Florida Department of Environmental Protection

Bob Martinez Center
2600 Blairstone Road
Tallahassee, Florida 32399-2400

Charlie Crist
Governor

Jeff Kottkamp
Lt. Governor

Michael W. Sole
Secretary

PERMITTEE

EnviroFocus Technologies, LLC (EFT)
1901 North 66th Street
Tampa, Florida 33619

Authorized Representative: Mr. John Tapper
Chief Operating Officer

Air Permit No. PSD-FL-404
DEP File No. 0570057-020-AC
EFT Lead-Acid Battery Recycling Facility
Facility Upgrade and Production Increase
Permit Expires: June 30, 2012
Hillsborough County

PROJECT AND LOCATION

This permit authorizes facility improvements and expansion of production to 150,000 tons per year (TPY) of lead alloy products at the EFT lead-acid battery recycling facility located in Hillsborough County on 1901 North 66th Street in Tampa, Florida. The UTM coordinates for the site are Zone 17, 364.0 kilometers (km) East and 3093.5 km North.

STATEMENT OF BASIS

This air pollution construction permit is issued under the provisions of Chapter 403 of the Florida Statutes (F.S.), and Chapters 62-4, 62-204, 62-210, 62-212, 62-296 and 62-297 of the Florida Administrative Code (F.A.C.). The permittee is authorized to conduct the proposed work in accordance with the conditions of this permit and as described in the application, approved drawings, plans and other documents on file with the Department. This project is subject to the general preconstruction review requirements in Rule 62-212.300, F.A.C. and the preconstruction review requirements for major stationary sources in Rule 62-212.400, F.A.C. for the Prevention of Significant Deterioration (PSD) of Air Quality.

Upon issuance of this final permit, any party to this order has the right to seek judicial review of it under Section 120.68 of the Florida Statutes by filing a notice of appeal under Rule 9.110 of the Florida Rules of Appellate Procedure with the clerk of the Department of Environmental Protection in the Office of General Counsel (Mail Station #35, 3900 Commonwealth Boulevard, Tallahassee, Florida, 32399-3000) and by filing a copy of the notice of appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The notice must be filed within 30 days after this order is filed with the clerk of the Department.

Executed in Tallahassee, Florida

Joseph Kahn, Director
Division of Air Resource Management

9/22/09
(Date)

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this Final Air Permit package (including the Final Determination and Final Permit with Appendices) was sent by electronic mail, or a link to these documents made available electronically on a publicly accessible server, with received receipt requested before the close of business on 9/22/09 to the persons listed below.

John Tapper, EnviroFocus Technologies, LLC: jtapper@gopherresource.com
Heather Abrams, EPA Region 4: abrams.heather@epa.gov
Jerry Campbell, Hillsborough County EPC: campbell@epchc.com
Russell S. Kemp, P.E., Environ: rkemp@environcorp.com
Victoria Gibson, DEP BAR: victoria.gibson@dep.state.fl.us (for read file)

Clerk Stamp

FILING AND ACKNOWLEDGMENT FILED, on this date, pursuant to Section 120.52(7), Florida Statutes, with the designated agency clerk, receipt of which is hereby acknowledged.

(Clerk) (Date) 9/22/09

FACILITY AND PROJECT DESCRIPTION

The EFT facility recycles automotive and industrial lead-acid batteries, as well as other lead-acid bearing scrap materials to produce lead alloys. The process involves several key operations (or steps) including: receiving of batteries and recyclable materials; battery breaking and separation into lead, lead salts, plastic and acid electrolyte; storage and containment of recovered lead and lead waste; acid neutralization and wastewater treatment; lead smelting and refining; casting; and shipping.

The present operation includes a battery breaker, one blast furnace and four refining kettles. The key changes include the replacement of the battery breaker with a larger hammer mill, the addition of a reverberatory furnace, the enlargement of the four existing refining kettles and the addition of six new kettles to support a production increase from 32,000 to 150,000 TPY of lead. The entire recycling process will be totally enclosed, placed under negative pressure and exhausted via an expanded building ventilation system through a cartridge collector and stack. The entire facility upgrade and production increase project includes:

- Installation of a feed dryer;
- Replacement of the battery breaker with a larger hammer mill with a wet impingement scrubber to control particulate matter ($PM/PM_{10}/PM_{2.5}$, hence forth referred to as PM) and lead (Pb) emissions;
- Replacement of the existing soda ash silo with a soda ash receiving silo and two soda ash process silos;
- Installation of a reverberatory (reverb) furnace;
- The addition of four 100-ton refining kettles and two 150-ton refining kettles while the four existing kettles will be converted from 75-ton to 100-ton capacities;
- Construction of a plastics plant, including four plastic pellet silos, to convert plastic from the battery casings into pellets;
- New baghouses with additional air flow capacity for the dryer, furnaces and refining kettles to control PM and Pb emissions;
- Replacement of the afterburner with a larger unit to control carbon monoxide (CO) and volatile organic compounds (VOC) from the blast and reverb furnaces;
- Installation of a wet scrubber to control sulfur dioxide (SO_2) emissions from the furnaces;
- Complete enclosure of the process areas and its placement under negative pressure;
- Increasing the capacity of the existing high-efficiency cartridge collector to control PM and Pb emissions from the enclosed building (including those from process upsets and fugitive sources); and
- Control of emissions of nitrogen oxides (NO_X) emissions from the dryer, furnaces and kettles at the upgraded facility through good combustion practices.

This project creates the following emissions units.

ID No.	New Emission Unit Description
021	Battery breaking area including plastics plant
022	Feed dryer
023	Collocated reverb furnace
024	(4) plastic pellet silos
025	Propane vaporizer (1) and soda ash slurry heaters (2)
026	500 kilowatt (kW) emergency generator

This project modifies or deletes the following emissions units.

ID No.	Existing Emission Unit Description
001	Collocated blast furnace
004	Tapping and charging (DELETED)
008	(1) Soda ash silo receiving silo and (2) soda ash processing silos (MODIFIED)
009	Facility grounds and roadways (MODIFIED)
011	Furnace tapping, charging and lead refining (process fugitive emissions).
013	Combustion exhaust consisting of 10 oxy/fuel burners and associated stacks fueled by natural gas and propane as a backup to heat the refining kettles.
015	Building ventilation (MODIFIED)

FACILITY REGULATORY CLASSIFICATION

- The EFT facility is subject to 40 Code of Federal Regulations (CFR), Part 60 – Standards of Performance for New Stationary Sources (NSPS). The facility and project are subject to 40 CFR 60, Subpart L - NSPS for Secondary Lead Smelters. A proposed emergency diesel engine is subject to 40 CFR 60, Subpart IIII - NSPS for Compression Ignition Internal Combustion Engines.
- The EFT facility is a "Major Stationary Source" as defined in Rule 62-210.200, Florida Administrative Code (F.A.C.). The project triggers the rules for the Prevention of Significant Deterioration (PSD) pursuant to Rule 62-212.400, F.A.C. and requires a best available control technology (BACT) determination.
- The EFT facility is a Title V or "Major Source" of air pollution as defined in Rule 62-210.200, F.A.C. because the potential emissions of at least one regulated pollutant exceed 100 tons per year (TPY). Regulated pollutants include pollutants such CO, NO_X, PM, SO_2, VOC and sulfuric acid mist (SAM).
- The EFT facility is also a "Major Source of Hazardous Air Pollutants (HAP)" because it has the potential to emit, in the aggregate, 10 TPY of any one HAP, 25 TPY of any combination of HAPs, or any lesser quantity of a HAP as established through EPA rulemaking.
- The EFT facility is subject to 40 Code of Federal Regulations (CFR), Part 63 – National Emission Standards for Hazardous Air Pollutants (NESHAP) for Source Categories. The facility is subject to 40 CFR 63, Subpart X - NESHAP for Secondary Lead Smelting. A proposed emergency diesel engine is subject to 40 CFR 63, Subpart ZZZZ – NESHAP for Stationary Reciprocating Internal Combustion Engines (RICE).

SECTION 2. ADMINISTRATIVE REQUIREMENTS

1. Permitting Authority: The permitting authority for this project is the Bureau of Air Regulation, Division of Air Resource Management, Florida Department of Environmental Protection (Department). The Bureau of Air Regulation's mailing address is 2600 Blair Stone Road (MS #5505), Tallahassee, Florida 32399-2400. All documents related to applications for permits to operate an emissions unit shall be submitted to the Title V Section of the same office.
2. Compliance Authority: All documents related to compliance activities such as reports, tests, and notifications shall be submitted to the Environmental Protective Commission of Hillsborough County (EPCHC), Air Management Division, 3629 Queen Palm Drive, Tampa, Florida 33619. The telephone number of the EPCHC is 813/627-2600.
3. Appendices: In addition to the permit conditions, the permittee shall comply with the applicable requirements listed in the following Appendices that are attached as part of this permit:
   a. Appendix CC. Common Conditions;
   b. Appendix CEMS. Continuous Emission Monitoring System (CEMS) Requirements;
   c. Appendix CF. Citation Formats and Glossary of Common Terms;
   d. Appendix CTR. Common Testing Requirements;
   e. Appendix FDCC. Standard Operation Procedures for Fugitive Dust Control During Construction Activities;
   f. Appendix FDCO. Standard Operation Procedures for Fugitive Dust Control During Operational Activities;
   g. Appendix GC. General Conditions;
   h. Appendix GP. NSPS, Subpart A and NESHAP Subpart A - Identification of General Provisions;
   i. Appendix IIII. NSPS, Subpart IIII - Stationary Compression Ignition Internal Combustion Engines;
   j. Appendix L. NSPS, Subpart L - Secondary Lead Smelters;
   k. Appendix ZZZZ. NESHAP, Subpart ZZZZ - Stationary Reciprocating Internal Combustion Engines (RICE); and,
   l. Appendix X. NESHAP, Subpart X - Secondary Lead Smelting.
4. Applicable Regulations, Forms and Application Procedures: Unless otherwise specified in this permit, the construction and operation of the subject emissions units shall be in accordance with the capacities and specifications stated in the application unless superseded by submittals by the applicant to requests for additional information (RAI) from the Department. The facility is subject to all applicable provisions of: Chapter 403, F.S.; and Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-296 and 62-297, F.A.C. Issuance of this permit does not relieve the permittee from compliance with any applicable federal, state, or local permitting or regulations.
5. New or Additional Conditions: For good cause shown and after notice and an administrative hearing, if requested, the Department may require the permittee to conform to new or additional conditions. The Department finds, independently of this permit, good cause requiring the permittee to conform to new or additional conditions. Therefore, the permittee is required to upgrade the facility such that all battery breaking, material storage and handling, smelting, refining, and casting operations are conducted within totally enclosed building(s) by December 2011 whether or not the permittee installs any of the process equipment (such as a reverberatory furnace, a larger hammer mill or kettles) needed to increase lead production. The enclosed building(s) shall be maintained under negative pressure and vented through control devices designed to limit lead (Pb) emissions to less than:
   (a) Battery breaking area stack - 0.8 mg/dry standard cubic meter (dscm);
   (b) Smelting process stack - 0.3 mg/dscm;
   (c) Tapping, charging and lead refining (hygiene) stack - 0.2 mg/dscm; and
   (d) Building ventilation stack - 0.05 mg/dscm.

   [Rules 62-4.070(3) and 62-4.080(1)(a), (b) and (c), F.A.C.; 40 CFR Part 50, Section 50.16]

6. Modifications: The permittee shall notify the Compliance Authority upon commencement of construction. No new emissions unit shall be constructed and no existing emissions unit shall be modified without obtaining an air construction permit from the Department. Such permit shall be obtained prior to beginning construction or modification.
[Rules 62-210.300(1) and 62-212.300(1)(a), F.A.C.]
7. Construction and Expiration: The permit expiration date includes sufficient time to complete construction, perform required testing, submit test reports, and submit an application for a Title V operation permit to the Department. For good cause, the permittee may request that this air construction permit be extended. Such a request shall be submitted to the Department's Bureau of Air Regulation at least sixty (60) days prior to the expiration of this permit.
[Rules 62-4.070(4), 62-4.080, and 62-210.300(1), F.A.C.]
8. Authorization to Construct: Authorization to construct shall expire if construction is not commenced within 18 months after receipt of the permit, if construction is discontinued for a period of 18 months or more, or if construction is not completed within a reasonable time. This provision does not apply to the time period between construction of the approved phases of a phased construction project except that each phase must commence construction within 18 months of the commencement date established by the Department in the permit. [Rule 62-212.400(12)(a), F.A.C.]
9. Source Obligation: At such time that a particular source or modification becomes a major stationary source or major modification (as these terms were defined at the time the source obtained the enforceable limitation) solely by virtue of a relaxation in any enforceable limitation which was established after August 7, 1980, on the capacity of the source or modification otherwise to emit a pollutant, such as a restriction on hours of operation, then the requirements of subsections 62-212.400(4) through (12), F.A.C., shall apply to the source or modification as though construction had not yet commenced on the source or modification. [Rule 62-212.400(12)(b), F.A.C.]
10. Application for Title V Permit: This permit authorizes construction and/or modification of the permitted emissions units and the initial operation of the upgrades for the EFT facility to determine compliance with Department rules. A Title V air operation permit is required for regular operation of the permitted emissions units. The permittee shall apply for a Title V air operation permit at least 90 days prior to expiration of this permit, but no later than 180 days after commencing operation. To apply for a Title V operation permit, the applicant shall submit the appropriate application form, compliance test results, and such additional information as the Department may by law require. The application shall be submitted to the appropriate Permitting Authority with copies to the Compliance Authority. [Rules 62-4.030, 62-4.050, 62-4.220 and Chapter 62-213, F.A.C.]
11. Objectionable Odors Prohibited: No person shall cause, suffer, allow or permit the discharge of air pollutants which cause or contribute to an objectionable odor. [Rule 62-296.320(2), F.A.C.]

    {Note: An objectionable odor is defined in Rule 62-210.200(Definitions), F.A.C., as any odor present in the outdoor atmosphere which by itself or in combination with other odors, is or may be harmful or injurious to human health or welfare, which unreasonably interferes with the comfortable use and enjoyment of life or property, or which creates a nuisance.}
12. Annual Operating Report (AOR): The owner or operator shall submit an AOR for the Air Pollutant Emitting Facility (DEP Form No. 62-210.900(5)) to the Department annually pursuant to subsection 62-210.370(3), F.A.C.

A. Battery Breaking Area

This section of the permit addresses the following emissions unit.

ID No.	Emission Unit Description
021	Battery breaking area including a maximum 60 tons per hour (TPH) hammer mill, separation equipment, plastics plant and wet impingement scrubber.

In the battery breaker area, spent batteries are conveyed to a hammer mill where they are crushed into primarily metallic lead, lead salts and plastics. After desulfurization, the lead salts are transferred to the material charging storage area along with the metallic lead. The majority of the plastic is shipped off-site for recycling or sent to the on-site plastic plant where it is reduced in size by a small wet hammer mill then melted and extruded into water to form plastic pellets. The plastic pellets are dried by a spin dryer and transferred pneumatically to one of the four plastic pellet silos (EU ID 024).

Emissions from the hammer mill (primarily of PM (including SAM) and Pb) and the plastic plant (PM and VOC) are routed to a wet impingement scrubber and exhausted via a 130 foot stack.

CONSTRUCTION

1. Equipment: The permittee is authorized to construct a lead-acid battery breaking area including a plastics plant consisting of the following equipment.

   a. Enclosure: The applicant shall fully enclose and ventilate the battery breaking area and plastics plant before using the new hammer mill (battery breaker) described below. PM, SO_2 and Pb emissions from the battery breaker and PM and VOC emissions from the plastics plant shall be controlled by the wet impingement scrubber. Fugitive emissions from the battery breaker and plastics plant will also vent to the wet impingement scrubber.
   [Application No. 0570057-020-AC and Rules 62-4.070(3) and 62-210.200(PTE), F.A.C.]

   b. Battery Breaking Area Stack: The permittee is authorized to construct a battery breaker stack that is at least 130 feet.
   [Application No. 0570057-020-AC and Rules 62-4.070(3) and 62-210.200(PTE), F.A.C.]

   c. Hammer mill (Battery Breaker): The applicant is authorized to replace the hammer mill with a larger unit. [Application No. 0570057-020-AC]

   d. Wet Hammer Mill (Plastics Plant): The permittee is authorized to construct a wet hammer mill to reduce the size of the feedstock plastic chips from the battery breaker.
   [Application No. 0570057-020-AC]

   e. Extruder (Plastics Plant): The permittee is authorized to construct one extruder to melt and extrude the processed plastic chips to form plastic pellets. [Application No. 0570057-020-AC]

   f. Spin Dryer (Plastics Plant): The permittee is authorized to construct a spin dryer to dry the plastic pellets. [Application No. 0570057-020-AC]

   g. Wet impingement scrubber: The applicant is required to install a wet impingement scrubber to control emissions from the new battery breaking area and the plastics plant and must be operational before use of the new hammer mills.
   [Application No. 0570057-020-AC; and Rules 62-4.070(3) and 62-210.200(PTE), F.A.C.]

2. Circumvention: The permittee shall not circumvent the air pollution control equipment or allow the emission of air pollutants without this equipment operating properly. [Rule 62-210.650, F.A.C.]

A. Battery Breaking Area

PERFORMANCE RESTRICTIONS

3. Battery Breaker Capacity: The battery beaker shall be limited to 60 TPH of spent lead-acid batteries with a maximum rate in any consecutive twelve month period of 438,000 tons (average of 50 TPH). [Application No. 0570057-020-AC and Rule 62-210.200(PTE), F.A.C.]

4. Plastic Plant Capacity: The maximum capacity of the plastic plant is 3,500 pounds per hour (lbs/hr) of plastic chips with a maximum rate in any consecutive twelve month period of 24,000,000 pounds (lbs). [Application No. 0570057-020-AC]

5. Hours of Operation: The hours of operation of the battery breaker and plastics plant are not limited (8,760 hours per year). [Application No. 0570057-020-AC; and Rules 62-4.070(3) and 62-210.200(PTE), F.A.C.]

EMISSIONS STANDARDS

6. PM Emissions Standard (including SAM): PM emissions including SAM from the battery breaking area and plastics plant as measured at the battery breaking area stack shall not exceed 0.005 grains per dry standard cubic foot (gr/dscf) or 1.1 lbs/hr as demonstrated by initial and annual compliance tests. [Application No. 0570057-020-AC; and Rules 62-4.070(3) and 62-210.200(PTE), F.A.C.]

7. Pb Emission Standard: Pb emissions from the battery breaker stack shall not exceed 0.80 milligram per dry standard cubic meter (mg/dscm) or 0.077 lbs/hr as demonstrated by initial and annual compliance tests. [Application No. 0570057-020-AC; and Rules 62-4.070(3) and 62-210.200(PTE), F.A.C.]

8. SO_2 Emission Standard: SO_2 emissions from the battery breaker stack shall not exceed 5.0 mg/dscm or 0.48 lbs/hr as demonstrated by an initial test. [Application No. 0570057-020-AC; and Rules 62-4.070(3) and 62-210.200(PTE), F.A.C.]

9. VOC Emissions Standard: VOC emissions from the battery breaker stack shall not exceed 0.28 lbs/hr as demonstrated by initial test. [Application No. 0570057-020-AC; and Rules 62-4.070(3) and 62-210.200(PTE), F.A.C.]

10. Visible Emission (VE) Standard: VE from the battery breaker area shall not exceed 3% opacity as demonstrated by initial and annual compliance tests on the battery breaking area stack. [Application No. 0570057-020-AC; Rules 62-296.603 and 62-296.712, F.A.C.; and 40 CFR 60.122(a)(2)]

TESTING AND MONITORING REQUIREMENTS

11. PM, Pb, SO_2, and VOC Compliance Tests: The battery breaker stack shall be tested to demonstrate initial compliance with the PM, Pb, SO_2 and VOC standards no later than 180 days after initial operation of the hammer mill (battery breaker). During each federal fiscal year (October 1st to September 30th), the battery breaker stack shall be tested to demonstrate compliance with the PM and Pb standards. [Application No. 0570057-020-AC; and Rules 62-4.070(3) and 62-210.200(PTE), F.A.C.]

12. VE Compliance Tests: The battery breaker stack shall be tested to demonstrate initial compliance with the VE standards no later than 180 days after initial operation of the EFT facility and during each federal fiscal year (October 1st to September 30th) thereafter. [Rule 62-4.070(3), F.A.C.]

13. Test Requirements: The permittee shall notify the EPCHC (Compliance Authority) in writing at least 15 days prior to any required tests. Tests shall be conducted in accordance with the applicable requirements specified in Appendix CTR (Common Testing Requirements) of this permit. [Rule 62-297.310(7)(a)9, F.A.C.]

14. Test Methods: Any required stack tests shall be performed in accordance with the following methods.

Method	Description of Method and Comments
EPA 5/29	Determination of Particulate Emissions. The minimum sample volume shall be 30 dry standard cubic feet.
EPA 8	Determination of Sulfuric Acid and Sulfur Dioxide Emissions from Stationary Sources
EPA 12/29	Determination of Lead Emissions.
EPA 25A	Determination of Total Gaseous Organic Concentration using a flame ionization analyzer.

RECORDS AND REPORTS

15. Test Reports: The permittee shall prepare and submit reports for all required tests in accordance with the requirements specified in Appendix CTR (Common Testing Requirements) of this permit. For each test run, the report shall also indicate the operating rate. [Rule 62-297.310(8), F.A.C.]

NESHAP APPLICABILITY

16. NESHAP Subpart X Applicability: The battery breaker area is subject to and shall comply with all applicable requirements of 40 CFR 63, Subpart X which applies to Secondary Lead Smelting. Specifically, the battery breaker area shall comply with 40 CFR 63.550 Reporting and Recordkeeping Requirements. Subpart X is provided in Appendix X of this permit. [Rule 62-204.800(11)(b) and 40 CFR 63, -Subpart X – National Emissions Standards for Hazardous Air Pollutants (NESHAP) for Secondary Lead Smelting].

B. Lead Smelting

This section of the permit addresses the following emissions units.

ID No.	Emission Unit Description
001	Collocated blast furnace
022	Feed dryer
023	Collocated reverb furnace

The metallic lead and desulfurized lead salts from the battery breaker area are conveyed to the 40 TPH feed dryer to remove most of the moisture prior to being feed into the reverb furnace. The feed dryer is fueled by 10 mmBtu per hour (mmBtu/hr) natural gas burners (with propane as a backup fuel). PM and Pb emissions from the feed dryer are controlled by a shaker type baghouse with a design flow rate of 18,000 acfm at approximately 200 degrees Fahrenheit (°F) before being ducted to the process stack.

The reverb furnace is heated using primarily natural gas or propane as a backup fuel. Molten soft lead from the reverb furnace will be conveyed through channels called launders directly to the refining kettles. The reverb furnace is fired by 23 mmBtu/hr burners. Slag from the reverb furnace and other lead bearing scrap materials will be fed to a blast furnace that produces hard lead. Metallurgical coke will be combined with slag to help supply fuel for the blast furnace smelting process.

Exhaust gases from both furnaces will be ducted to a new afterburner, followed by a shaker type baghouse and a wet scrubber before being combined with the exhaust gases from the feed dryer for final discharge through the new 130 foot process stack.

CONSTRUCTION

1. Equipment: The permittee is authorized to construct a feed dryer and a collocated reverb furnace and modify the existing collocated blast furnace consisting of the following equipment.

   a. Enclosure: The applicant shall fully enclose and ventilate the feed dryer and the collocated blast and reverb furnaces before operation of these emission units can commence. Emissions from the dryer are controlled by a baghouse while emissions from the furnaces will be controlled by an afterburner, baghouse and wet scrubber. Fugitive emissions of PM and Pb from the dryer and furnaces due to process upsets and other sources within the enclosed facility will be vented to the Torit filter of the enclosed facility's ventilation system (EU ID 015). [Application No. 0570057-020-AC; Rules 62-4.070(3) and 62-210.200(PTE), F.A.C.]

   b. Process Stack: The permittee is authorized to construct a process stack that is 130 feet above grade, has an exit diameter of 60 inches, with an exhaust flow rate of approximately 58,886 acfm at an average temperature of 150 °F.
   [Application No. 0570057-020-AC; Rules 62-4.070(3) and 62-210.200(PTE), F.A.C.]

   c. Feed Dryer: The permittee is authorized to construct a feed dryer capable of drying a maximum of 40 TPH of lead feed material with a maximum capacity of 338,400 tons in any consecutive twelve month period utilizing 10 mmBtu/hr burners fired by natural gas with propane as a backup fuel.
   [Application No. 0570057-020-AC; Rules 62-4.070(3) and 62-210.200(PTE), F.A.C.]

   d. Feed Dryer Baghouse: One shaker type baghouse shall be designed, installed and maintained to remove PM and Pb from the dryer exhaust. The baghouse shall be installed and operational before the dryer becomes operational. The baghouse shall have a design flow rate of 18,000 acfm and operate a temperature of approximately 200 °F.
   [Application No. 0570057-020-AC; Rules 62-4.070(3) and 62-210.200(PTE), F.A.C.]

e. Collocated Blast Furnace: The permittee is authorized to modify the existing blast furnace capable of processing a maximum of 7.5 TPH of lead feed material with a maximum capacity of 65,700 tons in any consecutive twelve month period utilizing metallurgical coke mixed with the lead-bearing feed as fuel. [Application No. 0570057-020-AC; Rules 62-4.070(3) and 62-210.200(PTE), F.A.C.]

f. Collocated Reverb Furnace: The permittee is authorized to construct a reverb furnace capable of processing a maximum of 40 TPH of lead-bearing feed material with a maximum capacity of 262,800 tons per any consecutive twelve month period utilizing burners fired by natural gas with propane as a backup fuel.
[Application No. 0570057-020-AC; Rules 62-4.070(3) and 62-210.200(PTE), F.A.C.]

g. Furnace Afterburner, Baghouse, and Scrubber: One afterburner, shaker type baghouse and wet scrubber shall be designed, installed and maintained to control CO, VOC, PM, Pb and SO_2 emissions from the blast and reverb furnaces. The afterburner, baghouse and wet scrubber must be operational before the furnaces commence operations. The afterburner, baghouse and scrubber shall vent to the 130 foot process stack. The afterburner and baghouse shall have a design flow rate of 54,000 acfm at approximately 350° F. The scrubber shall have a design flow rate of 42,800 acfm at approximately 125 °F with a caustic usage rate of approximately 264 gallons per hour (GPH).
[Application No. 0570057-020-AC; Rules 62-4.070(3) and 62-210.200(PTE), F.A.C.]

2. Circumvention: The permittee shall not circumvent the air pollution control equipment or allow the emission of air pollutants without this equipment operating properly. [Rule 62-210.650, F.A.C.]

PERFORMANCE RESTRICTIONS

3. Blast and Reverb Furnace Capacities: The maximum charge rate of the reverb furnace is 40 TPH with a maximum capacity of 262,800 tons in any twelve month consecutive period. The maximum charge rate of the blast furnace is 7.5 TPH with a maximum capacity of 65,700 tons in any twelve month consecutive period.
[Application No. 0570057-020-AC; Rules 62-210.200(PTE) and 62-212.400(10)(c), F.A.C.]

4. Reverb Furnace Burner Capacity: The maximum heat input rating of the reverb furnace burner is 23 mmBtu/hr. [Application No. 0570057-020-AC; Rules 62-210.200(PTE) and 62-212.400(10)(c), F.A.C.]

5. Feed Dryer Capacity: The maximum charge rate of the dryer is 40 TPH with a maximum capacity of 338,400 tons in any twelve month consecutive period.
[Application No. 0570057-020-AC; Rules 62-210.200(PTE) and 62-212.400(10)(c), F.A.C.]

6. Feed Dryer Burner Capacity: The maximum heat input rating of the dryer burner is 10 mmBtu/hr.
[Application No. 0570057-020-AC; Rules 62-210.200(PTE) and 62-212.400(10)(c), F.A.C.]

7. Hours of Operation: The hours of operation of the dryer and blast and reverb furnaces are not limited (8,760 hours per year).
[Application No. 0570057-020-AC; Rules 62-210.200(PTE) and 62-212.400(10)(c), F.A.C.]

8. Reverb Furnace Fuel: Natural gas is the primary fuel for the reverb furnace burners. Propane may be used as a backup fuel. A combination of the fuels shall not exceed a total heat input of 201,480 mmBtu to the reverb furnace burners during any consecutive twelve month period.
[Application No. 0570057-020-AC; Rules 62-210.200(PTE) and 62-212.400(10)(c), F.A.C.]

9. Feed Dryer Fuel: Natural gas is the primary fuel for the feed dryer burner. Propane may be used as a backup fuel. A combination of the fuels shall not exceed a total heat input of 87,600 mmBtu to the dryer burner during any consecutive twelve month period.
[Application No. 0570057-020-AC and Rule 62-210.200(PTE), F.A.C.]

10. Lead Production: The maximum lead produced from the EFT facility shall not exceed 150,000 tons in any consecutive twelve month period.
[Application No. 0570057-020-AC and Rule 62-210.200(PTE), F.A.C.]

EMISSIONS STANDARDS

11. PM Emission Standard: PM emissions from the dryer, blast furnace and reverb furnace shall not exceed 0.005 gr/dscf as demonstrated by initial and annual compliance tests on the process stack.
[Application No. 0570057-020-AC; Rules 62-4.070(3), 62-210.200(PTE) and 62-212.400(10)(c), F.A.C.]

12. Pb Emission Standard: Pb emissions from the dryer and blast furnace and reverb furnace shall not exceed 0.3 mg/dscm as demonstrated by initial and annual compliance tests on the process stack.
[Application No. 0570057-020-AC; Rules 62-4.070(3), 62-210.200(PTE), and 62-212.400(10)(c), F.A.C. and 40 CFR 63.543(a)]

13. NO_X Emission Standard: NO_X emissions from the feed dryer shall not exceed 0.21 pounds per ton (lb/ton) of material charged and 2.1 pounds per hour (lb/hr) as demonstrated by a combined 29.1 lb/hr 30-day rolling CEMS average on the process stack. NO_X emissions from the blast furnace and reverb furnace shall not exceed 0.4 lb/ton and 0.6 lb/ton of material charged as demonstrated by a combined 29.1 lb/hr 30-day rolling CEMS average on the process stack.
[Application No. 0570057-020-AC; Rules 62-4.070(3), 62-210.200(PTE), and 62-212.400(10)(c), F.A.C.]

14. CO Emission Standard: CO emissions from the feed dryer and blast furnace and reverb furnace shall not exceed 204.7 lb/hr as demonstrated by a combined 30-day rolling CEMS average on the process stack.
[Application No. 0570057-020-AC; Rules 62-4.070(3) and 62-210.200(PTE), F.A.C.]

15. SO_2 Emission Standard: SO_2 emissions from the feed dryer and blast furnace and reverb furnace shall not exceed 194.3 lb/hr as demonstrated by a combined 30-day rolling CEMS average on the process stack.
[Application No. 0570057-020-AC; Rules 62-4.070(3) and 62-210.200(PTE), F.A.C.]

16. VOC Emission Standard: The blast furnace shall not discharge VOC in excess of 360 ppm by volume, expressed as propane corrected to 4 percent carbon dioxide (CO_2), to the atmosphere when the reverb furnace is not operating as demonstrated by initial and annual compliance tests on the process stack. When the blast furnace and reverb furnace are both operating, the collocated blast and reverb furnace shall not discharge VOC in excess of 20 ppm by volume, expressed as propane corrected to 4 percent CO_2, to the atmosphere as demonstrated by initial and annual compliance tests on the process stack.
[Application No. 0570057-020-AC; Rules 62-4.070(3) and 62-210.200(PTE) F.A.C.; and 40 CFR 63.543(c)]

17. VE Standard: VE from the dryer, blast and reverb furnaces shall not exceed 3% opacity as demonstrated by initial and annual compliance tests on the process stack.
[Application No. 0570057-020-AC; Rules 62-296.603 and 62-296.712, F.A.C.; and 40 CFR 60.122(a)(2)]

TESTING AND MONITORING REQUIREMENTS

18. PM, Pb and VOC Compliance Tests: The feed dryer and blast and reverb furnace process stack exhaust shall be tested to demonstrate initial compliance with the PM, Pb, and VOC standards no later than 180 days after initial startup of these emissions units and during each federal fiscal year (October 1st to September 30th) thereafter. [Rule 62-4.070(3), F.A.C.]

19. SO_2, NO_X and CO Compliance Tests: The feed dryer, and blast and reverb furnace process stack exhaust shall be tested to demonstrate initial compliance with the SO_2, NO_X and CO standards no later than 180 days after initial startup of these emission units. The SO_2, NO_X and CO CEMS monitors shall install, calibrate, certify, operate and maintain in accordance with the CEMS requirements specified in Appendix CEMS of this permit. [Rule 62-4.070(3), F.A.C.]

20. VE Compliance Tests: The feed dryer and blast and reverb furnace process stack exhaust shall be tested to demonstrate initial compliance with the VE standards no later than 180 days after initial startup of these emissions units and during each federal fiscal year (October 1st to September 30th) thereafter. [Rule 62-4.070(3), F.A.C.]

21. Test Requirements: The permittee shall notify the EPCHC in writing at least 15 days prior to any required tests. Tests shall be conducted in accordance with the applicable requirements specified in Appendix CTR (Common Testing Requirements) of this permit. [Rule 62-297.310(7)(a)9, F.A.C.]

22. Test Methods: Any required stack tests shall be performed in accordance with the following methods:

Method	Description of Method and Comments
EPA 5/29	Determination of Particulate Emissions. The minimum sample volume shall be 30 dry standard cubic feet.
EPA 6, 6C	Determination of Sulfur Dioxide Emissions from Stationary Sources
EPA 7, 7A, 7B, 7C, 7D or 7E	Determination of Nitrogen Oxide Emissions from Stationary Sources
EPA 9	Determination of Visible Emissions. Each EPA Method 9 test shall be thirty (30) minutes in duration pursuant to Rule 62-297.310, F.A.C. and concurrent with one of the EPA Method 12 runs.
EPA 10	Determination of Carbon Monoxide Emissions from Stationary Sources.
EPA 12/29	Determination of Lead Emissions.
EPA 25A	Determination of Total Gaseous Organic Concentration using a flame ionization analyzer.

23. Required CEMS: The permittee shall install, calibrate, certify, operate and maintain CEMS on the process stack (blast furnace, reverb furnace and feed dryer emissions) to demonstrate compliance with the SO_2, NO_X and CO emissions standards in this section. The permittee shall comply with the CEMS requirements specified in Appendix CEMS of this permit. [Rule 62-4.070(3), F.A.C.]

24. Monitoring Afterburner: The permittee shall monitor and record the temperature of the afterburner at least every 15 minutes during the annual VOC compliance test and determine an arithmetic average for the recorded temperature measurements. If the 3-hour average temperature falls more than 50 °F below the 3-hour average temperature during the previous annual VOC compliance demonstration, it shall constitute a violation of the applicable emission standard for VOC listed in this permit. [40 CFR 63.548(j)(1)]

25. Pressure Drop: The permittee shall maintain and calibrate a device which continuously measures and records the pressure drop across each baghouse compartment controlling the dryer (dryer baghouse) and blast and reverb furnaces (process baghouse). [Rule 62-4.070(3), F.A.C. and 40 CFR 63.548(c)(1)]

26. Bag Leak Detection: The permittee shall maintain continuous operation of bag leak detection systems on the dryer baghouse as well as the blast and reverb furnace baghouse in accordance with 40 CFR 63.548. [Rule 62-4.070(3), F.A.C. and 40 CFR 63.548]

RECORDS AND REPORTS

27. Notification, Recordkeeping and Reporting Requirements: The permittee shall maintain records of the amount of natural gas and propane used in the dryer and the blast and reverb furnaces on a monthly basis and shall comply with the notification, recordkeeping and reporting requirements pursuant to 40 CFR 63.550. These records shall be submitted to the EPCHC on an annual basis or upon request. [Rule 62-4.070(3), F.A.C. and 40 CFR 60]

28. Test Reports: The permittee shall prepare and submit reports for all required tests in accordance with the requirements specified in Appendix CTR (Common Testing Requirements) of this permit. For each test run, the report shall also indicate the operating rate. [Rule 62-297.310(8), F.A.C.]

NSPS AND NESHAP APPLICABILITY

29. NSPS Subpart L Applicability: The furnaces are subject to and shall comply with all applicable requirements of 40 CFR 60 Subpart L which applies to Secondary Lead Smelters emissions of PM. Subpart L is provided in Appendix L of this permit. [Rule 62-204.800(11)(b) and 40 CFR 60, -Subpart L – New Source Performance Standards (NSPS) for Secondary Lead Smelting].

30. NESHAP Subpart X Applicability: The feed dryer and blast and reverb furnaces are subject to and shall comply with all applicable requirements of 40 CFR 63, Subpart X which applies to Secondary Lead Smelting. Specifically, the feed dryer and furnaces shall comply with 40 CFR 63.550 Reporting and Recordkeeping Requirements. Subpart X is provided in Appendix X of this permit. [Rule 62-204.800(11)(b) and 40 CFR 63, -Subpart X – National Emissions Standards for Hazardous Air Pollutants (NESHAP) for Secondary Lead Smelting].

C. Furnace Tapping, Charging and Lead Refining

This section of the permit addresses the following emissions unit.

ID No.	Emission Unit Description
011	Furnace tapping, charging and lead refining (process fugitive emissions).

Furnace tapping, charging and lead refining generate emissions that are termed as process fugitive emissions in the lead recycling process. This emissions unit includes the operations related to charging and tapping the collocated reverb and blast furnaces as well as the direct exhaust from the 10 refining kettles that receive and process lead from the furnaces. The emissions are captured by hooding, routed to a 72,000 acfm process fugitive emissions (hygiene) baghouse and exhausted via a 130 foot hygiene stack.

The refining kettles are indirectly heated by natural gas burners (EU ID 013) described in Subsection D. Alloying and fluxing agents such as sulfur and niter (sodium nitrate) are mixed in to produce lead alloys that meet predetermined specifications. The pollutant emissions consist of PM, Pb, NO_X, VOC, SO_2 and trace metal HAP. The PM and metals HAP, including Pb, are controlled by the hygiene baghouse.

CONSTRUCTION

1. Equipment: The permittee is authorized to modify and construct a refining area capable of processing approximately 20 TPH of hard and soft lead and consisting of the following equipment.

   a. Enclosure: The permittee shall include the operations related to charging and tapping the collocated reverb and blast furnaces as well as the direct exhaust from the 10 refining kettles that receive and process lead from the furnaces, hence forth called process fugitive emissions, within a fully enclosed and ventilated facility. Process fugitive emissions of PM and Pb are controlled by a baghouse. Fugitive emissions of PM and Pb due to process upsets and from other fugitive sources within the enclosed facility will be vented to the Torit filter of the enclosed facility ventilation system (EU ID 015). [Application No. 0570057-020-AC; Rules 62-4.070(3) and 62-210.200(PTE), F.A.C.]

   b. Hygiene Stack: The permittee is authorized to construct a hygiene stack that is 130 feet tall has a diameter of 60 inches with an exhaust flow rate of approximately 72,000 acfm at an average temperature of 150 °F.
   [Application No. 0570057-020-AC; Rules 62-4.070(3) and 62-210.200(PTE), F.A.C.]

   c. 100-Ton Refining Kettles: The permittee is authorized to modify the four existing 75-ton refining kettles to capacities of 100-tons each and to construct four new 100-ton refining kettles.
   [Application No. 0570057-020-AC; Rules 62-4.070(3) and 62-210.200(PTE), F.A.C.]

   d. 150-Ton Refining Kettles: The permittee is authorized to construct two new 150-ton refining kettles.
   [Application No. 0570057-020-AC; Rules 62-4.070(3) and 62-210.200(PTE), F.A.C.]

   e. Hygiene Baghouse: One shaker-type baghouse shall be designed, installed and maintained to remove PM and Pb from the process fugitive emissions. The baghouse shall have a flow rate of approximately 72,000 acfm and operate an average temperature of 150 °F. The hygiene baghouse must be installed and operational before this emissions unit commences operations.
   [Application No. 0570057-020-AC; Rules 62-4.070(3) and 62-210.200(PTE), F.A.C.]

   f. Enclosure Hoods: The permittee is authorized to construct and/or modify the enclosure hoods for the furnaces and refining kettles (modified and new) including tapping and charging in accordance with 40 CFR 63.544 of Subpart X which applies to standards for process fugitive sources from Secondary Lead Smelting. [Application No. 0570057-020-AC; Rules 62-4.070(3) and 62-210.200(PTE), F.A.C.]

2. Circumvention: The permittee shall not circumvent the air pollution control equipment or allow the emission of air pollutants without this equipment operating properly. [Rule 62-210.650, F.A.C.]

C. Furnace Tapping, Charging and Lead Refining

PERFORMANCE RESTRICTIONS

3. Refining Kettle Production: The maximum production rate of the ten refining kettles is 20 TPH. [Application No. 0570057-020-AC; Rules 62-210.200(PTE) and 62-212.400(10)(c), F.A.C.]

4. Hours of Operation: The hours of operation of the refining kettles are not limited (8,760 hours per year). [Application No. 0570057-020-AC; Rules 62-210.200(PTE) and 62-212.400(10)(c), F.A.C.]

5. Lead Production: The maximum lead produced from the EFT facility shall not exceed 150,000 tons in any consecutive twelve month period. [Application No. 0570057-020-AC and Rule 62-210.200(PTE), F.A.C.]

EMISSIONS STANDARDS

6. PM Emissions Standard: PM emissions from the hygiene stack shall not exceed 0.005 gr/dscf or 2.68 lbs/hr as demonstrated by initial and annual compliance tests. [Application No. 0570057-020-AC; Rules 62-4.070(3), 62-210.200(PTE), and 62-212.400(10)(c), F.A.C.]

7. Pb Emissions Standard: Pb emissions from the hygiene stack shall not exceed 0.2 mg/dscm or 0.05 lbs/hr as demonstrated by initial and annual compliance tests. [Application No. 0570057-020-AC; Rules 62-4.070(3), 62-210.200(PTE), and 62-212.400(10)(c), F.A.C. and 40 CFR 63.543(a)]

8. NO_X Emissions Standard: NO_X emissions shall not exceed 14.33 lbs/hr as demonstrated by a 30-day rolling CEMS average on the hygiene stack. [Application No. 0570057-020-AC; Rules 62-4.070(3), 62-210.200(PTE), and 62-212.400(10)(c), F.A.C.]

9. SO_2 Emissions Standard: SO_2 emissions shall not exceed 7.94 lbs/hr as demonstrated by 30-day rolling CEMS average on the hygiene stack. [Application No. 0570057-020-AC; Rules 62-4.070(3), 62-210.200(PTE), and 62-212.400(10)(c), F.A.C.]

10. VOC Emissions Standard: VOC emissions from the hygiene stack shall not exceed 20 parts per million or 8.95 lbs/hr as demonstrated by initial test on the hygiene stack. [Application No. 0570057-020-AC; Rules 62-4.070(3), 62-210.200(PTE), and 62-212.400(10)(c), F.A.C.]

11. VE Standard: VE from the hygiene stack shall not exceed 3% opacity as demonstrated by initial and annual compliance tests. [Application No. 0570057-020-AC; Rules 62-296.603 and 62-296.712, F.A.C.; and 40 CFR 60.122(a)(2)]

TESTING AND MONITORING REQUIREMENTS

12. PM, Pb and VOC Compliance Tests: The hygiene stack exhaust shall be tested to demonstrate initial compliance with the PM, Pb and VOC standards no later than 180 days after initial startup of this emissions unit. PM and Pb testing will also take place during each federal fiscal year (October 1st to September 30th) thereafter. [Rule 62-4.070(3), F.A.C.]

13. VE Compliance Tests: The hygiene stack exhaust shall be tested to demonstrate initial compliance with the VE standards no later than 180 days after initial startup of this emissions unit and during each federal fiscal year (October 1st to September 30th) thereafter. [Rule 62-4.070(3), F.A.C.]

14. SO_2, and NO_x Compliance Tests: The hygiene stack exhaust shall be tested to demonstrate initial compliance with the SO_2 and NO_x standards no later than 180 days after the initial startup of this emissions unit. [Rule 62-4.070(3), F.A.C.]

15. Test Requirements: The permittee shall notify the EPCHC in writing at least 15 days prior to any required tests. Tests shall be conducted in accordance with the applicable requirements specified in Appendix CTR (Common Testing Requirements) of this permit. [Rule 62-297.310(7)(a)9, F.A.C.]

16. Test Methods: Any required stack tests shall be performed in accordance with the following methods:

Method	Description of Method and Comments
EPA 5/29	Determination of Particulate Emissions. The minimum sample volume shall be 30 dry standard cubic feet.
EPA 6, 6C	Determination of Sulfur Dioxide Emissions from Stationary Sources
EPA 7, 7A, 7B, 7C, 7D or 7E	Determination of Nitrogen Oxide Emissions from Stationary Sources
EPA 9	Determination of Visible Emissions. Each EPA Method 9 test shall be thirty (30) minutes in duration pursuant to Rule 62-297.310, F.A.C. and concurrent with one of the EPA Method 12 runs.
EPA 12/29	Determination of Lead Emissions.
EPA 25A	Determination of Total Gaseous Organic Concentration using a flame ionization analyzer.

17. Required CEMS: The permittee shall install, calibrate, certify, operate and maintain CEMS on the hygiene stack to demonstrate compliance with the SO_2 and NO_X emissions standards in this section. The permittee shall comply with the CEMS requirements specified in Appendix CEMS of this permit. [Rule 62-4.070(3), F.A.C.]

18. Pressure Drop: The permittee shall maintain and calibrate a device which continuously measures and records the pressure drop across each hygiene baghouse compartment controlling process fugitive emissions. [Rule 62-4.070(3), F.A.C. and 40 CFR 63.548(c)(1)]

19. Bag Leak Detection: The permittee shall maintain continuous operation of bag leak detection systems on the hygiene baghouse in conjunction with 40 CFR 63.548. [Rule 62-4.070(3), F.A.C. and 40 CFR 63.548]

RECORDS AND REPORTS

20. Notification, Recordkeeping and Reporting Requirements: The permittee shall maintain records of the amount sulfur and niter used in the refining kettles on a monthly basis and shall comply with the notification, recordkeeping and reporting requirements pursuant to 40 CFR 63.550. These records shall be submitted to the EPCHC on an annual basis or upon request. [Rule 62-4.070(3), F.A.C. and 40 CFR 60]

21. Test Reports: The permittee shall prepare and submit reports for all required tests in accordance with the requirements specified in Appendix CTR (Common Testing Requirements) of this permit. For each test run, the report shall also indicate the operating rate. [Rule 62-297.310(8), F.A.C.]

NSPS AND NESHAP APPLICABILITY

22. NSPS Subpart L Applicability: The furnaces are subject to and must comply with all applicable requirements of 40 CFR 60 Subpart L which applies to Secondary Lead Smelters emissions of PM. Subpart L is provided in Appendix L of this permit. [Rule 62-204.800(11)(b) and 40 CFR 60, -Subpart L – New Source Performance Standards (NSPS) for Secondary Lead Smelting].

23. NESHAP Subpart X Applicability: The process fugitive emissions are subject to all applicable requirements of 40 CFR 63, Subpart X which applies to Secondary Lead Smelting. Specifically, the feed dryer shall comply with 40 CFR 63.550 Reporting and Recordkeeping Requirements. Subpart X is provided in Appendix X of this permit. [Rule 62-204.800(11)(b) and 40 CFR 63, -Subpart X – National Emissions Standards for Hazardous Air Pollutants (NESHAP) for Secondary Lead Smelting].

D. Refining Kettles Exhaust

This section of the permit addresses the following emissions unit.

ID No.	Emission Unit Description
013	Combustion exhaust consisting of 10 burners and associated stacks fueled by natural gas and propane as a backup to heat the refining kettles.

The ten refining kettles are indirectly fired (i.e., the combustion products do not contact the process) utilizing individual oxygen enhanced burners. Therefore, the stacks that exhaust these combustion products are identified as a separate emission unit from the process fugitive emissions (EU ID No. 011). The kettles' indirect combustion emissions are vented to the atmosphere through three separate stacks.

EQUIPMENT

1. Refining Kettle Burners: The permittee is authorized to construct ten oxygen enhanced burners fired by natural gas with propane as a backup fuel. The burners will exhaust combustion gases through three separate stacks. [Application No. 0570057-020-AC; Rules 62-4.070(3) and 62-210.200(PTE), F.A.C.]

PERFORMACE RESTRICTIONS

2. Heat Input Rate: The maximum combined heat to the 10 burners used to indirectly heat the refining kettles shall not exceed 40 mmBtu/hr.
   [Application No. 0570057-020-AC; Rules 62-4.070(3) and 62-210.200(PTE), F.A.C.]

3. Refining Kettle Burner Fuels: Natural gas is the primary fuel for the refining kettle burner. Propane may be used as a backup fuel. A combination of the fuels shall not exceed a total heat input of 35,400 mmBtu to all refining kettle burners in any consecutive twelve month period.
   [Application No. 0570057-020-AC; Rules 62-4.070(3) and 62-210.200(PTE), F.A.C.]

EMISSION STANDARDS

4. VE Standard: Visible emissions from the kettle combustion stacks shall not exceed 3% opacity as demonstrated by initial and annual compliance tests on the kettle exhaust stacks.
   [Application No. 0570057-020-AC; Rules 62-296.603 and 62-296.712, F.A.C.; and 40 CFR 60.122(a)(2)]

TESTING AND MONITORING REQUIREMENTS

5. VE Compliance Tests: The kettle exhaust gas stacks shall be tested to demonstrate initial compliance with the VE standards no later than 180 days after the startup of this emissions unit and during each federal fiscal year (October 1st to September 30th) thereafter. [Rule 62-4.070(3), F.A.C.]

6. Test Methods: Any required stack tests shall be performed in accordance with the following methods.

Method	Description of Method and Comments
EPA 9	Determination of Visible Emissions. Each EPA Method 9 test shall be thirty (30) minutes in duration pursuant to Rule 62-297.310, F.A.C. and concurrent with one of the EPA Method 12 runs.

RECORDS AND REPORTS

7. Notification, Recordkeeping and Reporting Requirements: The permittee shall maintain records of the amount of natural gas and propane used in the kettle combustors on a monthly basis and shall comply with the notification, recordkeeping and reporting requirements pursuant to 40 CFR 63.550. These records shall be submitted to the EPCHC on an annual basis or upon request. [Rule 62-4.070(3), F.A.C. and 40 CFR 60]

8. Test Reports: The permittee shall prepare and submit reports for all required tests in accordance with the requirements specified in Appendix CTR (Common Testing Requirements) of this permit. For each test run, the report shall also indicate the operating rate. [Rule 62-297.310(8), F.A.C.]

NESHAP APPLICABILITY

9. NESHAP Subpart X Applicability: The process fugitive emissions are subject to and must comply with all applicable requirements of 40 CFR 63, Subpart X which applies to Secondary Lead Smelting. Specifically, the feed dryer shall comply with 40 CFR 63.550 Reporting and Recordkeeping Requirements. Subpart X is provided in Appendix X of this permit. [Rule 62-204.800(11)(b) and 40 CFR 63, -Subpart X – National Emissions Standards for Hazardous Air Pollutants (NESHAP) for Secondary Lead Smelting].

E. Soda Ash Silos

This section of the permit addresses the following emissions unit.

ID No.	Emission Unit Description
008	The soda silos consist of a small soda ash receiving silo for receiving soda ash by truck and two larger soda ash process silos.

The soda ash is received by the soda ash receiving silo and then distributed to the soda ash process silos. The soda ash is then transferred from the process silos to the desulfurization process and the sulfur dioxide scrubber used to control SO_2 emissions from the reverb and blast furnaces. Emissions from these silos consist of PM and will be controlled by bin vent filters (fabric filters) atop the silos that filter the air displaced from the silos as they are filled.

CONSTRUCTION

1. Equipment: The permittee is authorized to construct the following.
   a. One soda ash receiving silo with a bin filter, with a stack height of 35 feet, a diameter of 16 inches and a flow rate of approximately 650 acfm.
   b. Two soda ash process silos with bin filters, with stack heights of 70 feet, diameters of 16 inches and flow rates of approximately 650 acfm.

   [Application No. 0570057-020-AC]

PERFORMANCE RESTRICTION

2. Maximum Fill Rate: The maximum fill rate for each silo shall not exceed 50 TPH with a maximum capacity of 25,000 tons per any consecutive twelve month period.
   [Application No. 0570057-020-AC; Rules 62-4.070(3) and 62-210.200(PTE), F.A.C.]

EMISSIONS STANDARDS

3. PM Emission Standard: PM emissions from each bin vent filters of the soda ash silos *shall not* exceed 0.005 gr/dscf. [Application No. 0570057-020-AC; Rules 62-4.070(3) and 62-210.200(PTE), F.A.C.]

4. VE Standard: VE from the soda ash silos bin filters shall not exceed 3% opacity as demonstrated by initial and annual compliance tests. A visible emission reading of 3% opacity or less may be used to establish compliance with the PM emission standard in Specific Condition 3**.** A visible emission reading greater than 3% opacity will require the permittee to perform a PM emissions stack test within 60 days to show compliance.
   [Application No. 0570057-020-AC; Rules 62-296.603 and 62-296.712, F.A.C.; and 40 CFR 60.122(a)(2)]

TESTING AND MONITORING REQUIREMENTS

5. Initial Compliance Tests: Each unit shall be tested to demonstrate initial compliance with the VE emissions standards specified in Specific Condition 4. The initial test shall be conducted within 180 days after initial operation. [Rule 62-297.310(7)(a)1., F.A.C. and Rule 62-4.070(3), F.A.C.]

6. Annual Compliance Tests: During each federal fiscal year (October 1st to September 30th), each unit shall be tested to demonstrate compliance with the VE standard specified in Specific Condition 4.
   [Rule 62-297.310(7)(a)4, F.A.C. and Rule 62-4.070(3), F.A.C.]

7. PM Compliance Test: The initial and annual VE tests in Specific Conditions 5 and 6 shall serve as a surrogate for the PM emissions tests. If the VE emissions standard in Specific Condition 4 is not meet, PM tests utilizing EPA Method 5 must be conducted within 60 days on the silo bin vent filters to show compliance with the PM emissions standard in Specific Condition 3. [Rule 62-297.620(4), F.A.C.]

8. Test Requirements: The permittee shall notify the EPC of Hillsborough County in writing at least 15 days prior to any required tests. Tests shall be conducted in accordance with the applicable requirements specified in Appendix CTR (Common Testing Requirements) of this permit. [Rule 62-297.310(7)(a)9, F.A.C.]

9. Test Methods: Any required stack tests shall be performed in accordance with the following methods.

Method	Description of Method and Comments
EPA 5	Determination of Particulate Emissions. The minimum sample volume shall be 30 dry standard cubic feet.
EPA 9	Method 9 - Visual Determination of the Opacity of Emissions from Stationary Sources.

RECORDS AND REPORTS

10. Test Reports: The permittee shall prepare and submit reports for all required tests in accordance with the requirements specified in Appendix CTR (Common Testing Requirements) of this permit. For each test run, the report shall also indicate the operating rate. [Rule 62-297.310(8), F.A.C.]

F. Facility Grounds and Roadways

This section of the permit addresses the following emissions unit.

ID No.	Emission Unit Description
009	Facility grounds and roadways controlled by wet suppression, vacuum sweeping and wheel washing.

Vehicular traffic movement on plant roads and in parking areas will produce fugitive emissions of PM and Pb. These fugitive emissions from paved areas at the plant will be controlled by a variety of work practice standards, including vacuum sweeping and wet suppression. Also, as required by the Secondary Lead Maximum Achievable Control Technology (MACT), (40 CFR 63, Subpart X, see Appendix X) the building will have wheel wash stations to remove lead contamination from vehicles prior to exiting the building.

CONSTRUCTION ACTIVITIES

1. Standard Operating Procedures (SOP) During Construction Activities: In order to limit the potential to emit emissions of PM and Pb from the roadways and grounds during construction activities, the permittee must follow the SOP for Fugitive Dust Control During Construction Activities given in Appendix FDCA of this permit upon commencement of construction activities.
   [Application No. 0570057-020-AC; Rules 62-210.200(PTE) and 62-212.400(10)(c), F.A.C.]

FACILITY OPERATION

2. SOP During Facility Operation: To show compliance with the emission limits of PM and Pb from the roadways and grounds of the upgraded facility during operation, the permittee must follow the SOP for Fugitive Dust Control During Operational Activities given in Appendix FDCO of this permit once construction activities are completed and the EFT facility becomes operational.
   [Application No. 0570057-020-AC; Rules 62-210.200(PTE) and 62-212.400(10)(c), F.A.C.]

   {Permitting Note: PM_{10} and Pb from the roadways and grounds during operation of the facility after it is upgraded are estimated to be 0.084 and 0.023 tons in any consecutive twelve month period. [Application No. 0570057-020-AC; Rules 62-210.200(PTE) and 62-212.400(10)(c), F.A.C.]}

3. Revised Operational SOP: If the permittee desires, a revised SOP to control fugitive dust emissions during facility operation can be submitted no later than 60 days from when the EFT facility becomes operational. Once the Operational SOP is in effect, the permittee may submit additional revisions to improve its effectiveness to the EPCHC for approval.

AMBIENT MONITORING AND MODELING REQUIRED

4. Lead–Total Suspended Particles (Pb-TSP) Monitors: The owner or operator shall install and operate two ambient monitoring stations for Lead in TSP (Pb-TSP) at offsite locations (sites) to be determined by the Department. The devices shall be installed and operational within 120 days of final issuance of this permit and shall operate at a sampling frequency to be determined by the EPCHC, and/or the Ambient Monitoring Section (AMS) of the Department's Bureau of Air Monitoring and Mobile Sources (BAMMS). Access to the monitoring sites and instruments must be provided to the EPCHC, and/or the AMS of the Department's BAMMS. The monitoring devices shall be those designated as EPA reference or equivalent methods and must be operated in accordance with BAMMS-approved quality assured policies and procedures.

5. Quality Assurance: Ambient monitoring activities required by this permit for Pb shall be conducted in such a manner so as to meet the Department's minimum quality assurance requirements as delineated in 40 CFR Parts 50 and 58.14; Part 58, Appendices A, C, D and E; and the Department's *State-Wide Quality Assurance Air Program Plan* (*Plan*). Changes to the *Plan* will be distributed by BAMMS to the owner or operator. The owner or operator shall comply with *Plan* changes as soon as practicable, but no later than upon renewal of this permit.

6. SOP for Monitors: The owner or operator shall, within 90 days of the effective permit date, submit to the Department and/or EPCHC for review and approval standard operating procedures for each monitor, calibrator and ancillary piece of equipment utilized in the production of the required ambient air quality data.

7. Monitoring Data: The owner or operator shall submit the verified monitoring data and quality assurance results to BAMMS and EPCHC within ninety (90) days after the end of each calendar quarter in an electronic medium and format: either Aerometric Information Retrieval System (AIRS) or other EPA acceptable electronic format for the monitoring data, and the Precision and Accuracy Data (PAData) or other EPA acceptable electronic format for the quality assurance data, as specified by the Department.

8. The owner or operator shall allow the Department and/or EPCHC auditors, with a minimum of seven (7) days prior notification, access to the monitoring locations for the purpose of the performance of accuracy audits which may be completed in lieu of, or in addition to, the owner or operator's quarterly accuracy audits as specified in 40 CFR, Part 58, Appendix A, 3.2 and 3.4. The owner or operator shall also submit to an annual systems audit as specified in 40 CFR Part 58, Appendix A, 2.5. The systems audit, which reviews the quality assurance and monitoring effort for the preceding year, shall be conducted between February and June of the year following the year in which the audited data were produced. In addition, the Department and/or EPCHC staff shall be allowed access to the monitoring locations, with a minimum of seven (7) days prior notification, on an annual basis, for the purpose of determining compliance with the siting requirements as specified in 40 CFR Part 58, Appendix E.

   [Rule 62-212.400(7), F.A.C. and 62-4.070(3) Reasonable Assurance]

LIMITATIONS ON FACILITY OPERATIONS

9. Sprinkler System: If the sprinkler system used for the wet suppression of PM and Pb fugitive emissions from the EFT facility's roadways and grounds malfunctions, a water truck or other means shall be used to maintain wet suppression of affected zones. Truck traffic shall be halted in any zones for which wet suppression cannot be maintained until the sprinkler system is repaired.
   [Rule 62-4.070, F.A.C. Reasonable Assurance and Rule 62-210.200(PTE).]

10. Truck Traffic: Truck traffic that is involved with the receiving of lead bearing materials, including lead-acid batteries, at EFT facility and the shipping of lead alloy products from the EFT facility is only allowed between the hours of 6:00 am to 10:00 pm seven days a week.
    [Rule 62-4.070, F.A.C. Reasonable Assurance and Rule 62-210.200(PTE).]

NESHAP APPLICABILITY

11. NESHAP Subpart X Applicability: The facility grounds and roadways at the EFT facility are subject to all applicable requirements of 40 CFR 63, Subpart X which applies to Secondary Lead Smelting. Specifically, the feed dryer shall comply with 40 CFR 63.550 Reporting and Recordkeeping Requirements. Subpart X is provided in Appendix X of this permit. [Rule 62-204.800(11)(b) and 40 CFR 63, -Subpart X – National Emissions Standards for Hazardous Air Pollutants (NESHAP) for Secondary Lead Smelting].

G. Building Ventilation

This section of the permit addresses the following emissions unit.

ID No.	Emission Unit Description
015	Building ventilation of enclosed facility controlled by Torit filter.

EFT will enclose all process areas of the facility and ventilate the air exhausted from the facility through a large 195,000 acfm cartridge collector identified as the Torit filter. This air flow will produce an inward draft velocity at all openings in the building of 50 feet per minute (fpm) to prevent PM and Pb emissions from escaping uncontrolled. The filtered gases will be emitted from a new stack identified as the Torit stack.

CONSTRUCTION

1. Equipment: The permittee is required to construct in phases a fully enclosed and ventilated facility consisting of the following equipment.

   a. Enclosure: The applicant shall construct a fully enclosed and ventilated facility that when completed will contain the feed dryer (EU ID 022), blast furnace (EU ID 001), reverb furnace (EU ID 023) and furnace tapping and charging and refining (EU ID 011). The full enclosure shall be completed before the entire EFT facility commences operations that utilize all the emissions units cited in the previous sentence. As specified in Subsections III-A, -B and –C of this permit, individual emissions units may commence operations once they have been individually enclosed. Fugitive emissions consisting of PM and Pb within the enclosed facility are controlled by a Torit filter.
   [Application No. 0570057-020-AC; Rules 62-4.070(3) and 62-210.200(PTE), F.A.C.]

   b. Torit Stack: The permittee is authorized to construct a Torit stack that is 130 feet tall and has a diameter of 96 inches with a design exhaust flow rate of 195,000 acfm at ambient temperature.
   [Application No. 0570057-020-AC; Rules 62-4.070(3) and 62-210.200(PTE), F.A.C.]

2. Circumvention: The permittee shall not circumvent the air pollution control equipment or allow the emission of air pollutants without this equipment operating properly. [Rule 62-210.650, F.A.C.]

PERFORMANCE RESTRICTIONS

3. Hours of Operation: The hours of operation of the enclosed facility are not limited (8,760 hours per year).
   [Application No. 0570057-020-AC; Rules 62-210.200(PTE) and 62-212.400(10)(c), F.A.C.]

4. Malfunction: If the Torit filter malfunctions causing the complete loss of negative pressure inside the enclosure, lead production at the EFT facility must stop until the malfunction can be corrected. The permittee must notify the EPC of Hillsborough County within 12 hours of a malfunction occurring.
   [Rule 62-210.200(PTE), F.A.C.]

5. Production: Upon completion of the total enclosure, the maximum lead produced from the enclosed facility shall not exceed 150,000 tons any consecutive twelve month period. [Application No. 0570057-020-AC and Rule 62-210.200(PTE), F.A.C.]

EMISSIONS STANDARDS

6. PM Emissions Standard: PM emissions from the Torit stack shall not exceed 0.005 gr/dscf or 36.60 lbs/hr as demonstrated by initial and annual compliance tests.
   [Application No. 0570057-020-AC; Rules 62-4.070(3), 62-210.200(PTE), and 62-212.400(10)(c), F.A.C.]

7. Pb Emissions Standard: Pb emissions from the Torit stack shall not exceed 0.05 mg/dscm or 0.160 lbs/hr as demonstrated by initial and annual compliance tests.
   [Application No. 0570057-020-AC; Rules 62-4.070(3), 62-210.200(PTE), and 62-212.400(10)(c), F.A.C. and 40 CFR 63.543(a)]

8. VE Standard: Visible emissions from the Torit stack shall not exceed 3% opacity as demonstrated by initial and annual compliance tests.
[Application No. 0570057-020-AC; Rules 62-296.603 and 62-296.712, F.A.C.; and 40 CFR 60.122(a)(2)]

TESTING AND MONITORING REQUIREMENTS

9. PM and Pb Compliance Tests: The Torit stack exhaust shall be tested to demonstrate initial compliance with the PM and Pb standards no later than 180 days after initial operation of the total enclosure and during each federal fiscal year (October 1st to September 30th) thereafter. [Rule 62-4.070(3), F.A.C.]

10. VE Compliance Tests: The Torit stack exhaust shall be tested to demonstrate initial compliance with the VE standards no later than 180 days after initial operation and during each federal fiscal year (October 1st to September 30th) thereafter. [Rule 62-4.070(3), F.A.C.]

11. Test Requirements: The permittee shall notify the EPC of Hillsborough County in writing at least 15 days prior to any required tests. Tests shall be conducted in accordance with the applicable requirements specified in Appendix CTR (Common Testing Requirements) of this permit.
[Rule 62-297.310(7)(a)9, F.A.C.]

12. Opening In-Draft Velocity Requirement: The in-draft velocity at all openings of the enclosed facility shall be at a minimum of 50 fpm. [Application No. 0570057-020-AC]

    a. Opening In-Draft Monitoring: Compliance with the doorway in-draft requirement of Specific Condition No. 12 shall be determined using either of the following two procedures:

        (i) The permittee shall use a propeller anemometer or equivalent device meeting the requirements of 40 CFR 63.547(d)(2)(ii) through (d)(2)(iv).

        (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, excluding the passageway between the enclosure and containment room, with all remaining doorways in the position they are in during normal operation.

    b.

        (i) The permittee shall install a differential pressure gauge on the leeward wall of the building to measure the pressure difference between the inside and outside of the building.

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

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

        (iv) 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 0.02 mm Hg when all doors are in the position they are in during normal operation.

    [Rule 62-4.070(3), F.A.C. and 40 CFR 63.547]

G. Building Ventilation

13. Test Methods: Any required stack tests shall be performed in accordance with the following methods:

Method	Description of Method and Comments
EPA 5/29	Determination of Particulate Emissions. The minimum sample volume shall be 30 dry standard cubic feet.
EPA 9	Determination of Visible Emissions. Each EPA Method 9 test shall be thirty (30) minutes in duration pursuant to Rule 62-297.310, F.A.C. and concurrent with one of the EPA Method 12 runs.
EPA 12/29	Determination of Lead Emissions.

RECORDS AND REPORTS

14. Test Reports: The permittee shall prepare and submit reports for all required tests in accordance with the requirements specified in Appendix CTR (Common Testing Requirements) of this permit. For each test run, the report shall also indicate the operating rate. [Rule 62-297.310(8), F.A.C.]

NESHAP APPLICABILITY

15. NESHAP Subpart X Applicability: The fugitive Pb emissions from the enclosed facility are subject to and must comply with all applicable requirements of 40 CFR 63, Subpart X which applies to Secondary Lead Smelting. Specifically, the feed dryer shall comply with 40 CFR 63.550 Reporting and Recordkeeping Requirements. Subpart X is provided in Appendix X of this permit. [Rule 62-204.800(11)(b) and 40 CFR 63, -Subpart X – National Emissions Standards for Hazardous Air Pollutants (NESHAP) for Secondary Lead Smelting].

H. Plastic Pellet Silos

This section of the permit addresses the following emissions unit.

ID No.	Emission Unit Description
024	Four (4) plastic pellet silos

ETF will install a total of four Plastic Pellet Silos for off-loading to truck and railcar. Two of the silos will be dedicated to truck loading and two for railcar loading. The silos will emit minor amounts of PM when they are being filled. The PM will be controlled by bin vent filters (fabric filters) atop the silos.

CONSTRUCTION

1. Equipment: The permittee is authorized to construct four plastic pellet silos (two for truck loading and two for train loading) with bin filters to control PM emissions. Each silo will have a stack height of 68.5 feet, a stack diameter of 14 inches and a flow rate of approximately 1,750 acfm.
[Application No. 0570057-020-AC]

PERFORMANCE RESTRICTIONS

2. Maximum Fill Rate: The maximum fill rate for each plastic pellet silo shall not exceed 1.75 TPH with a maximum capacity of 12,000 tons in any consecutive twelve month period.
[Application No. 0570057-020-AC; Rules 62-4.070(3) and 62-210.200(PTE), F.A.C.]

EMISSIONS STANDARDS

3. PM Emission Standard: PM emissions from each bin filter of the plastic pellet silos shall not exceed 0.001 gr/dscf. [Application No. 0570057-020-AC; Rules 62-4.070(3) and 62-210.200(PTE), F.A.C.]

4. VE Standard: VE from the plastic pellet silo bin vent filters shall not exceed 3% opacity as demonstrated by initial and annual compliance tests. A visible emission reading of 3% opacity or less may be used to establish compliance with the PM emission standard in Specific Condition 3**.** A visible emission reading greater than 3% opacity will require the permittee to perform a PM emissions stack test within 60 days to show compliance with the PM standard.
[Application No. 0570057-020-AC; Rules 62-296.603 and 62-296.712, F.A.C.; and 40 CFR 60.122(a)(2)]

TESTING AND MONITORING REQUIREMENTS

5. Initial Compliance Tests: Each unit shall be tested to demonstrate initial compliance with the VE emissions standards specified in Specific Condition 4. The initial test shall be conducted within 180 days after initial operation. [Rule 62-297.310(7)(a)1., F.A.C. and Rule 62-4.070(3), F.A.C.]

6. Annual Compliance Tests: During each federal fiscal year (October 1st to September 30th), each unit shall be tested to demonstrate compliance with the VE standard specified in Specific Condition 4.
[Rule 62-297.310(7)(a)4, F.A.C. and Rule 62-4.070(3), F.A.C.]

7. PM Compliance Test: The initial and annual VE tests in Specific Conditions 5 and 6 shall serve as a surrogate for the PM emissions tests. If the VE emissions standard in Specific Condition 4 is not meet, PM tests utilizing EPA Method 5 must be conducted on the silo bin filters to show compliance with the PM emissions standard in Specific Condition 3 within 60 days. [Rule 62-297.620(4), F.A.C.]

8. Test Methods: Any required stack tests shall be performed in accordance with the following methods.

Method	Description of Method and Comments
EPA 5	Determination of Particulate Emissions. The minimum sample volume shall be 30 dry standard cubic feet.
EPA 9	Method 9 - Visual Determination of the Opacity of Emissions from Stationary Sources

RECORDS AND REPORTS

9. Test Reports: The permittee shall prepare and submit reports for all required tests in accordance with the requirements specified in Appendix CTR (Common Testing Requirements) of this permit. For each test run, the report shall also indicate the operating rate. [Rule 62-297.310(8), F.A.C.]

I. Propane Vaporizer and Slurry Heaters

This section of the permit addresses the following emissions unit.

ID No.	Emission Unit Description
025	Propane vaporizer (1) with 1.2 mmBtu/hour burner and soda ash slurry heaters (2) with 0.25 mmBtu/hour burners.

Natural gas will be used as the primary fuel for many of the processes at the EFT facility, such as the furnaces (EU ID 001 and EU ID 023) and dryer (EU ID 022). However, the site will maintain a propane tank to use in the event of natural gas curtailment. The propane tank operation will require the use of a propane vaporizer that includes a 1.2 mmBtu/hr burner.

The plant will use a soda ash slurry injection system in the furnace gases as needed to supplement the sulfur dioxide removal performance of the scrubber. Soda ash may also be used as a backup reagent to the caustic ordinarily used in the scrubber. The soda ash slurry will be heated by two natural gas fired 0.25 mmBtu/hr burners. Heating the slurry will improve the soda ash dissolve time.

EQUIPMENT

1. Propane Vaporizer: The permittee is authorized to install a propane vaporizer with a burner rated at 1.2 mmBtu/hr of heat input when firing propane. The propane vaporizer shall only operate during time of natural gas curtailment. [Application No. 0570057-020-AC]

2. Propane Vaporizer Stack: The permittee is authorized to install a propane vaporizer stack with a height of 9 feet, a diameter of 8 inches and a flow rate of approximately 500 acfm at n average temperature of 600 °F. [Application No. 0570057-020-AC]

3. Slurry Heaters: The permittee is authorized to install two 0.25 mmBtu/hr soda ash slurry heaters. [Application No. 0570057-020-AC]

4. Slurry Heater Stacks: The permittee is authorized to install two soda ash slurry heater stacks with heights of 11.2 feet, diameters of 8 inches and flow rates of approximately 1,600 acfm at an average temperature of 300 °F. [Application No. 0570057-020-AC]

PERFORMANCE RESTRICTIONS

5. Hours of Operation: The hours of operation of the propane vaporizer and soda ash slurry heaters are not limited (8,760 hours per year).
[Application No. 0570057-020-AC; Rules 62-210.200(PTE) and 62-212.400(10)(c), F.A.C.]

6. Burner Heat Input Rates: The maximum heat input rate to the propane vaporizer burner shall not exceed 1.2 mmBtu/hr. The maximum heat input rate to the soda ash slurry heaters shall not exceed 0.50 mmBtu/hr (2 @ 0.25 mmBtu/hr).
[Application No. 0570057-020-AC; Rules 62-210.200(PTE) and 62-212.400(10)(c), F.A.C.]

7. Propane Vaporizer Heat Input: The maximum heat input into the propane vaporizer in any consecutive twelve month period shall not exceed 10,512 mmBtu.
[Application No. 0570057-020-AC; Rules 62-210.200(PTE) and 62-212.400(10)(c), F.A.C.]

8. Soda Ash Slurry Heaters Heat Input: Natural gas is the primary fuel used for the soda ash slurry heaters. Propane may be used as a backup fuel. The maximum heat input into the soda ash slurry heaters in any consecutive twelve month period shall not exceed 4,380 mmBtu.
[Application No. 0570057-020-AC; Rules 62-210.200(PTE) and 62-212.400(10)(c), F.A.C.]

I. Propane Vaporizer and Slurry Heaters

EMISSIONS STANDARDS

9. VE Standard: VE from the propane vaporizer and soda ash slurry heaters stacks shall not exceed 3% opacity as demonstrated by initial and annual compliance tests.
[Application No. 0570057-020-AC; Rules 62-210.200(PTE) and 62-212.400(10)(c), F.A.C.]

TESTING AND MONITORING REQUIREMENTS

10. VE Compliance Tests: The propane vaporizer and soda ash slurry heater stacks exhaust s shall be tested to demonstrate initial compliance with the VE standards no later than 180 days after initial operation and during each federal fiscal year (October 1st to September 30th) thereafter. [Rule 62-4.070(3), F.A.C.]

11. Test Requirements: The permittee shall notify the EPCHC in writing at least 15 days prior to any required tests. Tests shall be conducted in accordance with the applicable requirements specified in Appendix CTR (Common Testing Requirements) of this permit.
[Rule 62-297.310(7)(a)9, F.A.C.]

12. Test Methods: Any required stack tests shall be performed in accordance with the following methods:

Method	Description of Method and Comments
EPA 9	Determination of Visible Emissions. Each EPA Method 9 test shall be thirty (30) minutes in duration pursuant to Rule 62-297.310, F.A.C. and concurrent with one of the EPA Method 12 runs.

RECORDS AND REPORTS

13. Notification, Recordkeeping and Reporting Requirements: The permittee shall maintain records of the amount of natural gas and propane used in the sodas ash slurry heaters and the amount of propane used in the propane vaporizer on a monthly basis and shall comply with the notification, recordkeeping and reporting requirements pursuant to 40 CFR 63.550. These records shall be submitted to the EPCHC on an annual basis or upon request. [Rule 62-4.070(3), F.A.C. and 40 CFR 60]

14. Test Reports: The permittee shall prepare and submit reports for all required tests in accordance with the requirements specified in Appendix CTR (Common Testing Requirements) of this permit. For each test run, the report shall also indicate the heat input rate. [Rule 62-297.310(8), F.A.C.]

J. Emergency Generator

This section of the permit addresses the following emissions unit.

ID No.	Emission Unit Description
026	One 500 kilowatt (kW) liquid fueled emergency generator

The facility will install a diesel-fired emergency generator with an anticipated capacity of 500 kW. The generator will only be used when power is not available from the local utility. The maximum hours of operation are not to exceed 500 hours per year.

1. Equipment: The permittee is authorized to install, operate, and maintain one 500 kW emergency generator. [Applicant Request and Rule 62-210.200(PTE), F.A.C.]

2. Hours of Operation and Fuel Specifications: The hours of operation shall not exceed 500 hours in any consecutive 12 month period. The generator shall burn ultralow sulfur diesel fuel oil (0.0015% sulfur). [Applicant Request and Rule 62-210.200(PTE), F.A.C.]

3. NSPS Subpart IIII Applicability: The emergency generator is Stationary Compression Ignition Internal Combustion Engines (Stationary ICE) and shall comply with applicable provisions of 40 CFR 60, Subpart IIII, including emission testing or certification. [40 CFR 60, Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines, See Appendix IIII]

4. NESHAPS Subpart ZZZZ Applicability: The emergency generator is a Liquid Fueled Reciprocating Internal Combustion Engines (RICE) and shall comply with applicable provisions of 40 CFR 63, Subpart ZZZZ. Pursuant to 40 CFR 63.6590(c) the generator must meet the requirements of Subpart ZZZZ by meeting the requirements of 40 CFR 60, Subpart IIII.
[40 CFR 63, Subpart ZZZZ - National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE)]

5. Emissions Limits: Each emergency generator shall comply with the following emission limits and demonstrate compliance in accordance with the procedures given in 40 CFR 60, Subpart IIII the language of which is given in Appendix IIII. Manufacturer certification can be provided to the Department in lieu of actual stack testing.

Source (model year)[a]	CO (g/hp-hr)	PM (g/hp-hr)	Hydrocarbons (g/hp-hr)	NO_X (g/hp-hr)[c]
Subpart IIII (2007 and later)	---	0.12	4.0 (NMHC[b]+NO_X)	

a. As per 40 CFR § 89.113.
b. NMHC means Non-Methane Hydrocarbons.
c. g/hp-hr means grams per horsepower-hour

[Application No. 0570057-020-AC; 40 CFR 60, Subpart IIII and Rule 62-4.070(3), F.A.C.]

6. Visible Emission (VE) Limit: The liquid-fueled emergency generator shall comply with a visible emission limit of 3% opacity. An initial VE test shall be conducted in accordance with EPA Method 9 within 60 days after achieving the maximum production rate at which the unit will be operated, but not later than 180 days after initial startup. [Rules 62-296.603, 62-296.712, F.A.C.; and 40 CFR 60.122(a)(2)]

7. Notification, Recordkeeping and Reporting Requirements: The permittee shall maintain records of the amount of fuel oil used in the emergency generator along with the hours of operation and shall comply with the notification, recordkeeping and reporting requirements pursuant to 40 CFR 60.4214 and 40 CFR 60.7. These records shall be submitted to the Compliance Authority on an annual basis or upon request.
[Rule 62-4.070(3), F.A.C. and 40 CFR 60, Subparts A and IIII]