered by smelting the lead from lead acid batteries and other sources of scrap lead. Therefore, 40 CFR 60.180 Subpart R (Standards of Performance for Primary Lead Smelters) does not apply to this source.
- (c) This source is not subject to the New Source Performance Standard for Lead-Acid Battery Manufacturing Plants (40 CFR 60.370 Subpart KK) because the source does not produce a storage battery using lead or lead compounds. This source is a stationary secondary lead smelting operation whereby lead is recovered by smelting the lead from lead acid batteries and other sources of scrap lead. Therefore, 40 CFR 60.370 Subpart KK (Standards of Performance for Lead-Acid Battery Manufacturing Plants) does not apply to this source.

National Emissions Standards for Hazardous Air Pollutants

The following federal rules are applicable to the source:

- (a) This source is subject to the National Emission Standards for Hazardous Air Pollutants from Secondary Lead Smelting (40 CFR 63.541 Subpart X), which is incorporated by reference as 326 IAC 20-13. This source is subject to the rule because it contains a reverberatory furnace, refining kettles, a dryer, and is both a process fugitive source and fugitive dust source. Quemetco, Inc. does not have a blast furnace. Therefore, this source does not consist of a blast furnace collocated with a reverberatory furnace, as defined in Subpart X.

The source is subject to the following portions of Subpart X.

- (1) 40 CFR 63.541
- (2) 40 CFR 63.542
- (3) 40 CFR 63.543(a)
- (4) 40 CFR 63.543(h)
- (5) 40 CFR 63.544(a)
- (6) 40 CFR 63.544(b)
- (7) 40 CFR 63.544(c)
- (8) 40 CFR 63.544(d)
- (9) 40 CFR 63.547(e)
- (10) 40 CFR 63.548(a)
- (11) 40 CFR 63.548(c)
- (12) 40 CFR 63.548(f)
- (13) 40 CFR 63.548(h)
- (14) 40 CFR 63.550

The provisions of 40 CFR 63 Subpart A – General Provisions, which are incorporated as 326 IAC 20-1-1, apply to the facility described in this section except when otherwise specified in 40 CFR 63 Subpart X.

40 CFR 64.2, Compliance Assurance Monitoring

Pursuant to 40 CFR 64.2, Compliance Assurance Monitoring (CAM) is applicable to existing emission units that involve a pollutant-specific emission unit and meet the following criteria:

- (1) has a potential to emit before controls equal to or greater than the major source threshold for the pollutant involved;
- (2) is subject to an emission limitation or standard for that pollutant; and
- (3) uses a control device, as defined in 40 CFR 64.1, to comply with that emission limitation or standard.

The following table is used to identify the applicability of each of the criteria, under 40 CFR 64.1, to each existing emission unit and specified pollutant subject to CAM:

Emission Unit / Pollutant	Control Device Used	Emission Limitation (Y/N)	Uncontrolled PTE (tons/year)	Controlled PTE (tons/year)	Major Source Threshold (tons/year)	CAM Applicable (Y/N)	Large Unit (Y/N)
Reverb. Furn. / PM	Baghouse	Y	> 100	1.2	100	Y	N
Reverb. Furn. / PM ₁₀	Baghouse	Y	> 100	1.2	100	Y	N
Reverb. Furn. / SO ₂	Scrubber	Y	> 100	83.7	100	Y	N
Reverb. Furn. / Pb	Baghouse	Y	> 5	0.03	5	Y	N
Slag Red. Furn. / PM	Baghouse	Y	> 100	1.2	100	Y	N
Slag Red. Furn. / PM ₁₀	Baghouse	Y	> 100	1.2	100	Y	N
Slag Red. Furn. / SO ₂	Scrubber	Y	< 100	83.7	100	N	N
Slag Red. Furn. / Pb	Baghouse	Y	> 5	0.03	5	Y	N

Emission Unit / Pollutant	Control Device Used	Emission Limitation (Y/N)	Uncontrolled PTE (tons/year)	Controlled PTE (tons/year)	Major Source Threshold (tons/year)	CAM Applicable (Y/N)	Large Unit (Y/N)
Kettles 1-9, Casting, & Rotary Kiln / PM	Baghouse	Y	> 100	4.9	100	Y	N
Kettles 1-9, Casting, & Rotary Kiln / PM ₁₀	Baghouse	Y	> 100	4.9	100	Y	N
Kettles 1-9, Casting, & Rotary Kiln / Pb	Baghouse	Y	> 5	0.48	5	Y	N

Reverberatory and Slag Reduction Furnaces share control devices. Controlled values for Reverberatory and Slag Reduction Furnaces are combined emissions.

In order to monitor SO₂ emissions, a CEM unit is operated at all times. This satisfies the requirements of CAM.

Based on this evaluation, the requirements of 40 CFR Part 64, CAM are applicable to the Reverberatory Furnace and Slag Reduction Furnace for PM, PM₁₀, SO₂, and lead. Additionally, CAM are applicable to the Kettles 1-9, Casting Machine, and Rotary Kiln for Lead. A CAM plan has been submitted and the Compliance Determination and Monitoring Requirements section includes a detailed description of the CAM requirements.

State Rule Applicability - Entire Source

326 IAC 2-2 (PSD)

This source was constructed before 1977 and at that time it had the potential to emit of at least one regulated pollutant greater than 100 tons per year. Therefore the source was a major source for PSD in 1977. Additionally, it is in one of the twenty-eight (28) listed sources.

326 IAC 2-1.1-5 (Nonattainment New Source Review)

This existing source is a major stationary source, under Nonattainment New Source Review (326 IAC 2-1.1-5), because the potential to emit of direct PM-2.5 and SO₂ are greater than 100 tons per year.

326 IAC 2-6 (Emission Reporting)

This source is subject to 326 IAC 2-6 (Emission Reporting) because it is required to have an operating permit under 326 IAC 2-7, Part 70 program. Pursuant to this rule, the Permittee shall submit an emission statement certified pursuant to the requirements of 326 IAC 2-6. In accordance with the compliance schedule specified in 326 IAC 2-6-3, an emission statement must be submitted triennially by July 1 beginning in 2005 and every 3 years after. Therefore, the next emission statement for this source must be submitted by July 1, 2011. The emission statement shall contain, at a minimum, the information specified in 326 IAC 2-6-4.

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 thirty percent (30%) for 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 6-5 (Fugitive Particulate Matter Emission Limitations)

Pursuant to 326 IAC 6-5-3, any source of fugitive particulate matter which has potential fugitive particulate matter emissions of twenty five (25) tons per year or more and is located in Wayne Township of Marion County, shall submit a fugitive particulate matter emissions control plan within six (6) months following December 13, 1985. This source does not have potential fugitive particulate matter emissions of twenty five (25) tons per year or more. Therefore, this source is not subject to the provisions of 326 IAC 6-5-3 (Fugitive Particulate Matter Emission Limitations).

State Rule Applicability - Individual Facilities

326 IAC 2-2 (PSD)

This source was constructed before 1977 and at that time it has the potential to emit of at least one regulated pollutant greater than 100 tons per year. Therefore the source was a major source for PSD in 1977, and it is in one of the twenty-eight (28) listed sources.

1995 Modification

The Slag reduction Furnace (SRF), identified as Emission unit 3.3 constructed in 1995 has uncontrolled PM₁₀, SO₂ and Pb emissions greater than PSD significant levels. Therefore, the PM₁₀, SO₂ and Pb emissions have been limited to less than the significant levels.

- (a) The PM emissions from the Slag Reduction Furnace (SRF) shall exceed (5.7) pounds per hour.
- (b) The PM₁₀ emissions from the Slag Reduction Furnace (SRF) shall not exceed (3.4) pounds per hour.
- (c) The SO₂ emissions from the Slag Reduction Furnace (SRF) shall not exceed nine and one tenth (9.1) pounds per hour.
- (d) The lead emissions from the Slag Reduction Furnace (SRF) shall not exceed (0.136) pounds per hour.

Compliance with these limits will limit the PM, PM₁₀, SO₂, and lead emissions from the Slag Reduction Furnace (SRF) to less than six tenths 25, 15, 10, and 0.6 tons of per year, respectively, and render the requirements of 326 IAC 2-2 (PSD) not applicable to this emission unit.

1988 Modification - Kettle #7

1992 Modification - Kettle #8

2002 Modification - Kettle #9

The Significant emission increase level for lead defined in 326 IAC 2-2-1 is (3.29) pounds per day. The three kettles #7, #8, # and #9, each have an uncontrolled potential to emit lead that is less than this level. Therefore, the requirements of 326 IAC 2-2 (PSD) are not applicable to these units.

326 IAC 3-5 (Continuous Emission Monitoring System (CEMs))

Stack/Vents S-100 and S-111 have emission limits for SO₂ emission. Pursuant to 326 IAC 3-5-1, the source is required to have a certified continuous emission monitor (CEM) for sulfur dioxide (SO₂) emissions on Stack/Vent S-100 installed and operated in compliance with 326 IAC 3-5-2, 326 IAC 3-5-3, 326 IAC 3-5-4 and 326 IAC 3-5-5.

326 IAC 7-2-1

Pursuant to 326 IAC 7-2-1(g) (Sulfur Dioxide Rules: Compliance), CEM data collected and reported pursuant to 326 IAC 3-5 (Continuous Monitoring of Emissions) may be used as the means for determining compliance with 326 IAC 7-4-2 (Marion County Sulfur Dioxide Rules). Pursuant to 326 IAC 3-5-7 Reporting Requirements), gaseous excess emissions data reports shall be submitted using three (3) hour block periods and shall be submitted to IDEM, OAQ quarterly.

326 IAC 6.5-1-2 (Particulate emission limitations; fuel combustion steam generators, asphalt concrete plant, grain elevators, foundries, mineral aggregate operations)

- (a) Pursuant to 326 IAC 6.5-1-2(a), particulate emissions from Stack/Vent S-100 shall not exceed three hundredths (0.03) grains per dry standard cubic foot of exhaust air.
- (b) Pursuant to 326 IAC 6.5-1-2(a), particulate emissions from Stack/Vent S-112, S-113, S-114, S-115, S-116, S-117 and S-118 each shall not exceed three hundredths (0.03) grains per dry standard cubic foot of exhaust air.
- (c) Pursuant to 326 IAC 6.5-1-2(a), Particulate emissions from Stack/Vent S-101, S-102, S-103, S-104, S-105, S-106, S-107, S-108 and S-109 each shall not exceed three hundredths (0.03) grains per dry standard cubic foot of exhaust air.
- (d) Pursuant to 326 IAC 6.5-1-2(a), Particulate emissions from the Maintenance Office HVAC system, Emergency Gasoline Generators, Emergency Diesel Generators, Battery Wrecker, Outside Storage Bins, the five (5) Soda Ash Silos, the Water Quality Department wet scrubber and the Maintenance Shop shall each not exceed three hundredths (0.03) grains per dry standard cubic foot of exhaust air.

326 IAC 6.5-6-28 (County Specific Particulate emission limitations)

Pursuant to 326 IAC 6.5-6-28, the allowable particulate emissions from the Reverberatory Furnace shall not exceed sixteen thousandths (0.016) grains per dry standard cubic foot of exhaust and five and eight tenths (5.8) tons per year.

326 IAC 7-4-2 (Sulfur Dioxide Rules: Marion County Sulfur Dioxide Rules)

Pursuant to 326 IAC 7-4-2 (Sulfur Dioxide Rules: Marion County Sulfur Dioxide Rules), SO₂ emissions from the Reverberatory Furnace, identified as Emission Unit 3.1, are limited to 24.6 pounds per ton of material processed and 617 pounds per hour.

326 IAC 8-1-6 (General Provisions: General Reduction Requirements for New Facilities)

This existing major source, as of January 1, 1980, has not had a modification or new construction since January 1, 1980 that has the potential to emit twenty five (25) tons or more of VOC per year. Therefore, 326 IAC 8-1-6 (General Provisions: General Reduction Requirements for New Facilities) does not apply to any of the emission units at the source.

326 IAC 8-3-2 (Cold Cleaner Operations)

The degreasers are not subject to the requirements of 326 IAC 8-3-2 because they were existing prior to January 1, 1980. Therefore, the requirements of 326 IAC 8-3-2 are not applicable to the source.

362 IAC 8-3-5 (Cold Cleaner Degreaser Operation and Control)

- (a) Pursuant to 326 IAC 8-3-5(a) (Cold Cleaner Degreaser Operation and Control), for cold cleaner degreaser operations without remote solvent reservoirs constructed after July 1, 1990, located in Marion County is applicable to the cold cleaner degreaser operation.
- (b) 326 IAC 8-3-5(b) (Cold Cleaner Degreaser Operation and Control) is applicable to the cold cleaner degreaser operation.

326 IAC 8-6 (Organic Solvent Emission Limitations)

This secondary lead smelting source commenced operation prior to January 1, 1980 and has the potential to emit Volatile Organic Compounds (VOC) of less than one hundred (100) tons per year. Therefore, this source is not subject to 326 IAC 8-6 (Organic Solvent Emission Limitations).

326 IAC 9 (Carbon Monoxide Emission Rules)

There are no provisions under 326 IAC 9 (Carbon Monoxide Emission Rules) for a secondary lead smelting and/or lead refining operation. Therefore, this source is not subject to the provisions of 326 IAC 9 (Carbon Monoxide Emission Rules).

326 IAC 20-13-2 (Emission Limitations; Lead Standards for Quemetco, Incorporated):

Pursuant to 326 IAC 20-13-2;

- (a) Quemetco, Inc. shall comply with the following emission limitations and operating provisions:

Facility Description	Lead Emission Limitation mg/dscm (gr/dscf)
Stack/Vent S-100	1.0 (0.00044)
Stack/Vent S-101	0.5 (0.00022)
Stack/Vent S-102	0.5 (0.00022)
Stack/Vent S-103	0.5 (0.00022)
Stack/Vent S-104	0.5 (0.00022)
Stack/Vent S-105	0.5 (0.00022)
Stack/Vent S-106	0.5 (0.00022)
Stack/Vent S-107	0.5 (0.00022)
Stack/Vent S-108	0.5 (0.00022)
Stack/Vent S-109	0.5 (0.00022)
Stack/Vent S-111	1.0 (0.00044)

- (b) Process fugitive and fugitive dust emissions from Stack/Vent S-101 through S-109 shall be vented to the atmosphere through high efficiency particulate air (HEPA) filters as defined in 40 CFR 63.542. Roof Vent baghouse(s) RV #1 through RV #9, exhausting at S-101 through S-109 are high efficiency particulate air (HEPA) filters as defined in 40 CFR 63.542.

326 IAC 20-13-5 (Operational and Work Practice Standards)

Pursuant to 326 IAC 20-13-5, the Permittee shall install and continuously operate a bag leak detection system for all baghouses controlling process and process fugitive sources (baghouses

#035, #036, #037, #038, #039, #040 and # 041). In accordance with 40 CFR 63.548(g) and (h), baghouses equipped with HEPA filters or used exclusively for the control of fugitive dust emissions are exempt from this requirement (RV#1 through RV#9).

Compliance Determination and Monitoring Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with all applicable state and federal rules on a continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a continuous demonstration. When this occurs IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, Compliance Determination Requirements are included in the permit. The Compliance Determination Requirements in Section D of the permit are those conditions that are found directly within state and federal rules and the violation of which serves as grounds for enforcement action.

If the Compliance Determination Requirements are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also in 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.

Test Requirements

- (a) Testing

Emission units	Control device	When to test	Pollutants	Frequency of testing
Stack/Vent S-111	Baghouse	Before April 2012	PM	Every five (5) years
Slag Reduction Furnace	Baghouse	Within 180 days of issuance	PM ₁₀	Every five (5) years
Stack/Vent S-111	Baghouse	Before April 2012	Pb	Every two (2) years
Stack/Vent S-100	Baghouse	Before April 2012	Pb	Every two (2) years
Stack/Vents S-106, S-107, S-108 and S-109	Baghouse	Before April 2011	Pb	Every two (2) years

326 IAC 2-1.1-11 (Compliance Testing):

- (a) The Permittee shall conduct a compliance test for PM from Stack vent S-111 by April 2012.
- (b) Within 180 days of the issuance of this permit, the Permittee shall conduct a compliance test for PM₁₀ from the Slag Reduction Furnace (SRF).

The normal process operation of the SRF relies on the output from the simultaneous operation of the Reverberatory Furnace (Reverb). Both units share the common Stack/Vent S-111. Due to the nature of the configuration of these two units, testing of an isolated exhaust stream from the SRF is impracticable.

Compliance with the PM₁₀ limit for the SRF may be demonstrated if testing at Stack/Vent S-111 shows that the combined exhaust from the SRF and Reverb has an emission rate less than limit for the SRF alone. Failure to demonstrate that the combined exhaust has an emission rate less than the PM₁₀ limit for the SRF shall not be considered a demonstration of non-compliance for the SRF.

Alternate test techniques may be used to demonstrate compliance with the PM₁₀ limit for the SRF. Test methods used for the demonstration shall be described in a test protocol to be submitted to OAQ for review and approval, prior to the date of test.

326 IAC 20-13-6 (Compliance Testing):

- (a) The Permittee shall conduct a compliance test for Lead compounds from process stacks on an annual basis, no later than twelve (12) calendar months following the previous compliance test.
- (b) If a compliance test demonstrates a source emitted Lead compounds from process stacks less than or equal to fifty percent (50.0%) of the applicable limit under this rule during the compliance test, the Permittee shall be allowed up to twenty four (24) calendar months from the previous compliance test to conduct the next compliance test for Lead compounds.
- (c) The Permittee shall conduct a compliance test for Lead compounds from process fugitive stacks and fugitive dust stacks on the following schedule;
 - (1) Process fugitive stacks shall be tested on a biennial basis, no later than twenty four (24) months following the previous compliance test.
 - (2) Fugitive dust stacks shall be tested on an initial compliance test only and shall not be required to conduct testing on an annual or biennial basis.

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

Control	Parameter	Frequency	Value, or Range	Excursions and Exceedances
Baghouses: #035 and #037.	Bag Leak Detectors	Continuous	NA	Response Steps
Baghouses: #035 and #037. (when as backup for leak detector)	Water Pressure Drop	Daily	2 to 8 inches	Response Steps
	Visible Emissions		Normal-Abnormal	
Baghouses: #038, #040 and #041	Bag Leak Detectors	Continuous	NA	Response Steps
Baghouses: #038, #040 and #041 (when as backup for leak detector)	Water Pressure Drop	Daily	2 to 8 inches	Response Steps
	Visible Emissions		Normal-Abnormal	
Baghouses: RV# 1 through RV #9	Water Pressure Drop	Daily	2 to 8 inches	Response Steps
	Visible Emissions		Normal-Abnormal	
Scrubber #046 (when as backup for CEMS)	Flow Rate	Per Shift	90 gallons/min	Response Steps
	pH		6-11	

Recommendation

The staff recommends to the Commissioner that the Part 70 Operating Permit 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 application for the purposes of this review was received on September 25, 2008. Additional information was received on August 8, 2009.

Conclusion

The operation of this secondary lead smelting and refining operation shall be subject to the conditions of the attached Part 70 Operating Permit Renewal No. 097-27020-00079.

Appendix A: CALCULATIONS

Quemetco

7870 West Morris St. Indianapolis, IN 46231

Part 70 Operating Permit T097-27020-00079

Permit Reviewer: James Mackenzie

UNRESTRICTED POTENTIAL TO EMIT

Emission Unit	Pollutant (ton/year)							
	PM	PM ₁₀	PM _{2.5}	NOx	SO ₂	VOC	CO	Pb
Reverberatory Furnace	22940	29285	29285	45.3	12089	0.0	22.8	4616
Slag Reduction Furnace	306	112	112	0.4	5.8	0.6	24.1	70
Process Fugitive Emissions	21.3	21.3	21.3	0.0	0.0	0.0	0.0	4.9
Refining Kettles #1 - #8	6.1	6.1	6.1	0.0	87.2	0.0	0.0	0.1
Refining Kettle #9	0.28	0.28	0.28	0.0	4.0	0.0	0.0	0.01
Casting Machine	8.5	184.6	184.6	0.0	0.0	0.0	0.0	2.1
Rotary Dryer	4730	4730	4730	0.0	0.0	0.0	0.0	30.2
Fug. Stacks GV:101-109 (gr/dscf)	2089	2089	2089	0.0	4.0	0.0	0.0	42.9
Nat. Gas Combustion	0.7	2.8	2.8	36.2	0.2	2.0	30.4	0
TOTAL PTE	30102	36431	36431	82	12190	3	77	4767

LIMITED POTENTIAL TO EMIT

Emission Unit	Pollutant (ton/year)							
	PM	PM ₁₀	PM _{2.5}	NOx	SO ₂	VOC	CO	Pb
Stack 111								
Reverberatory Furnace	5.8	29285	29285	45.3	2702	0.0	22.8	0.78
Slag Reduction Furnace	24.5	14.9	14.9	0.4	5.8	0.6	24.1	
Stack 100								
Process Fugitive Emissions	21.3	21.3	21.3	0.0	0.0	0.0	0.0	4.9
Refining Kettles #1 - #8	6.1	6.1	6.1	0.0	87.2	0.0	0.0	
Refining Kettle #9	0.28	0.28	0.28	0.0	4.0	0.0	0.0	
Casting Machine	8	185	185	0.0	0.0	0.0	0.0	
Rotary Dryer	4730	4730	4730	0.0	0.0	0.0	0.0	
Fug. Stacks GV:101-109	398.0	2089	2089	0.0	0.0	0.0	0.0	
Nat. Gas Combustion	0.7	2.8	2.8	36.2	0.2	2.0	30.4	0
TOTAL PTE	5195	36334	36334	82	2800	3	77	7.8

CONTROLLED EMISSIONS

Emission Unit	Pollutant (ton/year)							
	PM	PM ₁₀	PM _{2.5}	NOx	SO ₂	VOC	CO	Pb
Stack 111								
Reverberatory Furnace	1.2	1.2	1.2	45.7	83.7	0.6	46.9	0.03
Slag Reduction Furnace								
Stack 100								
Process Fugitive Emissions	4.9	4.9	4.9	0.0	148	0.0	0.0	0.48
Refining Kettles #1 - #8								
Refining Kettle #9								
Casting Machine								
Rotary Dryer								
Fug. Stacks GV:101-109	16.7	16.7	16.7	0.0	4.0	0.0	0.0	0.01
Nat. Gas Combustion	0.7	2.8	2.8	36.2	0.2	2.0	30.4	0.0

Appendix A: CALCULATIONS

Quemetco
 7870 WestMorris St. Indianapolis, IN 46231
 Part 70 Operating Permit T097-27020-00079
 Permit Reviewer: James Mackenzie

REVERBERATORY FURNACE

CHARGE CAPACITY		LEAD PRODUCED	
828	tons/day	389.2	tons/day
34.5	tons/hour	16.2	tons/hour

	Unit of Measure	Pollutant							
		PM	PM ₁₀	PM _{2.5}	NO _x	SO ₂ *	VOC	CO	Pb
Emission Factor	(lb/ton)	323	193.8	193.8	0.3	80	-	-	65
Potential to Emit	(ton/yr)	22940	29285	29285	45.3	12089	0.0	22.8	4616
Controlled PTE	(ton/yr)	1.2	1.2	1.2	45.3	104	0.0	22.8	0.03

METHODOLOGY

Lead produced = 47% charge capacity; AP-42 (1/95); 12.11.2.2, Smelting, Secondary Lead Processing
 PM Emission Factor = 323 lb/ton (produced); AP-42 (1/95) 12.11-2, Emission Factors for Secondary Lead Processing
 PM_{2.5} = PM₁₀ Emission Factor = 193.8 lb/ton (charged); EPA EIIP (7/01) SCC 3-04-004-02 Lead Reverberatory Furnace
 NO_x Emission Factor = 0.3 lb/ton (charged); EPA EIIP (7/01) SCC 3-04-004-02 Lead Reverberatory Furnace
 SO₂ Emission Factor = 80 lb/ton; AP-42 (1/95) 12.11-2, Emission Factors for Secondary Lead Processing
 CO Emission based on 08/13/96 stack test = 22.8 tpy = (4.2 lb/hr / 27.8 ton/hr) * (34.5 ton/hr) * (8760 hr/yr) / (2000 lb/ton)
 Pb Emission Factor = 65 lb/ton (produced) AP-42 (1/95) 12.11-2, Emission Factors for Secondary Lead Processing
 Controlled PM; emission factor based on 04/10/03 stack test = (0.28 lb/hr / 36.3 tons/hr) x (828 tons/d) * (365 d/y) / (2000 lb/ton)
 Controlled SO₂ (* Stack 111: RF + SRF) emission factor based on 08/13/96 stack test = 0.69 lb/ton = (19.1 lb/hr) / (27.8 ton/hr) [Reverb. Furn. process mass rate]
 Controlled SO₂ = (19.1 ton/hr) / (27.8 ton/hr) * (34.5 ton/hr) * (8760 hr/yr) * (ton/2000 lb)
 Controlled Pb emission based on 04/10/03 stack test = (0.007 lb / 36.3 ton) x (828 ton/d) x (365 d/y) / (2000 lb/ton)

SLAG REDUCTION FURNACE (2500 kVA Electric Arc)

CHARGE CAPACITY		LEAD PRODUCED	
132	tons/day	52.8	tons/day
5.5	tons/hour	2.2	tons/hour

	Unit of Measure	Pollutant							
		PM	PM ₁₀	PM _{2.5}	NO _x	SO ₂	VOC	CO	Pb
Emission Factor	(lb/ton)	12.7	11.6	11.6	0.04	0.24	0.06	1.0	2.92
Potential to Emit	(ton/yr)	306	111.8	111.8	0.4	5.8	0.6	24.1	70
Controlled PTE	(ton/yr)	1.3	1.3	1.3	0.4	*ND	0.6	24.1	0.05

METHODOLOGY

Tons produced = approx. 40% of charge; AP 12.11.2.2 Smelting
 PM Emission Factor = 12.7 lb/ton (charged); EPA EIIP (7/01); SCC 3-04-003-04, Electric Arc Furnace, Grey Iron Foundries
 PM_{2.5} = PM₁₀ Emission Factor = 11.6 lb/ton (produced) EPA EIIP (7/01); SCC 3-04-003-04, Electric Arc Furnace, Grey Iron Foundries
 NO_x Emission Factor = 0.04 lb/ton (produced) EPA EIIP (7/01); SCC 3-04-003-04, Electric Arc Furnace, Grey Iron Foundries
 SO₂ Emission Factor 0.24 lb/ton (charged) EPA EIIP (7/01); SCC 3-04-003-04, Electric Arc Furnace, Grey Iron Foundries
 VOC Emission Factor = 0.06 lb/ton (produced) EPA EIIP (7/01); SCC 3-04-003-04, Electric Arc Furnace, Grey Iron Foundries
 CO Emission Factor = 1.0 lb/ton (produced) EPA EIIP (7/01); SCC 3-04-003-04, Electric Arc Furnace, Grey Iron Foundries
 Pb Emission Factor = 2.92 lb/ton = where Pb is 23% of Furnace Flue particulate emission; AP-42 (1/95), Table 12.11-2, note g.
 Controlled (PM_{2.5} = PM₁₀ = PM); emission based on 03/18/96 stack test = 0.21 lb/hr / 3.75 ton/hr * (132 tons/d) * (365 d/y) / (2000 lb/ton)
 * Controlled SO₂ Emission; from Stack Test (3/18/96): SO₂ was not detectable from the SRF.
 Controlled Pb; emission based on 03/18/96 stack test = (0.008 lb/hr) / (3.75 ton/hr) * (132 ton/d) * (365 d/y) / (2000 lb/ton)

Appendix A: CALCULATIONS

Quemetco
 7870 WestMorris St. Indianapolis, IN 46231
 Part 70 Operating Permit T097-27020-00079
 Permit Reviewer: James Mackenzie

PROCESS FUGITIVE EMISSIONS FROM REVERBERATORY FURNACE

CHARGE CAPACITY		LEAD PRODUCED	
828	tons/day	389	tons/day
34.5	tons/hour	16.2	tons/hour

	Unit of Measure	Pollutant							
		PM	PM ₁₀	PM _{2.5}	NOx	SO ₂	VOC	CO	Pb
Emission Factor	(lb/ton)	0.30	0.30	0.30	0.0	0.0	0.0	0.0	0.069
Potential to Emit	(ton/yr)	21.3	21.3	21.3	0.0	0.0	0.0	0.0	4.9
Controlled PTE	(ton/yr)	0.17	0.17	0.17	0.0	0.0	0.0	0.0	0.04

METHODOLOGY
 Tons produced = 47% of charge material: AP-42 (1/95) Section 12.11.2.2 - Smelting
 PM_{2.5} = PM₁₀ = PM Emission Factor = 0.30 lb/ton (produced); AWMA AirPollution Engineering Manual (1992), p 702 "Reverberatory Furnace Leakage"
 Pb Emission Factor = 0.069 lb/ton (produced) = 23% of PM; AP-42 (1/95) Secondary Lead Processing, 12.11.2.2 - Smelting
 Pb = 23% of Furnace Flue particulate emission; AP-42 (1/95), Table 12.11-2, note g.
 Baghouse Efficiency = 99.2% : AP-42 (1/95) Table 12.11-5, Efficiencies of Particulate Control Equipment Associated with Secondary Lead Smelting

REFINING KETTLES; #1 - #8

PROCESS CAPACITY	
46.3	tons/hour

	Unit of Measure	Pollutant							
		PM	PM ₁₀	PM _{2.5}	Nox	SO ₂	VOC	CO	Pb
Emission Factor	(lb/ton)	0.03	0.03	0.03	0.0	0.43	0.0	0.0	6.00E-04
Potential to Emit	(ton/yr)	6.1	6.1	6.1	0.0	87.2	0.0	0.0	0.12
Controlled PTE	(ton/yr)	0.05	0.05	0.05	0.0	87.2	0.0	0.0	0.29

METHODOLOGY
 PM Emission Factors from EPA EIIP (7/01); SCC #3-04-004-26, Secondary Lead Production, Kettles
 PM_{2.5} = PM₁₀ = PM (controlled) emission based on 03/27/02 stack test = 1.11 lb/hr / 33.1 tons/hr * (46.3 tons/hr) * (8760 hr/y) / (2000 lb/ton)
 SO₂ emission factor based on 4/06/10 errata test = 0.43 lb/ton = (21 lb/hr) / ((46.3 + 2.14) ton/hr)
 Pb emission factor = 6.0 x 10⁻⁴ lb/ton. EPA EIIP (7/01); SCC 3-04-004-14, Secondary Lead Production, Kettles
 Pb (controlled) emission based on 03/27/02 stack test = 0.048 lb/hr / 33.1 tons/hr * (46.3 tons/hr) * (8760 hr/y) / (2000 lb/ton)

Appendix A: CALCULATIONS

Quemetco
 7870 WestMorris St. Indianapolis, IN 46231
 Part 70 Operating Permit T097-27020-00079
 Permit Reviewer: James Mackenzie

REFINING KETTLE #9

PROCESS CAPACITY	
2.14	tons/hour

	Unit of Measure	Pollutant							
		PM	PM ₁₀	PM _{2.5}	Nox	SO ₂	VOC	CO	Pb
Emission Factor	(lb/ton)	0.03	0.03	0.03	0.0	0.43	0.0	0.0	6.00E-04
Potential to Emit	(ton/yr)	0.28	0.28	0.28	0.0	4.0	0.0	0.0	0.01
Controlled PTE	(ton/yr)	0.0022	0.0022	0.0022	0.0	4.0	0.0	0.0	0.03

METHODOLOGY
 Emission Factors from EPA EIIP (7/01); SCC #3-04-004-26, Secondary Lead Production, Kettles
 PM_{2.5} = PM₁₀ = PM (controlled) emission based 99.2% baghouse efficiency
 Baghouse Eff. = 99.2% : AP-42 (1/95) Table 12.11-5, Efficiencies of Particulate Control Equipment Associated with Secondary Lead Smelting
 SO₂ emission factor based on 4/06/10 errata test = 0.43 lb/ton = (21 lb/hr) / ((46.3 + 2.14) ton/hr)
 Pb emission factor = 6.0 x 10⁻⁴ lb/ton. EPA EIIP (7/01); SCC 3-04-004-14, Secondary Lead Production, Kettles
 Pb (controlled) emission based on 10/08/02 stack test = 0.11 lb/hr / 38.6 tons/hr * (2.14 tons/hr) * (8760 hr/y) / (2000 lb/ton)

CASTING MACHINE

PROCESS CAPACITY	
1162.6	tons/day
48.4	tons/hour

	Unit of Measure	Pollutant							
		PM	PM ₁₀	PM _{2.5}	Nox	SO ₂	VOC	CO	Pb
Emission Factor	(lb/ton)	0.04	0.87	0.87	0.0	0.0	0.0	0.0	0.01
Potential to Emit	(ton/yr)	8.5	184.6	184.6	0.0	0.0	0.0	0.0	2.1
Controlled PTE	(ton/yr)	0.1	1.5	1.5	0.0	0.0	0.0	0.0	0.02

METHODOLOGY
 Baghouse Efficiency = 99.2% : AP-42 (1/95) Table 12.11-5, Efficiencies of Particulate Control Equipment Associated with Secondary Lead Smelting
 Maximum process capacity limited by refining kettles (#1 thru #8) + #9 = 48.4 tons/hr = (46.3 + 2.14) tons/hr
 PM Emission Factor = 0.04 lb/ton; EPA WEBFire; SCC #30400409, Secondary Lead Casting
 PM_{2.5} = PM₁₀ Emission Factor = 0.87 lb/ton; EPA WEBFire; SCC #30400409, Secondary Lead Casting
 Pb Emission Factor = 0.01 lb/ton; EPA WEBFire; SCC #30400409, Secondary Lead Casting

Appendix A: CALCULATIONS

Quemetco
 7870 WestMorris St. Indianapolis, IN 46231
 Part 70 Operating Permit T097-27020-00079
 Permit Reviewer: James Mackenzie

ROTARY DRYER

PROCESS CAPACITY

828	tons/day
34.5	tons/hour

	Unit of Measure	Pollutant, (tons/yr)							
		PM	PM ₁₀	PM _{2.5}	Nox	SO ₂	VOC	CO	Pb
Emission Factor	(lb/ton)	31.3	31.3	31.3	0.0	0.0	0.0	0.0	0.20
Potential to Emit	(ton/yr)	4730	4730	4730	0.0	0.0	0.0	0.0	30
Controlled PTE	(ton/yr)	38	38	38	0.0	0.0	0.0	0.0	0.24

METHODOLOGY

Baghouse Efficiency = 99.2% : AP-42 (1/95) Table 12.11-5, Efficiencies of Particulate Control Equipment Associated with Secondary Lead Smelting
 Throughput is limited to the capacity of the Reverberatory Furnace, 828 tons/day
 $PM_{2.5} = PM_{10} = PM$ Emission Factor; derived from Exide Corp. T035-22352-00028 = 31.3 lb/ton = (1970 ton/yr) X (2,000 lb/ton) / (126,000 ton/yr)
 Pb Emission Factor; derived from Exide Corp. T035-22352-00028 = 0.20 lb/ton = (13 ton/yr) X (2,000 lb/ton) / (126,000 tons/yr)

GENERAL VENTILATION, STACKS GV101 - GV109: FUGITIVE EMISSIONS

PROCESS CAPACITY

Assumed full

	Unit of Measure	Pollutant							
		PM	PM ₁₀	PM _{2.5}	Nox	SO ₂	VOC	CO	Pb
Emission Rate	gr/dscf	0.0013	0.0013	0.0013	0.0	0.0	0.0	0.0	3.45E-05
Unrestricted PTE	(ton/yr)	2089	2089	2089	0.0	0.0	0.0	0.0	42.9
Controlled PTE	(ton/yr)	17	17	17	0.0	0.0	0.0	0.0	0.34

METHODOLOGY

Controlled emissions extrapolated from worst case stack tests of GV106 - GV109, 3/28/2007 & 3/29/2007. GV101 - GV109 have identical design flow rates
 PM (GV107, stack test, worst case) = 0.0013 gr/dscf
 $PM (GV107, stack test) = 0.424 \text{ lb/hr}$ PTE (PM) = (9 stacks) x (0.424 lb/hr) x (8760 hr/yr) x (ton/2000 lb)
 Pb (GV106) = 3.45×10^{-5} gr/dscf
 $Pb (GV108) = 0.0087 \text{ lb/hr}$ PTE (Pb) = (9 stacks) x (0.0087 lb/hr) x (8760 hr/yr) x (ton/2000 lb)
 Vent Filter Efficiency = 99.2% : AP-42 (1/95) Table 12.11-5, Efficiencies of Particulate Control Equipment Associated with Secondary Lead Smelting
 Unrestricted PTE's (PM and Pb) = (Controlled PTE) / (1-0.992)

Appendix A: CALCULATIONS

Quemetco
 7870 WestMorris St. Indianapolis, IN 46231
 Part 70 Operating Permit T097-27020-00079
 Permit Reviewer: James Mackenzie

Limited Potential to Emit

Emission Unit	PM (tons/yr)	PM ₁₀ (tons/yr)	PM _{2.5} (tons/yr)	SO ₂ (tons/yr)	VOC (tons/yr)	CO (tons/yr)	NOx (tons/yr)	Single HAP (Pb) (tons/yr)	HAPs (tons/yr)
Reverb. Furnace Unit 3.1	5.8			2702					
Slag Reduction Furnace Unit 3.3 (Electric Arc)	24.5	14.9	14.9	39.9	< 40	< 100	< 40	0.57	
Stack S-111 (47,517 dscfm = typical)	53.5							0.78	
Rever.Proc. Fug Slag Red Proc. Fug Casting Machine Rotary Kiln									
Kettle 1 Kettle 2 Kettle 3 Kettle 4 Kettle 5 Kettle 6 Kettle 7 Kettle 8 Kettle 9									See Pb
Stack S-100 (295,615 dscfm = typical)	332.9							4.9	
Gen. Building Ventilation (39,259 dscfm ea. = typical)									
GV101	44.2							0.32	
GV102	44.2							0.32	
GV103	44.2							0.32	
GV104	44.2							0.32	
GV105	44.2							0.32	
GV106	44.2							0.32	
GV107	44.2							0.32	
GV108	44.2							0.32	
GV109	44.2							0.32	
Nat. Gas Combustion	158.1							neg	

Unit / Stack	cite	Pollutant	Limit		
			gr/dscf	lb/hr	ton/yr
Reverb.	326 IAC 6.5-6-28	PM	0.016	-	5.8
Reverb.	326 IAC 7-4-2	SO ₂	-	617	* 24.6
SRF	326 2-2 Min. Lim.	PM	-	5.7	25
SRF	326 2-2 Min. Lim.	PM ₁₀	-	3.4	15
SRF	326 2-2 Min. Lim.	PM _{2.5}	-	2.3	10
SRF	326 2-2 Min. Lim.	SO ₂	-	5.7	25
SRF	326 2-2 Min. Lim.	Pb	-	0.1	0.6
111	326 IAC 6.5-1-2	PM	0.03	-	52.9
111	326 IAC 20-13-2	Pb	0.00044	-	-
100	326 IAC 6.5-1-2	PM	0.03	-	281.6
100	326 IAC 20-13-2	Pb	0.00044	-	-
GV:101 - 109	326 IAC 6.5-1-2	PM	0.03	-	398.0
GV:101 - 109	326 IAC 20-13-2	Pb	0.00022	-	2.9
S:112 - 118	326 IAC 6.5-1-2	PM	0.03	-	-
Nat. Gas Combustion	326 IAC 6-6-2	PM	-	* 0.42	158.1

* notes

* lb/ton

not applicable, on basis of construct

* lb/MM Btu

Bold numbers reflect actual rule specification.

Methodology

Nat. Gas PM limit = (0.87/84.4^{0.16})(lb/MM Btu) x (84.4 MM Btu/hr) x (8760 hr/yr) x (ton/2000 lb)
 (no. stacks) x (gr/dscf) x (lb/7000 gr) x (dscfm) x (60 min/hr) x (8760 hr/yr) x (ton/2000 lb) = ton/yr

Appendix A: CALCULATIONS

Quemetco
 7870 WestMorris St. Indianapolis, IN 46231
 Part 70 Operating Permit T097-27020-00079
 Permit Reviewer: James Mackenzie

Heat Input Capacity
 MMBtu/hr

Potential Throughput
 MMCF/yr

84.35

724.4

Emission Factor in lb/MMCF	Pollutant						
	PM*	PM ₁₀ *	PM _{2.5} *	SO ₂	NO _x 100.0 **see below	VOC	CO
Potential Emission in tons/yr	0.7	2.8	2.8	0.2	36.2	2.0	30.4

*PM emission factor is filterable PM only. PM_{2.5} = PM₁₀ emission factor is filterable and condensable PM10 combined.

**Emission Factors for NO_x: Uncontrolled = 100, Low NO_x Burner = 50, Low NO_x Burners/Flue gas recirculation = 32

Methodology

Natural Gas Units, Btu : Reverb. (32M); Kettles #1-#8 (32M); Kettle # 9 (4.25M); Casting (0.3M); Rot. Dry (14M); Trim burners (1.8M)

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,020 M

Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and (SUPPLEMENT D 3/98)

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

See page 24 for HAPs emissions calculations.

Emission Factor in lb/MMcf	HAPs - Organics				
	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene
Potential Emission in tons/yr	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

Emission Factor in lb/MMcf	HAPs - Metals				
	Lead	Cadmium	Chromium	Manganese	Nickel
Potential Emission in tons/yr	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

Methodology is the same as page 23.

The five highest organic and metal HAPs emission factors are provided above.

Additional HAPs emission factors are available in AP-42, Chapter 1.4.

Appendix A: CALCULATIONS
 Quemetco

7870 WestMorris St. Indianapolis, IN 46231
 Part 70 Operating Permit T097-27020-00079
 Permit Reviewer: James Mackenzie

STACK TEST HISTORY: ROOF VENTS

Emission Unit I.D.	GV101	GV102	GV103	GV104	GV105	GV106
Description	Ventilation for the bin 10 feed storage hopper	Ventilation for the cold charge electric arc furnace building west	Ventilation for the cold charge electric arc furnace building east	Ventilation for the reverb charge room	Ventilation for the cold charge electric arc furnace slag room	Ventilation for the reverb and slag reduction furnaces
Date Installed	1991	1991	1991	1991	1991	1991
Collection Hood	045-1	045-2	045-3	045-4	045-5	045-6
Control Device	RV BH#1	RV BH#2	RV BH#3	RV BH#4	RV BH#5	RV BH#6
Stack I.D.	S-101	S-102	S-103	S-104	S-105	S-106
Flowrate (acfm)	40000	40000	40000	40000	40000	40000
Gas temp (F)	80	80	80	80	80	80
Flowrate (dscf)	39259	39259	39259	39259	39259	39259
Emission Unit I.D.	GV107	GV108	GV109			
Description	Ventilation for the refinery area	Ventilation for the slag reduction furnace area	Ventilation for the refinery area			
Date Installed	1991	1992	1995			
Collection Hood	045-1	045-2	045-3			
Control Device	RV BH#7	RV BH#8	RV BH#9			
Stack I.D.	S-107	S-108	S-109			
Flowrate (acfm)	40000	40000	40000			
Gas temp (F)	80	80	80			
Flowrate (dscf)	39259	39259	39259			

Actual Emissions

Stack I.D.	Date Tested	PM Stack Test Results (gr/dscf)	PM Stack Test Results (lbs/hr)	Pb Stack Test Results (gr/dscf)	Pb Stack Test Results (lbs/hr)	Process throughput during the test (tons/hr)	Calculated PM emission factor (lbs/ton)	Calculated Pb Emission Factor (lbs/ton)
S-101	10/21/97	0.0049	0.185	0.000031	0.0118	30	6.17E-03	3.93E-04
S-106	04/28/97	0.00046	0.13	0.000029	0.0083	27.88	4.66E-03	2.98E-04
S-108	04/28/97	0.0029	0.08	0.000016	0.0046	27.88	2.87E-03	1.65E-04
S-106	03/28/07	0.0008	0.153	3.45E-05	0.0063			
S-107	03/28/07	0.0013	0.424	2.42E-05	0.0082			
S-108	03/29/07	0.0005	0.141	2.79E-05	0.0087			
S-109	03/29/07	0.0009	0.284	2.06E-05	0.0063			
[Derived from 1997 tests for S-101, S-106, S-108]			lbs/hr	tons/yr				
Controlled PM emission rate for an individual RV BH:			0.13	0.58				
Controlled PM emission rate for all RV BH:			1.19	5.19				
Controlled Pb emission rate for an individual RV BH:			0.01	0.04				
Controlled Pb emission rate for all RV BH:			0.07	0.32				

HAPs	% HAP in Baghouse Dust	Maximum controlled PM emission rate (tons/yr)	Estimated HAP emission rate (tons/yr)
As	0.500	5.190	0.003
Sb	2.000	5.190	0.010
Ni	0.400	5.190	0.002
Cr	0.070	5.190	0.000
Se	0.090	5.190	0.000
Cd	0.300	5.190	0.002

Potential to Emit

Pollutant	Facility	Rule Cite
PM	Each RV BH	326 IAC 6.5-1-2(0.03 gr/dscf)
Pb	Each RV BH	326 IAC 15-1-2(0.15 lbs/hr)

0079calc.xls

**Most Recent
Stack Tests**

Emission Unit	Stack/Vent ID	Date	Date	Pollutant								Test Rate tons/hr	In Compliance Y/N
				PM	PM-10	Lead	SO2	CO	NOx	VOC	Opacity		
Reverberatory Furnace/SRF	S-111	---	04/10/03	0.0007 gr/dscf 0.28 #/hr	---	1.82E-5 gr/dscf 0.007 #/hr	---	---	---	---	0%	36.3	Y
Reverberatory Furnace/SRF	S-111	---	08/13/96	---	---	---	19.1 #/hr	4.2 #/hr	60.2 #/hr	---	0%	27.8	Y
SRF	S-111	---	03/18/96	0.0092 gr/dscf 0.21 #/hr	---	0.00004 gr/dscf 0.008 #/hr	ND	---	---	---	0%	3.75	Y
EAF	S-100	03/27/02	08/16/96 (SO2, CO & NOx)	---	---	2.18E-5 gr/dscf 0.048 #/hr	---	---	---	---	0%	33.1	Y
Rotary Dryer													
K-1													
K-2													
K-3													
K-4													
K-5													
K-6													
Casting Machine													
K-7													
K-8	S-100	---	10/08/02 (K-7, K-8 & K-9)	---	---	5.33E-5 gr/dscf 0.11 #/hr	---	---	---	0%	38.6	Y	
K-9	---	---	---	---	---	---	---	---	---	---	---	---	---
GV101	RV #1	---	---	---	---	---	---	---	---	---	---	---	---
GV102	RV #2	---	---	---	---	---	---	---	---	---	---	---	---
GV103	RV #3	---	---	---	---	---	---	---	---	---	---	---	---
GV104	RV #4	---	---	---	---	---	---	---	---	---	---	---	---
GV105	RV #5	---	---	---	---	---	---	---	---	---	---	---	---
GV106	RV #6	---	03/25/03	0.0002 gr/dscf 0.062 #/hr	---	6.23E-6 gr/dscf 0.0018 #/hr	---	---	---	---	0%	38.7	Y
GV107	RV #7	---	03/26/03	0.0001 gr/dscf 0.041 #/hr	---	7.40E-6 gr/dscf 0.0026 #/hr	---	---	---	---	0%	34.5	Y
GV108	RV #8	---	03/25/03	0.0002 gr/dscf 0.044 #/hr	---	1.08E-5 gr/dscf 0.0027 #/hr	---	---	---	---	0%	38.7	Y
GV109	RV #9	---	03/26/03	0.0002 gr/dscf 0.070 #/hr	---	7.47E-6 gr/dscf 0.0026 #/hr	---	---	---	---	0%	34.5	Y

Quemetco
 7870 West Morris St. Indianapolis, IN 46231
 Part 70 Operating Permit T097-27020-00079
 Permit Reviewer: James Mackenzie

SHORT TERM LIMITS

Limited Potential to Emit

Emission Point	CFM	PM			Pb		
		gr/dscf	lb/hr	tpy	gr/dscf	lb/hr	tpy
Stack 100	295,615	0.03		332.9	4.4E-04		4.9
Stack/Vent 101 *	39,259	0.03		44.2	2.2E-04		0.32
Stack/Vent 102 *	39,259	0.03		44.2	2.2E-04		0.32
Stack/Vent 103 *	39,259	0.03		44.2	2.2E-04		0.32
Stack/Vent 104 *	39,259	0.03		44.2	2.2E-04		0.32
Stack/Vent 105 *	39,259	0.03		44.2	2.2E-04		0.32
Stack/Vent 106 *	39,259	0.03		44.2	2.2E-04		0.32
Stack/Vent 107 *	39,259	0.03		44.2	2.2E-04		0.32
Stack/Vent 108 *	39,259	0.03		44.2	2.2E-04		0.32
Stack/Vent 109 *	39,259	0.03		44.2	2.2E-04		0.32
Stack 111	47,517	0.03		53.5	4.4E-04		0.78
Indirect Heating (Nat. Gas); Rvrb. Furn. & Stacks 112- 117	84.4MM BTu/hr		36.1	158.1			

* 101 - 109 require additional HEPA filter per 326 IAC 20-13-2

Methodology

PM Limit: 325 IAC 6.5-1-2; PM shall not exceed 3×10^{-2} gr/dscf (equivalent: 1.0 g/dscm)

326 IAC 20-13-2(a); stack #100 & #111 shall not exceed 4.4×10^{-3} gr/dscf (equivalent: 1.0 g/dscm)

326 IAC 20-13-2(b), 326 IAC 20-13-2(b); stack 101 - 109 shall not exceed 2.2×10^{-3} gr/dscf (equivalent: 0.5 g/dscm)

326 IAC 7-4-2(18); Reverberatory SO₂ limited to: 24.6 lb/ton or 617 lb/hr

326 IAC 6-2-2; Ind.Htg. Nat. Gas, $Q_{tot.} = 84.4 \text{ MM Btu/hr}$. $Pt = 0.87/Q^{0.16} = 0.43 \text{ lb/MM Btu}$. $(84.4 \text{ MM Btu/hr}) \times (0.43 \text{ lb/MM Btu}) \times (8760 \text{ hr/yr}) \times (\text{ton}/2000 \text{ lb}) = 158.1 \text{ tpy}$



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

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Governor

Thomas W. Easterly
Commissioner

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

SENT VIA U.S. MAIL: CONFIRMED DELIVERY AND SIGNATURE REQUESTED

TO: Robert A Kelsey
Quemetco, Inc.
7870 W Morris St
Indianapolis, IN 46231

DATE: September 13, 2011

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

SUBJECT: Final Decision
Title V - Renewal
097 - 27020 - 00079

Enclosed is the final decision and supporting materials for the air permit application referenced above. Please note that this packet contains the original, signed, permit documents.

The final decision is being sent to you because our records indicate that you are the contact person for this application. However, if you are not the appropriate person within your company to receive this document, please forward it to the correct person.

A copy of the final decision and supporting materials has also been sent via standard mail to:
George Rezabek, VP Indiana Ops
OAQ Permits Branch Interested Parties List

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178, or toll-free at 1-800-451-6027 (ext. 3-0178), and ask to speak to the permit reviewer who prepared the permit. If you think you have received this document in error, please contact Joanne Smiddie-Brush of my staff at 1-800-451-6027 (ext 3-0185), or via e-mail at jbrush@idem.IN.gov.

Final Applicant Cover letter.dot 11/30/07



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

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September 13, 2011

TO: Wayne Township Public Library

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

Subject: **Important Information for Display Regarding a Final Determination**

Applicant Name: Quemetco, Inc.
Permit Number: 097 - 27020 - 00079

You previously received information to make available to the public during the public comment period of a draft permit. Enclosed is a copy of the final decision and supporting materials for the same project. Please place the enclosed information along with the information you previously received. To ensure that your patrons have ample opportunity to review the enclosed permit, **we ask that you retain this document for at least 60 days.**

The applicant is responsible for placing a copy of the application in your library. If the permit application is not on file, or if you have any questions concerning this public review process, please contact Joanne Smiddie-Brush, OAQ Permits Administration Section at 1-800-451-6027, extension 3-0185.

Enclosures
Final Library.dot 11/30/07



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

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Commissioner

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

TO: Interested Parties / Applicant

DATE: September 13, 2011

RE: Quemetco, Inc. / 097 - 27020 - 00079

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

In order to conserve paper and reduce postage costs, IDEM's Office of Air Quality is now sending many permit decisions on CDs in Adobe PDF format. The enclosed CD contains information regarding the company named above.

This permit is also available on the IDEM website at:
<http://www.in.gov/ai/appfiles/idem-caats/>

If you would like to request a paper copy of the permit document, please contact IDEM's central file room at:

Indiana Government Center North, Room 1201
100 North Senate Avenue, MC 50-07
Indianapolis, IN 46204
Phone: 1-800-451-6027 (ext. 4-0965)
Fax (317) 232-8659

Please Note: *If you feel you have received this information in error, or would like to be removed from the Air Permits mailing list, please contact Patricia Pear with the Air Permits Administration Section at 1-800-451-6027, ext. 3-6875 or via e-mail at PPEAR@IDEM.IN.GOV.*

Enclosures
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2		George Rezabek VP Indiana Ops Quemetco, Inc. 7870 W Morris St Indianapolis IN 46231 (RO CAATS)									
3		Marion County Health Department 3838 N, Rural St Indianapolis IN 46205-2930 (Health Department)									
4		Mrs. Sandra Lee Watson 7834 E 100 S Marion IN 46953 (Affected Party)									
5		Indianapolis City Council and Mayors Office 200 East Washington Street, Room E Indianapolis IN 46204 (Local Official)									
6		Lawrence City Council and Mayors Office 9001 East 59th Street #205 Lawrence IN 46216 (Local Official)									
7		Marion County Commissioners 200 E. Washington St. City County Bldg., Suite 801 Indianapolis IN 46204 (Local Official)									
8		Wayne Township Public Library 198 South Girl School Rd. Indianapolis IN 46231 (Library)									
9		Matt Mosier Office of Sustainability 2700 South Belmont Ave. Administration Bldg. Indianapolis IN 46221 (Local Official)									
10		Mark Zeltwanger 26545 CR 52 Nappanee IN 46550 (Affected Party)									
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