EnviroFocus Technologies, LLC dba Gopher Resources
EnviroFocus Technologies

Facility ID No. 0570057
Hillsborough County

Title V Air Operation Permit Revision

Permit No. 0570057-036-AV
Revision of Title V Air Operation Permit No. 0570057-031-AV

<u>Permitting and Compliance Authority:</u>

Environmental Protection Commission
of Hillsborough County
Air Management Division

3629 Queen Palm Drive
Tampa, Florida 33619
Telephone: (813) 627-2600
Fax: (813) 627-2660

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PERMITTEE:
EnviroFocus Technologies, LLC dba Gopher Resources
6505 Jewel Avenue
Tampa, Florida 33619

Permit No. 0570057-036-AV
EnviroFocus Technologies
Facility ID No. 0570057
Title V Air Operation Permit Revision

The purpose of this permit is to revise the Title V air operation permit for the above referenced facility. The existing facility is located in Hillsborough County at 1901 N 66th Street, Tampa, Florida. UTM Coordinates are: Zone 17, 364.00 East and 3093.50 North. Latitude is: 27° 57' 43.0'' North; and, Longitude is: 82° 22' 49.0'' West.

The Title V air operation permit is issued under the provisions of Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Chapters 62-4, 62-210, 62-213. The above named permittee is hereby authorized to operate the facility in accordance with the terms and conditions of this permit.

0570057-031-AV Effective Date: November 24, 2015
0570057-033-AV Effective Date: March 6, 2017
0570057-036-AV Effective Date: *
Renewal Application Due Date: April 13, 2020
Expiration Date: November 24, 2020

* To be entered upon final issuance
Janet L. Dougherty
Executive Director

JLD/DML/dml

Subsection A. Facility Description.

EnviroFocus Technologies recycles spent automotive and industrial lead-acid batteries as well as lead scrap to produce lead ingots. Batteries arrive at the facility by truck and are off-loaded directly to the battery process area. Pallets or skids are used as separators for stacking of batteries that are received. Once the batteries are removed from the pallets or skids, the clean unbroken pallets or skids are normally stored outside or in the spent lead acid battery storage area and sent off-site for reuse. The rest of the pallets or skids are shredded in a hammer mill area by the wood shredder and used as raw material feed to the furnace to recover lead and aid in the drying of chipped battery material or shipped off-site for recycling.

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 separated plastic is loaded into truck via a pneumatic conveying system and shipped off-site for recycling. Emissions from the hammer mill (primarily of PM including SAM and Pb) are routed to a wet impingement scrubber and exhausted via a 130 foot stack.

The metallic lead and desulfurized lead salts from the battery breaker area are conveyed to the feed dryer to remove most of the moisture prior to being fed 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 material from the feed dryer is conveyed to the reverb furnace which is heated using natural gas. 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 30 MMBtu/hr burners. The facility also operates a blast furnace. Slag from the reverb furnace and/or other lead bearing scrap materials are fed to the blast furnace that produces hard lead. Other non-lead bearing fluxes and associated process materials, including but not limited to coke, cast iron, silica, limerock, and shredded steel, are also added to the furnace as needed. Metallurgical coke will be combined with slag to help supply fuel for the blast furnace smelting process. Coke breeze may also be added to the slag as a reductant.

The blast furnace produces a by-product slag which will be either disposed of or reclaimed in the furnace. The slag is first tested using the EPA methods 1311, 3005a and 6010b for sampling, preparation, digestion and analysis of Toxicity Characteristic Leaching Procedure extracts. If the slag is characteristically hazardous for lead, the material is brought back into the containment building for treatment with a stabilizing agent or returned to the furnaces for further reclamation. When the treatment process is chosen, the slag is tested again using the TCLP Methods 1311, 3005a and 6010b. The stabilizing agent is either brought in by a Tilt-up Pre-Filled Vertical Silo or pre-filled super sacs from the supplier.

Blast and Reverb Operating Collocated: Exhaust gases from both furnaces are ducted to an 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 130 foot process stack.

Blast Operation Only Mode: Exhaust gases from the blast furnace are ducted to a blast only dedicated afterburner. The dedicated afterburner will require a startup period where the dedicated afterburner burners will be firing while the reverb burners are in high or low fire (dedicated afterburner standby mode). Once the dedicated afterburner reaches required temperature for operating, the reverb burners will be placed in banked mode (no charging of lead bearing or waste material).

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 034). 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.

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. 033). The kettles' in-direct combustion emissions are vented to the atmosphere through ten separate stacks.

The alkaline reagents are received and stored in the alkaline reagents process silo. The alkaline reagents are then transferred from the process silo to the desulfurization process. Potential emissions from the silo consist of PM and are controlled by bin vent filter (fabric filter) atop the silo that filters the air displaced from the silo loading operation.

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

All process areas of the facility are enclosed and the air exhausted from the facility ventilates through two large 195,000 acfm (Torits A, B and C combined into a common stack) and 160,000 acfm (Torits D and E combined into a common stack) Torit cartridge collectors identified as Torit filters. The 160,000 acfm Torit collector has a high efficiency particulate air (HEPA) filter downstream of the cartridge collector. This air flow produces an inward draft velocity producing negative pressure at all openings in the building to prevent PM and Pb emissions from escaping uncontrolled. The filtered gases are emitted from two stacks identified as the Torit stacks.

A diesel-fired emergency generator with a capacity of 1,000 kW also exists on site. The generator is only used when power is not available from the local utility. The maximum hours of operation are not to exceed 100 hours per year.

The facility is subject to PM and Pb RACT, NSPS requirements of 40 CFR 60 – Subpart L, and the MACT requirements of Subpart X of the NESHAP for Pb and VOC and Dioxins and Furan. Also, the emergency generator is subject to 40 CFR 60, Subpart IIII.

Subsection B. Summary of Emissions Units.

EU ID No.	Description
026	**Battery breaking area** including a 1,440 TPD hammer mill, separation equipment, wet impingement scrubber and a 130 ft stack.
028	**Alkaline reagent silo** with a bin filter
030	**Feed dryer** fueled by natural gas (propane backup) to remove moisture from lead and lead salts prior to introduction into the reverb furnace. Includes an 18,000 acfm baghouse that is vented through the combined process (blast and reverb furnace) stack.
031	**Collocated reverb furnace**. Direct emissions controlled by a common: afterburner, process baghouse and SO_2 scrubber exhausting through the 130-ft process stack.
032	**Collocated blast furnace**. Direct emissions controlled by a dedicated afterburner and a common: afterburner, process baghouse and SO_2 scrubber exhausting through the 130-ft process stack.
033	**Furnace tapping, charging and refining**. Process fugitive emissions from the furnace tapping and charging and the 10 refining kettles. Emissions are controlled by the 72,000 acfm (hygiene) baghouse exhausting through the 130-ft hygiene stack.
034	**Combustion gases from Refining Kettles**. (10) natural gas burners with a total capacity of 40

EU ID No.	Description
	MMBtu per hour providing heat to the refining kettles. Exhaust is vented to 10 small stacks.
035	**Building ventilation** of the totally enclosed lead recycling process to maintain the key operations at a lower than ambient pressure ensuring in-draft through any doorway opening. Emissions are controlled by a 195,000 acfm cartridge collector and exhausted through a 130 ft stack.
036	**Facility grounds and roadways**. Controlled by wet suppression, vacuum sweeping and wheel wash stations.
037	**Emergency generator** rated at 1,000 kilowatts (kW).
038	**Additional building ventilation** that is vented to the 160,000 acfm cartridge collector with secondary HEPA filter to increase the negative pressure within the building exhausting through a 90 ft stack.

Subsection C. Applicable Regulations.

Based on the Title V air operation permit revision application received March 5, 2019, this facility is not a major source of hazardous air pollutants (HAP). The existing facility is a PSD major source of air pollutants in accordance with Rule 62-212.400, F.A.C. A summary of applicable regulations is shown in the following table.

Regulation	EU No(s).
Federal Rule Citations	
40 CFR 60, Subpart A, NSPS General Provisions	031, 032, 033
40 CFR 60, Subpart L	031, 032, 033
40 CFR 60, Subpart IIII	037
40 CFR 63, Subpart X	026, 030, 031, 032, 033, 034, 035, 036, 038
State Rule Citations	
Rule 62-296.600, 601, and 603, F.A.C. – Pb RACT	026, 030, 031, 032, 033, 035, 036, 038
Rule 62-296.700 and 712, F.A.C. – PM RACT	030, 032, 033, 036
Rule 62-296.320(2), F.A.C. – Objectionable Odor	Facility-wide

SECTION II. FACILITY-WIDE CONDITIONS.

The following conditions apply facility-wide to all emission units and activities:

FW1. Appendices. The permittee shall comply with all documents identified in Section IV, Appendices, listed in the Table of Contents. Each document is an enforceable part of this permit unless otherwise indicated. [Rule 62-213.440, F.A.C.]

Emissions and Controls

FW2. Not federally Enforceable. Objectionable Odor Prohibited. No person shall cause, suffer, allow or permit the discharge of air pollutants, which cause or contribute to an objectionable odor. An "objectionable odor" means 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. [Rule 62-296.320(2) and 62-210.200(Definitions), F.A.C.; EPCHC Rule 1-3.22]

FW3. General Volatile Organic Compounds (VOC) Emissions or Organic Solvents (OS) Emissions. The permittee shall allow no person to store, pump, handle, process, load, unload or use in any process or installation, volatile organic compounds or organic solvents without applying known and existing vapor emission control devices or systems deemed–necessary and ordered by the Department. . [Rule 62-296.320(1), F.A.C.]

FW4. General Visible Emissions. No person shall cause, let, permit, suffer or allow to be discharged into the atmosphere the emissions of air pollutants from any activity equal to or greater than 20% opacity. Emissions from the following types of activities in Hillsborough County are further subject to a general 5% opacity standard: loading or unloading of materials to or from containers such as rail cars, trucks, ships, storage structures and stockpiles; permanent conveyor systems; storage of materials in structures such as silos or enclosed bins, which have a storage capacity of fifty cubic yards or more; crushing, grinding, sizing and screening operations; and, static drop transfer points. These regulations do not impose a specific testing requirement. [Rules 62-296.320(4)(b)1, F.A.C. and Rule 1-3.52, HCEPC]

FW5. Unconfined Particulate Matter. No person shall cause, let, permit, suffer or allow the emissions of unconfined particulate matter, including emissions of lead, from any activity, including vehicular movement; transportation of materials; construction; alteration; demolition or wrecking; or industrially related activities such as loading, unloading, charging, melting, tapping, casting, storing or handling; without taking reasonable available control technology (RACT) and maximum achievable control technology (MACT) to prevent such emissions. RACT and MACT measures shall include, but not be limited to, the following:

a. Paving, curbing, and maintaining roads, parking areas and yards which are routinely used by vehicular traffic.
b. Minimize vehicular traffic on unpaved areas.
c. Maintain vegetation coverage on all of the unpaved plant grounds.
d. Two times daily, regardless of plant operation, wet vacuum paved traffic areas using a HEPA filter equipped wet vacuum, except when natural precipitation makes it impractical.
e. Maintain the sprinkler system and operate it in accordance with the sprinkler plan as detailed in the SOP for the Control of Fugitive Emissions During Operation (attached appendix FDCO).
f. Maintain records of all wet suppression, pavement cleaning and vehicle washing activities as per the SOP for the Control of Fugitive Emissions During Operation.
g. Using hoods, fans, filters, and similar equipment as detailed in the permitting applications to capture, contain, and control lead and particulate matter emissions.
h. Apply water or chemicals to control emissions from such activities as demolition of buildings, grading roads, construction, and land clearing.
i. Using walls or windbreaks to contain lead-bearing scrap, products, or raw materials.

[Rules 62-4.070(3), 62-296.320(4)(c), and 62-296.601(2), F.A.C., 40 CFR 63 Subpart X]

Annual Reports and Fees

See Appendix RR, Facility-wide Reporting Requirements for additional details.

FW6. Electronic Annual Operating Report and Title V Annual Emissions Fees. The information required by the Annual Operating Report for Air Pollutant Emitting Facility [Including Title V Source Emissions Fee Calculation] (DEP Form No. 62-210.900(5)) shall be submitted by April 1 of each year, for the previous calendar year, to the Department of Environmental Protection's Division of Air Resource Management. Each Title V source shall submit the annual operating report using the DEP's Electronic Annual Operating Report (EAOR) software, unless the Title V source claims a technical or financial hardship by submitting DEP Form No. 62-210.900(5) to the DEP Division of Air Resource Management instead of using the reporting software. Emissions shall be computed in accordance with the provisions of subsection 62-210.370(2), F.A.C. Each Title V source must pay between January 15 and April 1 of each year an annual emissions fee in an amount determined as set forth in subsection 62-213.205(1), F.A.C. The annual fee shall only apply to those regulated pollutants, except carbon monoxide and greenhouse gases, for which an allowable numeric emission-limiting standard is specified in the source's most recent construction permit or operation permit. Upon completing the required EAOR entries, the EAOR Title V Fee Invoice can be printed by the source showing which of the reported emissions are subject to the fee and the total Title V Annual Emissions Fee that is due. The submission of the annual Title V emissions fee payment is also due (postmarked) by April 1st of each year. A copy of the system-generated EAOR Title V Annual Emissions Fee Invoice and the indicated total fee shall be submitted to: **Major Air Pollution Source Annual Emissions Fee, P.O. Box 3070, Tallahassee, Florida 32315-3070.** Additional information is available by accessing the Title V Annual Emissions Fee On-line Information Center at the following Internet web site: http://www.dep.state.fl.us/air/emission/tvfee.htm. [Rules 62-210.370(3), 62-210.900 & 62-213.205, F.A.C.; and, §403.0872(11), Florida Statutes (2013)]

{Permitting Note: Resources to help you complete your AOR are available on the electronic AOR (EAOR) website at: http://www.dep.state.fl.us/air/emission/eaor. If you have questions or need assistance after reviewing the information posted on the EAOR website, please contact the Department by phone at (850) 717-9000 or email at eaor@dep.state.fl.us.}

{Permitting Note: The Title V Annual Emissions Fee form (DEP Form No. 62-213.900(1)) has been repealed. ***A separate Annual Emissions Fee form is no longer required to be submitted by March 1st each year.****}*

FW7. Annual Statement of Compliance. The permittee shall submit an annual statement of compliance to the compliance authority at the address shown on the cover of this permit and to the US. EPA at the address shown below within 60 days after the end of each calendar year during which the Title V air operation permit was effective. [Rules 62-213.440(3)(a)2. & 3. and (b), F.A.C.]

U.S. Environmental Protection Agency, Region 4
Atlanta Federal Center
61 Forsyth Street, SW
Atlanta, Georgia 30303
Attn: Air Enforcement Branch

FW8. Prevention of Accidental Releases (Section 112(r) of CAA). If, and when, the facility becomes subject to 112(r), the permittee shall:

a. Submit its Risk Management Plan (RMP) to the Chemical Emergency Preparedness and Prevention Office (CEPPO) RMP Reporting Center. Any Risk Management Plans, original submittals, revisions or updates to submittals, should be sent electronically through EPA's Central Data Exchange system at the following address: https://cdx.epa.gov. Information on electronically submitting risk management plans using the Central Data Exchange system is available at: http://www2.epa.gov/rmp. The RMP Reporting Center can be contacted at: RMP Reporting Center, Post Office Box 10162, Fairfax, VA 22038, Telephone: (703) 227-7650.
b. Submit to the permitting authority Title V certification forms or a compliance schedule in accordance with Rule 62-213.440(2), F.A.C.[40 CFR 68]

Other Requirements

FW9. Semi-Annual Monitoring Reports. The permittee shall monitor compliance with the terms and conditions of this permit and shall submit reports of any deviations from the requirements of these conditions at least every six (6) months. All instances of deviations from permit requirements must be clearly identified in such reports, including reference to the specific requirement and the duration of such deviation. All reports shall be accompanied by a certification by a responsible official, pursuant to subsection 62-213.420(4), F.A.C. (See also Conditions RR2. – RR4. of Appendix RR, Facility-wide Reporting Requirements, for additional reporting requirements related to deviations.) [Rule 62-213.440(1)(b)3.a., F.A.C.]

{Permitting Note: EPA has clarified that, pursuant to 40 CFR 70.6(a)(3), the word "monitoring" is used in a broad sense and means monitoring (i.e., paying attention to) the compliance of the source with all emissions limitations, standards, and work practices specified in the permit.}

FW10. The use of property, facilities, equipment, processes, products, or compounds, or the commission of paint overspraying or any other act, that causes or materially contributes to a public nuisance is prohibited, pursuant to the Hillsborough County Environmental Protection Act, Section 16, Chapter 84-446, Laws of Florida, as Amended.

FW11. Startup, Shutdown, and Malfunction. At all times, including periods of startup, shutdown, and malfunction, the permittee shall operate and maintain any affected source, including associated air pollution control equipment, in a manner consistent with good air pollution control practices for minimizing emissions at least to the levels required by all relevant standards. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the EPC which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. Malfunctions shall be corrected as soon as practicable after their occurrence in accordance with the *Startup, Shutdown, and Malfunction Plan*. [40 CFR 63.6(e)(1)(i) and (ii), 40 CFR 60.11(d), and Rule 62-4.070(3), F.A.C]

FW12. Special Compliance Tests. When the Environmental Protection Commission of Hillsborough County (EPC) after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a Department rule or in a permit issued pursuant to those rules is being violated, it shall require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit, unless the EPC obtains other information sufficient to demonstrate compliance. The owner or operator of the emissions unit shall provide a report on the results of said tests to the EPC in accordance with the provisions of subsection 62-297.310(10), F.A.C. [Rule 62-297.310(8)(c), F.A.C.]

FW13. Circumvention of Control Device. 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.]

FW14. Modification. The permittee shall provide timely notification to the Environmental Protection Commission of Hillsborough County prior to implementing any changes that may result in a modification to this permit pursuant to Rule 62-210.200, F.A.C., Modification. The changes do not include normal maintenance, but may include, and are not limited to, the following, and may also require prior authorization before implementation: [Rules 62-210.300 and 62-4.070(3), F.A.C.]

a. Alteration or replacement of any equipment* or major component of such equipment.
b. Installation or addition of any equipment* which is a source of air pollution.
c. Processing or charging any new materials at the facility.

*Not applicable to routine maintenance, repair, or replacement of component parts of an air emissions unit.

FW15. Certification by Responsible Official (RO). In addition to the professional engineering certification required for applications by Rule 62-4.050(3), F.A.C., any application form, report, compliance statement, compliance plan and compliance schedule submitted pursuant to Chapter 62-213, F.A.C., shall contain a certification signed by a responsible official that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. Any responsible official who fails to submit any required information or who has submitted incorrect information shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary information or correct information. [Rule 62-213.420(4), F.A.C.]

FW16. All applicable rules of the Environmental Protection Commission of Hillsborough County including design discharge limitations specified in the application shall be adhered to. The permit holder may also need to comply with county, municipal, federal, or other state regulations prior to construction.
[Rule 62-4.070(7), F.A.C.]

FW17. Transfer of Ownership. If the permittee wishes to transfer this permit to another owner, an "Application for Transfer of Permit" (DEP Form 62-210.900(7)) shall be submitted, in duplicate, to the Environmental Protection Commission of Hillsborough County within 30 days after the sale or legal transfer of the permitted facility.
[Rule 62-4.120, F.A.C.]

FW18. Outdoor Lead Storage. The permittee shall not store lead ingots outdoors. Also, the permittee shall ensure that all lead bearing materials that are stored outdoors are placed in containers and are covered at all times. In addition, the permittee shall ensure that any contaminated soils stored outdoors are covered and wetted.
[Rules 62-4.070(3)]

FW19. Facility-wide Lead Concentration through the Vents. Pursuant to 40 CFR 63.543 and Specific Conditions A.14.b., B.33.a., C.20.a. and G.13.b., the permittee must maintain the flow-weighted average concentration of lead compounds in vent gases from a secondary lead smelting facility at or below 0.20 milligrams of lead per dry standard cubic meter (0.000087 grains of lead per dry standard cubic foot).

(1) You must demonstrate compliance with the flow weighted average emissions limit on a 12-month rolling average basis, calculated monthly using the most recent test data available.

(2) Until 12 monthly weighted average emissions rates have been accumulated, calculate only the monthly average weighted emissions rate.

(3) You must use Equation 1 of this section to calculate the flow-weighted average concentration of lead compounds from process vents:

$$C_{FWA} = \frac{\sum_{i=1}^{n} F_i \times C_i}{\sum_{i}^{n} F_i} \quad \text{(Eq. 1)}$$

Where:

C_{FWA} = Flow-weighted average concentration of all process vents.

n = Number of process vents.

F_i = Flow rate from process vent *i* in dry standard cubic feet per minute, as measured during the most recent compliance test.

C_i = Concentration of lead in process vent *i*, as measured during the most recent compliance test.

(4) Each month, you must use the concentration of lead and flow rate obtained during the most recent compliance test performed prior to or during that month to perform the calculation using Equation 1 of this section.

(5) If a continuous emissions monitoring system (CEMS) is used to measure the concentration of lead in a vent, the monthly average lead concentration and monthly average flow rate must be used rather than the most recent compliance test data.

FW20. Spark Arresting System. The permittee shall operate and maintain a spark arresting system for Baghouse Torit D (roof area vent above the furnace area). [Rule 62-4.070(3), F.A.C.]

FW21. Appendix SIP. The permittee shall implement additional contingency measures, as reflected in Appendix SIP of this permit if the requirement is triggered. [40 CFR Part 52, Florida State Implementation Plan, as amended in 80 FR 20443]

FW22. Operating Rate During Compliance Testing. Rule 62-297.310(2), F.A.C., which is included in Appendix CTR of this permit, states: [Rule 62-297.310(2), F.A.C.; Permit No. 0570057-030-AC]

"Testing of emissions shall be conducted with the emissions unit operating at permitted capacity. If it is impractical to test at permitted capacity, an emissions unit may be tested at less than the maximum permitted capacity. If an emissions unit is tested at less than the testing capacity, another emissions test shall be conducted and completed no later than 60 days after the emissions unit operation exceeds 110% of the capacity at which its most recent emissions test was conducted. Testing capacity is defined as at least 90 percent of the maximum operation rate specified by the permit.

This rule requires that an emission unit capacity be limited to a maximum of 110% of the lowest capacity at which the most recent compliance test was conducted for any pollutant for an emission source with multiple pollutants and emissions standards. If an emission unit is tested at 70% capacity during compliance testing for Pb and at 80% capacity when compliance testing for NOX is preformed, then during normal operation of the emission unit its capacity shall be limited to 77% (70% x 1.1) **not** 88% (80% x 1.1) until such time that a new compliance test is conducted for Pb at a higher capacity. Upon testing for lead (or any other pollutant), the same capacity analysis shall be performed again to determine the unit capacity limiting pollutant (if any).

A. Battery Breaking Area

This section of the permit addresses the following emissions unit.

EU ID No.	Emission Unit Description
026	**Battery breaking area**: includes a hammer mill, separation equipment, 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 the desulfurization process, the lead salts are transferred to the material charging storage area along with the metallic lead.

Emissions from the hammer mill (PM, SAM and Pb) are vented to a 25,700 acfm wet impingement scrubber (Tri-Mer Whirl Wet Model 280-H) and exhausted via the 130 foot Raw Material Processing Center (RMPC) Scrubber stack.

OPERATIONAL RESTRICTIONS

A.1. Battery Breaker Capacity: The battery breaker shall be limited to 1,440 TPD of spent lead-acid batteries with a maximum rate in any consecutive twelve month period of 438,000 tons. This 438,000 TPY limit shall be demonstrated by a 12-month rolling total. Records shall be kept on site for a period of 5 years. [Rule 62-210.200(PTE), F.A.C.; Permit No. 0570057-030-AC]

A.2. Hours of Operation: The hours of operation of the battery breaking area are not limited (8,760 hours per year). [Rules 62-4.070(3) and 62-210.200(PTE), F.A.C.; Permit No. 0570057-020-AC]

EMISSIONS STANDARDS

A.3. PM Emissions Standard (including SAM): PM emissions including SAM from the battery breaking area shall not exceed 0.005 grains per dry standard cubic foot (gr/dscf) or 1.1 lbs/hr. [Rules 62-4.070(3) and 62-210.200(PTE), F.A.C.; Permit No. 0570057-020-AC]

A.4. 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 . [Rules 62-4.070(3) and 62-210.200(PTE), F.A.C.; Permit No. 0570057-020-AC]

A.5. SO_2 Emission Standard: SO_2 emissions from the battery breaker stack shall not exceed 5.0 mg/dscm or 0.48 lbs/hr. [Rules 62-4.070(3) and 62-210.200(PTE), F.A.C.; Permit No. 0570057-020-AC]

A.6. VOC Emissions Standard: VOC emissions from the battery breaker stack shall not exceed 0.28 lbs/hr. [Rules 62-4.070(3) and 62-210.200(PTE), F.A.C.; Permit No. 0570057-020-AC]

A.7. Visible Emission (VE) Standard: VE from the battery breaking area stack shall not exceed 3% opacity. [62-296.603 and 62-296.712, F.A.C.; and 40 CFR 60.122(a)(2); Permit No. 0570057-020-AC]

TESTING, MONITORING AND RECORDS REQUIREMENTS

A.8. The battery breaker stack shall be tested annually during each calendar year (January 1st to December 31th) to demonstrate compliance with the PM and Pb standards. The Pb and PM tests shall be conducted no later than 12 calendar months following the previous compliance test. In addition, the battery breaker stack shall be tested, 180 days prior to the renewal application due date, to demonstrate compliance with the SO_2 standard. [Rules 62-4.070(3), 62-210.200(PTE) and 62-297.310(8)(a), F.A.C.; 40 CFR 63.543(g)(1); Permit No. 0570057-020-AC]

A.9. The battery breaking area stack shall be tested annually during each calendar year (January 1st to December 31th) for Visible Emission (VE). [Rules 62-4.070(3), F.A.C. and 62-297.310(8)(a)]

A.10. The permittee shall notify the EPCHC (Compliance Authority) in writing at least 60 days prior to any required lead tests and 15 days prior to any required tests for other pollutants. Tests shall be conducted in accordance with the applicable requirements specified in Appendix TR (Facility-wide Testing Requirements) of this permit. [Rule 62-297.310(9), F.A.C.; 40 CFR 63.9(e)]

A.11. 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 (FIA).

A.12. Scrubber Monitoring Procedure: The permittee must monitor and record the pressure drop value at least once every hour and must maintain the pressure drop between 7.3 and 8.7 inches of water.

[40 CFR 63.8(f) and 40 CFR 63.548(i), ASP 15-GG-AP]

A.13. The permittee shall prepare and submit reports for all required tests in accordance with the requirements specified in Appendix TR (Facility-wide Testing Requirements) of this permit. For each test run, the report shall also indicate the operating rate. [Rule 62-297.310(10), F.A.C.]

NESHAP APPLICABILITY

A.14. 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. Subpart X is provided in Appendix X of this permit. Notwithstanding, NESHAP Subpart X requires;

a. that the battery breaker stack maintain the concentration of lead compounds at or below 1.0 milligrams of lead per dry standard cubic meter (mg/dscm). This requirement is met by meeting the Pb emission limit given in Specific Condition **A.4** of this subsection.
b. that existing sources must maintain a flow-weighted average concentration of lead compounds in vent gases from a secondary lead smelting facility at or below 0.20 mg/dscm of lead.

[Rule 62-204.800(11)(b) and 40 CFR 63, Subpart X – National Emissions Standards for Hazardous Air Pollutants (NESHAP) for Secondary Lead Smelting].

COMPLIANCE TESTING MONITORING

A.15. Compliance Monitoring Procedure: During compliance testing required in the subsection, the permittee shall monitor the battery input rate to the battery breaking process during testing manually with an employee standing at the pallet dumper at the apron feeder to count the pallets fed to the feeder or by automated means to record the operating rate during the compliance test. The hourly feed rate shall not exceed 60 TPH. [Rules 62-212.400(BACT) and 62-210.200(PTE), F.A.C.; and Permit No. 0570057-030-AC]

{Permitting Note: The permittee may submit to the Compliance Authority for approval alternative methods of monitoring the battery input rate to the apron feeder, prior to the compliance testing and concurrent with the test notification.}

ON-GOING COMPLIANCE MONITORING

A.16. On-Going Compliance Monitoring Procedure: Ongoing production monitoring will be accomplished on a daily basis by manually counting pallets per day or by automated means to estimate the amount of batteries broken and shall not exceed 1,440 TPD in a 24 hour period.
[Rules 62-212.400(BACT) and 62-210.200(PTE), F.A.C., and Permit No. 0570057-030-AC]

B. Lead Smelting

This section of the permit addresses the following emissions units.

ID No.	Emission Unit Description
030	Feed dryer
031	Collocated reverb furnace
032	Collocated blast 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 Foster Wheeler shaker type baghouse with a design flow rate of 18,000 acfm at approximately 200 degrees Fahrenheit (°F) before being ducted to the 130 foot 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 30 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. Other non-lead bearing fluxes and associated materials, including but not limited to coke, cast iron, silica, limerock, and shredded steel, are also added to the furnace as needed. Metallurgical coke will be combined with slag to help supply fuel for the blast furnace smelting process. Coke breeze may also be added to the slag as a reductant.

The blast furnace produces a slag (i.e., by-product) which will be either reused or reclaimed in the furnace. The slag is first tested using the EPA Methods 1311, 3005a and 6010b for sampling, preparation, digestion and analysis of Toxicity Characteristic Leaching Procedure extracts. If the slag is characteristically hazardous for lead, the material is treated with a stabilizing agent or returned to the furnaces for further reclamation. When the treatment process is chosen, the slag is tested again using the TCLP Methods 1311, 3005a and 6010b. The stabilizing agent is either brought in by a portable Tilt-up Pre-Filled Vertical Silo or pre-filled super sacs from the supplier. Blast and Reverb Operating Collocated: Exhaust gases from both furnaces are ducted to a 10 MMBtu/hr afterburner, followed by a Foster Wheeler shaker type baghouse and a 54,000 acfm wet Sulfur Dioxide scrubber before being combined with the exhaust gases from the feed dryer for final discharge through the 130 foot process stack. Blast Operation Only Mode: Exhaust gases from the blast furnace are ducted to a blast only dedicated afterburner. The dedicated afterburner will require a startup period where the dedicated afterburner burners will be firing while the reverb burners are in high or low fire (dedicated afterburner standby mode). Once the dedicated afterburner reaches required temperature for operating, the reverb burners will be placed in banked mode.

OPERATIONAL RESTRICTIONS

B.1. Blast and Reverb Furnace Capacities: The maximum charge rate of the reverb furnace is 960 TPD with a maximum capacity of 262,800 tons in any twelve month consecutive period. The maximum charge rate of the blast furnace is 180 TPD with a maximum capacity of 65,700 tons in any twelve month consecutive period. [Rules 62-210.200(PTE) and 62-212.400(10)(c), F.A.C.; and Permit No. 0570057-030-AC]

B.2. Reverb Furnace Burner Capacity: The maximum heat input rating of the reverb furnace burner is 30 MMBtu/hr. [Rules 62-210.200(PTE) and 62-212.400(10)(c), F.A.C.; and Permit No. 0570057-035-AC]

B.3. Feed Dryer Capacity: The maximum charge rate of the dryer is 960 TPD with a maximum capacity of 338,400 tons in any twelve month consecutive period.
[Rules 62-210.200(PTE) and 62-212.400(10)(c), F.A.C.; and Permit No. 0570057-030-AC]

B.4. Feed Dryer Burner Capacity: The maximum heat input rating of the dryer burner is 10 MMBtu/hr. [Rules 62-210.200(PTE) and 62-212.400(10)(c), F.A.C.; and Permit No. 0570057-020-AC]

B.5. Hours of Operation: The hours of operation of the dryer and blast and reverb furnaces are not limited (8,760 hours per year).
[Rules 62-210.200(PTE) and 62-212.400(10)(c), F.A.C.; and Permit No. 0570057-020-AC]

B.6. Reverb Furnace Fuel: 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 262,800 MMBtu to the reverb furnace burners during any consecutive twelve month period. [Rules 62-210.200(PTE) and 62-212.400(10)(c), F.A.C.; and Permit No. 0570057-035-AC]

B.7. Feed Dryer Fuel: Natural gas is the primary fuel for the feed dryer burner. Fuel usage shall not exceed a total heat input of 87,600 MMBtu to the dryer burner during any consecutive twelve month period. [Rule 62-210.200(PTE), F.A.C.; and Permit No. 0570057-020-AC]

B.8. Dedicated Blast Furnace Afterburner: The maximum heat input rating of the dedicated blast furnace burner is 20 MMBtu/hr. The dedicated blast furnace afterburner shall only be operated during times when the reverb furnace is not in operation.
[Rules 62-4.070(3) and 62-210.200(PTE), F.A.C.; Permit No. 0570057-030-AC]

B.9. Lead Production: The maximum lead produced from the EFT facility shall not exceed 150,000 tons in any consecutive twelve month period. [Rule 62-210.200(PTE), F.A.C.; and Permit No. 0570057-020-AC]

B.10. The permittee shall not feed un-compacted waste material to the furnaces. [Rules 62-4.070(3), F.A.C.]

EMISSIONS STANDARDS

B.11. PM Emission Standard: PM emissions from the dryer, blast furnace and reverb furnace shall not exceed 0.005 gr/dscf . [Rules 62-4.070(3), 62-210.200(PTE) and 62-212.400(10)(c), F.A.C.; and Permit No. 0570057-020-AC]

B.12. Pb Emission Standard: Pb emissions from the dryer and blast furnace and reverb furnace shall not exceed 0.3 mg/dscm. [Rules 62-4.070(3), 62-210.200(PTE), and 62-212.400(10)(c), F.A.C.; 40 CFR 63.543(a); and Permit No. 0570057-020-AC]

B.13. NO_X Emission Standard: NOX emissions from the feed dryer shall not exceed 0.21 lb/MMBtu and 2.1 pounds per hour (lb/hr) as demonstrated by a combined 42.2 lb/hr 30-day rolling CEMS average on the process stack. NOX emissions from the blast furnace and reverb furnace shall not exceed 0.80 lb/ton and 0.80 lb/ton of material charged, respectively, as demonstrated by a combined 42.2 lb/hr 30-day rolling CEMS average on the process stack. NOX emissions from the process stack shall not exceed 158 tons per year (tpy) on a 12-month rolled month CEMS average basis. [Rules 62-4.070(3), 62-210.200(PTE), and 62-212.400(10)(c), F.A.C.; Permit Nos. 0570057-020/035-AC: and PSD Avoidance]

B.14. CO Emission Standard: 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. CO emissions from the process stack shall not exceed 464 tpy on a 12-month rolled month CEMS average basis. [Rules 62-4.070(3) and 62-210.200(PTE), F.A.C.; and Permit Nos. 0570057-020/035-AC; and PSD Avoidance]

B.15. SO_2 Emission Standard: SO_2 emissions from the feed dryer, blast furnace and reverb furnace combined with SO_2 emission from the hygiene stack shall not exceed 202.24 lb/hr, as demonstrated by a combined 30-day rolling CEMS averages on the hygiene and process stacks. SO2 emissions from the process stack shall not exceed 202 tpy on a 12-month rolled month CEMS average basis.

1. ***SO_2 CEMS Data***. Based on SO_2 CEMS data, the amount of reagents used in the desulfurization process and the wet scrubber shall be adjusted as required to meet the permitted SO_2 emission limit. Records shall be kept on-site indicating the amount and type of reagent used and the corresponding SO_2 emissions rates. These records shall be kept on site for a period of 5 years and open to inspection by the Compliance Authority.

2. ***Alkaline Reagents.*** Use of other reagents in the SO2 scrubber, other than Caustic, is not authorized unless prior approval is obtained from the EPC.

[Rules 62-4.070(3) and 62-210.200(PTE), F.A.C.; Permit Nos. 0570057-020/035-AC; and PSD Avoidance]

B.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. 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 annual compliance tests on the process stack.
[Rules 62-4.070(3) and 62-210.200(PTE) F.A.C.; and 40 CFR 63.543(c); and Permit No. 0570057-020-AC]

B.17. D/F Emission Standard: The blast furnace shall not discharge Dioxins and Furan in excess of 170 ng/dscm by volume, expressed as TEQ corrected to 7 percent Oxygen (O_2), to the atmosphere when the reverb furnace is not operating as demonstrated by compliance tests. When the blast furnace and reverb furnace are both operating, the collocated blast and reverb furnace shall not discharge Dioxins and Furan in excess of 0.5 ng/dscm by volume, expressed as TEQ corrected to 7 percent Oxygen (O_2), to the atmosphere as demonstrated by compliance tests on the process stack. [Rules 62-4.070(3) and 62-210.200(PTE) F.A.C.; and 40 CFR 63.543(c)]

B.18. VE Standard: VE from the dryer, blast and reverb furnaces shall not exceed 3% opacity as demonstrated by annual compliance tests on the process stack.
[Rules 62-296.603 and 62-296.712, F.A.C.; and 40 CFR 60.122(a)(2); and Permit No. 0570057-020-AC]

TESTING AND MONITORING REQUIREMENTS

B.19. PM, Pb and VOC Compliance Tests: The feed dryer and blast and reverb furnaces shall be tested to demonstrate compliance with the PM, Pb, and VOC standards annually during each calendar year (January 1st to December 31th). The Pb, PM and VOC tests shall be conducted no later than 12 calendar months following the previous compliance test. A VOC test shall be performed in both operation modes; (1) collocated reverb and blast furnace mode and (2) blast furnace only mode. [Rules 62-4.070(3) and 62-297.310(8)(a), F.A.C.; 40 CFR 63.543(g)(1) and (h)]

B.20. D/F Compliance Test: The permittee must conduct a performance test for dioxins and furans emissions from each process vent that has established limits for dioxins and furans at least once every 6 years following the previous compliance test. The D/F test shall be performed in both operation modes; (1) collocated reverb and blast furnace mode and (2) blast furnace only mode. [Rule 62-4.070(3), F.A.C.; 40 CFR 63.543(i)]

{Permitting Note: Collocated reverb and blast mode testing was performed on 7/15/14. Blast furnace only mode testing was performed on 6/20/16}

B.21. VE Compliance Tests: The feed dryer and blast and reverb furnaces shall be tested to demonstrate compliance with the VE standards once during each calendar year (January1st to December 31th).
[Rule 62-4.070(3) and 62-297.310(8)(a), F.A.C.]

B.22. Test Requirements: The permittee shall notify the EPCHC in writing at least 60 days prior to any required lead, D/F and VOC tests and 15 days prior to any required tests for other pollutants. Tests shall be conducted in accordance with the applicable requirements specified in Appendix CTR (Common Testing Requirements) of this permit. [Rule 62-297.310(9), F.A.C.; 40 CFR 63.9(e)]

B.23. 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 an FIA.

B.24. 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.]

B.25. The permittee shall audit each CEMS at least once each calendar quarter. Successive quarterly audits shall occur no closer than 2 months. Relative Accuracy Test Audit (RATA) shall be conducted at least once every four calendar quarters and other alternative audit procedures (i.e. RAA or CGA) may be used as approved by the Administrator for the other three of four calendar quarters. All test audits shall be conducted as specified in 40 CFR 60, Appendix F and must be submitted to the EPCHC within 45 days of the audit completion date. [Rule 62-4.070(3), F.A.C ; 40 CFR 60, Appendix F]

B.26. Temperature Monitoring of Afterburner: The permittee shall monitor and record the temperature of the afterburner at least every 15 minutes during the annual VOC and D/F 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 VOC and D/F compliance demonstration, it shall constitute a violation of the applicable emission standard for VOC and D/F listed in this permit. [40 CFR 63.548(j)(1)]

B.27. 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)]

B.28. 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

B.29. 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. [Rule 62-4.070(3), F.A.C. and 40 CFR 63]

B.30. Actual Emissions Reporting : The permittee shall report to the EPC within 60 days after the end of each calendar year during the 10-year period setting out the unit's annual emissions during the calendar year that preceded submission of the report. The information required to be documented and maintained pursuant to subparagraphs 62-212.300(1)(e)1 and 2, F.A.C., shall be submitted to the EPC, which shall make it available for review to the general public. The report shall contain the following: [Rules 62-212.300(1)(e) and 62-210.370, 62-210.200(PTE), F.A.C., and Permit Nos. 0570057-030/035-AC]

1. The name, address and telephone number of the owner or operator of the major stationary source;

2. The annual emissions calculations pursuant to the provisions of 62-210.370, F.A.C., which are provided in Appendix CTR of this permit;
3. If the emissions differ from the preconstruction projection, an explanation as to why there is a difference; and
4. Any other information that the owner or operator wishes to include in the report.

The following pollutants shall be reported:

a. The CO emissions from the facility shall be monitored, with records kept on site and open to inspection by the EPC, to show that the CO PSD SER of 100 TPY has not been exceeded due to the operation of the dedicated blast furnace afterburner.
b. Annual reporting of actual emissions of carbon monoxide (CO), nitrogen oxides (NOX) and sulfur dioxide (SO2) is required for the process stack associated with the reverb furnace (EU 031). Emissions of CO, NO_X and SO_2 from the process stack shall not exceed 464 tons per year (TPY), 158 TPY and 202 TPY, respectively.

{Permitting Note: The Projected Actual Emissions Tracking Sheet under the "Appendix P" can be used to develop the annual emission reports.

The first annual facility-wide CO emission reporting is due 60 days after the end of the calendar year 2017.

The first annual process stack CO, NO_X, SO_2 emission reporting is due 60 days after the end of the calendar year 2019.}

B.31. Test Reports: The permittee shall prepare and submit reports for all required tests in accordance with the requirements specified in Appendix TR (Testing Requirements) of this permit. For each test run, the report shall also indicate the operating rate. [Rule 62-297.310(10), F.A.C.]

NSPS AND NESHAP APPLICABILITY

B.32. 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].

B.33. 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. Subpart X is provided in Appendix X of this permit.

a. *Lead Emissions from Process Stack.* NESHAP Subpart X requires that the process stack maintain the concentration of lead compounds at or below 1.0 milligram of lead per dry standard cubic meter (mg/dscm). This requirement is met by meeting the Pb emission limit given in Specific Condition B.10**.** of this subsection. Further, existing sources must maintain a flow-weighted average concentration of lead compounds in vent gases from a secondary lead smelting facility at or below 0.20 mg/dscm of lead.
b. *Collocated Blast and Reverberatory Furnaces*.
   i. THC: 20 ppmv expressed as propane corrected to 4% CO_2(ppmv)
   ii. Dioxin and furan (D/F): 0.50 ng/dscm expressed as toxic equivalents (TEQ) corrected to 7% O_2
c. Collocated Blast and Reverberatory Furnaces when the Reverberatory Furnace is not Operating.
   i. THC: 360 ppmv expressed as propane corrected to 4% CO_2
   ii. D/F: 170 ng/dscm TEQ corrected to 7% O_2

[Rule 62-204.800(11)(b) and 40 CFR 63, -Subpart X – National Emissions Standards for Hazardous Air Pollutants (NESHAP) for Secondary Lead Smelting].

COMPLIANCE TESTING MONITORING

B.34. Monitoring Procedure: During compliance testing required in the subsection, the permittee shall manually or by automated means monitor the process rates and burner firing rates during compliance stack testing. The permittee shall monitor the process rates for the furnaces and feed dryer by manually reading and recording meter readings and monitor the system with employees at each unit or by automated means. The hourly maximum processing capacities of lead-bearing feed material for reverb furnace and blast furnace are 40 TPH and 7.5 TPH, respectively. For the purposes of this condition, the fluxes and associated materials, including but not limited to coke, cast iron, silica, limerock, and shredded steel, shall not be considered lead-bearing feed material. For the feed dryer, the maximum charge rate of the dryer is 40 TPH. [Rules 62-212.400(BACT) and 62-210.200(PTE), F.A.C.; and Permit No. 0570057-030-AC]

{Permitting Note: The permittee may submit to the Compliance Authority for approval alternative methods of monitoring the process and burner firing rate to the apron feeder during compliance testing.}

ON-GOING COMPLIANCE MONITORING

B.35. On-Going Compliance Monitoring Procedure: For ongoing compliance, inputs to the dryer and furnaces on a daily basis shall be monitored for comparison with daily process limits of 960 TPD for the feed dryer, 960 TPD for the reverb furnace and 180 TPD for the blast furnace. Additionally, a 24-hour period shall be used to demonstrate compliance for monitoring purposes.
[Rules 62-212.400(BACT) and 62-210.200(PTE), F.A.C.; and Permit No. 0570057-030-AC]

C. Furnace Tapping, Charging and Lead Refining

This section of the permit addresses the following emissions unit.

ID No.	Emission Unit Description
033	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 the 130 foot hygiene stack.

The refining kettles, with a design processing rate of 20 TPH, are indirectly heated by natural gas burners (EU ID 034) 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.

The initial startup date of the furnace tapping, charging and lead refining was 12/15/12.

PERFORMANCE RESTRICTIONS

C.1. Refining Kettle Production: The maximum total lead casting rate from the refining process shall not exceed 1,584 TPD (equivalent to 66 TPH). [Rules 62-210.200(PTE) and 62-212.400(10)(c), F.A.C.; and Permit No. 0570057-030-AC]

C.2. Hours of Operation: The hours of operation of the refining kettles are not limited (8,760 hours per year). [Rules 62-210.200(PTE) and 62-212.400(10)(c), F.A.C.; and Permit No. 0570057-020-AC]

C.3. Lead Production: The maximum lead produced from the EFT facility shall not exceed 150,000 tons in any consecutive twelve month period. [Rule 62-210.200(PTE), F.A.C.; and Permit No. 0570057-020-AC]

EMISSIONS STANDARDS

C.4. PM Emissions Standard: PM emissions from the hygiene stack shall not exceed 0.005 gr/dscf or 2.68 lbs/hr. [Rules 62-4.070(3), 62-210.200(PTE), and 62-212.400(10)(c), F.A.C.; and Permit No. 0570057-020-AC]

C.5. Pb Emissions Standard: Pb emissions from the hygiene stack shall not exceed 0.2 mg/dscm or 0.05 lbs/hr. [Rules 62-4.070(3), 62-210.200(PTE), and 62-212.400(10)(c), F.A.C. and 40 CFR 63.543(a); and Permit No. 0570057-020-AC]

C.6. NO_X Emissions Standard: NO_X emissions shall not exceed 5.0 lbs/hr as demonstrated by a 30-day rolling CEMS average on the hygiene stack. [Rules 62-4.070(3), 62-210.200(PTE), and 62-212.400(10)(c), F.A.C.; and Permit No. 0570057-030-AC]

C.7. SO_2 Emissions Standard: SO_2 emissions from the hygiene stack when combined with the SO_2 emissions from the process stack shall not exceed 202.24 lbs/hr as demonstrated by 30-day rolling CEMS averages on the process and hygiene stacks. [Rules 62-4.070(3), 62-210.200(PTE), and 62-212.400(10)(c), F.A.C.; and Permit No. 0570057-030-AC]

C.8. VOC Emissions Standard: VOC emissions from the hygiene stack shall not exceed 20 parts per million or 8.95 lbs/hr. [Rules 62-4.070(3), 62-210.200(PTE), and 62-212.400(10)(c), F.A.C.; 40 CFR 63.543(f); Permit No. 0570057-020-AC]

C.9. VE Standard: VE from the hygiene stack shall not exceed 3% opacity. [Rules 62-296.603 and 62-

296.712, F.A.C.; and 40 CFR 60.122(a)(2); and Permit No. 0570057-030-AC]

TESTING AND MONITORING REQUIREMENTS

C.10. PM, Pb and VOC Compliance Tests: The hygiene stack exhaust shall be tested to demonstrate compliance with the PM and Pb standards each calendar year (January 1st to December 31th). The PM and Pb annual tests shall be conducted no later than 12 calendar months following the previous compliance test. The hygiene stack shall also be tested to demonstrate compliance with the VOC standards. The VOC compliance test shall be conducted no later than 24 calendar months following the previous compliance test. If the test results show that the VOC emissions exceed 50% of the allowable VOC emissions, as specified in **Specific Condition No. C.8**, the VOC testing shall be performed within 12 months of the previous compliance test. [Rule 62-4.070(3), F.A.C.; and 40 CFR 63.543(g)(1) and (h), ASP 16-C-AP]

C.11. VE Compliance Tests: The hygiene stack exhaust shall be tested to demonstrate compliance with the VE standards annually during each calendar year (January 1st to December 31th). [Rule 62-4.070(3) and 62-297.310(8)(a), F.A.C.]

C.12. Test Requirements: The permittee shall notify the EPCHC in writing at least 60 days prior to any required lead and VOC tests and 15 days prior to any required tests for other pollutants. Tests shall be conducted in accordance with the applicable requirements specified in Appendix CTR (Common Testing Requirements) of this permit. [Rule 62-297.310(9), F.A.C.; 40 CFR 63.9(e)]

C.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 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 an FIA.

C.14. 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.]

C.15. 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)]

C.16. 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

C.17. 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 63]

C.18. Test Reports: The permittee shall prepare and submit reports for all required tests in accordance with the requirements specified in Appendix TR (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

C.19. 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].

C.20. 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. Subpart X is provided in Appendix X of this permit.

a. *Lead Emission from Hygiene Stack*. NESHAP Subpart X requires that the hygiene stack maintain the concentration of lead compounds at or below 1.0 milligrams of lead per dry standard cubic meter (mg/dscm). This requirement is met by meeting the Pb emission limit given in **Specific Condition C.5** of this subsection. Further, existing sources must maintain a flow-weighted average concentration of lead compounds in vent gases from a secondary lead smelting facility at or below 0.20 mg/dscm of lead.

b. *THC Emission from the Furnace Charging and Tapping* . THC concentration in the furnace tapping and charging vent shall be at or below 20 ppmv, expressed as propane.

[Rule 62-204.800(11)(b) and 40 CFR 63, -Subpart X – National Emissions Standards for Hazardous Air Pollutants (NESHAP) for Secondary Lead Smelting].

COMPLIANCE TESTING MONITORING

C.21. Monitoring Procedure: During compliance testing required in the subsection, the permittee shall monitor the throughput rate at which the refined lead is cast. The maximum casting rate shall not exceed 66 TPH. To ensure that there is a representative load on furnace tapping and charging during stack tests, the permittee shall manually or by automated means measure the casting rate to ensure it does not exceed the 66 TPH limit.
[Rules 62-212.400(BACT) and 62-210.200(PTE), F.A.C.; and Permit No. 0570057-030-AC]

{Permitting Note: The permittee may submit to the Compliance Authority for approval alternative methods of monitoring the casting rate during compliance testing.}

ON-GOING COMPLIANCE MONITORING

C.22. On-Going Compliance Monitoring Procedure: For ongoing compliance, the casting rate shall be monitored for comparison with daily process limits of 1,584 TPD. Additionally, a 24-hour period shall be used to demonstrate compliance for monitoring purposes. [Rules 62-212.400(BACT) and 62-210.200(PTE), F.A.C.; and Permit No. 0570057-030-AC]

D. Refining Kettles Exhaust

This section of the permit addresses the following emissions unit.

ID No.	Emission Unit Description
034	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. 033). The kettles' in-direct combustion emissions are vented to the atmosphere through ten separate stacks.

PERFORMACE RESTRICTIONS

D.1. Heat Input Rate: The maximum combined heat to the 10 burners used to indirectly heat the refining kettles shall not exceed 40 MMBtu/hr.
[Rules 62-4.070(3) and 62-210.200(PTE), F.A.C.; and Permit No. 0570057-020-AC]

D.2. 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 350,400 MMBtu to all refining kettle burners in any consecutive twelve month period.
[Rules 62-4.070(3) and 62-210.200(PTE), F.A.C.; and Permit No. 0570057-020-AC]

EMISSION STANDARDS

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

TESTING AND MONITORING REQUIREMENTS

D.4. VE Compliance Tests: The kettle exhaust gas stacks shall be tested to demonstrate compliance with the VE standard annually during each calendar year (January 1st to December 31th). [Rule 62-4.070(3) and 62-297.310(8)(a), F.A.C.]

D.5. 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

D.6. 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 63]

D.7. Test Reports: The permittee shall prepare and submit reports for all required tests in accordance with the requirements specified in Appendix TR (Testing Requirements) of this permit. For each test run, the report shall also indicate the operating rate. [Rule 62-297.310(10), F.A.C.]

NESHAP APPLICABILITY

D.8. 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. 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. Alkaline Reagent Silo

This section of the permit addresses the following emissions unit.

ID No.	Emission Unit Description
028	The alkaline reagent silo with a bin filter

The alkaline reagent is received and stored in the 85' high silo. The alkaline reagent is then transferred from the silo to the desulfurization process and to the sulfur dioxide scrubber, which is used to control the SO_2 emissions from the reverb and blast furnaces. Emissions from the silo consist of PM and is controlled by a Modu-Kleen (from Dynamic Air Hypoly Filter) bin vent filter atop of the silo that filters the air displaced from the silo loading operation.

PERFORMANCE RESTRICTION

E.1. Maximum Fill Rate: The maximum fill rate for the silo shall not exceed 50 TPH with a maximum capacity of 25,000 tons per any consecutive twelve month period.
[Rules 62-4.070(3) and 62-210.200(PTE), F.A.C.; and Permit No. 0570057-020-AC]

EMISSIONS STANDARDS

E.2. PM Emission Standard: PM emissions from the silo's bin vent filter shall not exceed 0.005 gr/dscf.
[Rules 62-4.070(3) and 62-210.200(PTE), F.A.C.; and Permit No. 0570057-030-AC]

E.3. VE Standard: VE from the silo' bin vent filter shall not exceed 3% opacity as demonstrated by 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 E.2. 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.
[Rules 62-296.603 and 62-296.712, F.A.C.; and 40 CFR 60.122(a)(2); and Permit No. 0570057-030-AC]

TESTING AND MONITORING REQUIREMENTS

E.4. Compliance Tests: During each calendar year (January 1st to December 31st), the unit shall be tested to demonstrate compliance with the VE standard specified in Specific Condition E.3. [Rules 62-4.070(3) and 62-297.310(8), F.A.C.]

E.5. PM Compliance Test: The annual VE test in Specific Condition E.4. shall serve as a surrogate for the PM emissions test. If the VE emissions standard in Specific Condition E.3. is not met, PM tests utilizing EPA Method 5 must be conducted within 60 days on the silo bin vent filter to show compliance with the PM emissions standard in Specific Condition E.2.. [Rule 62-297.620(4), F.A.C.]

E.6. 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 TR (Testing Requirements) of this permit. [Rule 62-297.310(9), F.A.C.]

E.7. 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

E.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(10), F.A.C.]

F. Facility Grounds and Roadways

This section of the permit addresses the following emissions unit.

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

Vehicular traffic movement on plant roads and in parking areas produces fugitive emissions of PM and Pb. These fugitive emissions from paved areas at the plant are 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 has two mobile wheel wash stations to remove lead contamination from vehicles prior to exiting the building.

There are two ambient air monitoring stations for lead in Total Suspended Particles (Pb-TSP): EnviroFocus Special (EFS), Kenly Elementary School (Station ID: 12-057-0100). EFS is located at an adjacent property that is owned by Gopher Resources and is a non-regulatory special purpose monitor. Both devices operate at a sampling frequency of once every six days. Also, there are two other lead monitoring stations, the CSX Railyard [Station ID: 12-057-1066] and former Patent Scaffolding [Station ID: 12-057-1073], which are operated and maintained by the EPC.

{Permitting Note: PM10 and Pb from the roadways and grounds during operation of the facility were estimated to be 0.084 and 0.023 tons in any consecutive twelve month period.}

FACILITY OPERATION

F.1. SOP During Facility Operation: To demonstrate 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.
[Rules 62-210.200(PTE) and 62-212.400(10)(c), F.A.C.; Permit No. 0570057-020-AC]

F.2. Revised Operational SOP: If the permittee desires, a revised SOP to control fugitive dust emissions can be submitted to improve its effectiveness to the EPCHC for approval. [62-4.070(3), F.A.C.]

AMBIENT MONITORING AT KENLY ELEMENTARY SCHOOL [STATION ID: 12-057-0100]

F.3. Quality Assurance: Ambient monitoring 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, with the following exceptions for the special purpose monitor at the EFS monitoring site: 1) siting criteria in 40 CFR Part 58, Appendix E; and 2) Sections 2.4, National Performance Evaluations Programs, and 2.5 Technical Systems Audit Program of 40 CFR Prat 58, Appendix A; and the Department's *State-Wide Quality Assurance Air Program Plan* (*Plan*). Changes to the *Plan* will be distributed by BAM to the owner or operator. The owner or operator shall comply with the *Plan* changes as soon as practicable, but no later than upon renewal of this permit.

F.4. Monitoring Data: The owner or operator shall submit the verified monitoring data and quality assurance results to BAM 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.

F.5. 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)]

LIMITATIONS ON FACILITY OPERATIONS

F.6. 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. and Rule 62-210.200(PTE).]

F.7. 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

F.8. 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. 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
035	Building ventilation of enclosed facility controlled by Torit filter.
038	Building ventilation of enclosed facility controlled by new Torit filter with secondary HEPA filter.

The process areas of the facility are enclosed and the air exhausted from the facility is ventilated through two large 195,000 (Torits A, B and C combined into a common stack) and 160,000 acfm (Torits D and E combined into a common stack) Torit cartridge collectors identified as Torit filters. The 160,000 acfm Torit collector will have a high efficiency particulate air (HEPA) filter downstream of the cartridge collector. This air flow will produce an inward draft velocity at all openings in the building to prevent PM and Pb emissions from escaping uncontrolled. The filtered gases will be emitted from two new stacks identified as the Torit stacks.

PERFORMANCE RESTRICTIONS

G.1. Hours of Operation: The hours of operation of the enclosed facility are not limited (8,760 hours per year). [Rules 62-210.200(PTE) and 62-212.400(10)(c), F.A.C.; Permit No. 0570057-030-AC]

G.2. Malfunction: If the Torit filters malfunction 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.]

G.3. Production: The maximum lead produced from the enclosed facility shall not exceed 150,000 tons any consecutive twelve month period. [Rule 62-210.200(PTE), F.A.C.; Permit No. 0570057-020-AC]

EMISSIONS STANDARDS

G.4. PM Emissions Standard: PM emissions from each individual Torit stack shall not exceed 0.005 gr/dscf or 36.60 lbs/hr (EU 035) and 6.86 lb/hr (EU 038) as demonstrated by initial and annual compliance tests. [Rules 62-4.070(3), 62-210.200(PTE), and 62-212.400(10)(c), F.A.C.; Permit No. 0570057-027-AC]

G.5. Pb Emissions Standard: Pb emissions from each individual Torit stack shall not exceed 0.05 mg/dscm or 0.037 lb/hr (EU 035) and 0.030 lb/hr (EU 038) as demonstrated by initial and annual compliance tests. [Rules 62-4.070(3), 62-210.200(PTE), and 62-212.400(10)(c), F.A.C. and 40 CFR 63.543(a); Permit No. 0570057-027-AC]

G.6. VE Standard: Visible emissions from each individual Torit stack shall not exceed 3% opacity as demonstrated by initial and annual compliance tests.
[Rules 62-296.603 and 62-296.712, F.A.C.; and 40 CFR 60.122(a)(2); Permit No. 0570057-027-AC]

TESTING AND MONITORING REQUIREMENTS

G.7. PM and Pb Compliance Tests: Each Torit stack exhaust shall be tested to demonstrate compliance with the PM and Pb standards during each calendar year (January 1st to December 31st). The Pb and PM tests shall be conducted no later than 12 calendar months following the previous compliance test. [Rule 62-4.070(3) and 62-297.310(8)(a), F.A.C.; 40 CFR 63.543(g)(1)]

G.8. VE Compliance Tests: Each Torit stack exhaust shall be tested to demonstrate compliance with the VE standards during each calendar year (January 1st to December 31st) thereafter. [Rule 62-4.070(3) and 62-297.310(8)(a), F.A.C.]

G.9. Test Requirements: The permittee shall notify the EPC of Hillsborough County in writing at least 60 days prior to any required lead test and 15 days prior to any required tests for other pollutants. Tests shall be conducted in accordance with the applicable requirements specified in Appendix TR (Testing

Requirements) of this permit. [Rule 62-297.310(9), F.A.C.; 40 CFR 63.9(e)]

G.10. Opening In-Draft Velocity Requirement: The permittee must ventilate the total enclosure continuously to ensure negative pressure values of at least 0.013 mm of mercury (0.007 inches of water). Per 40 CFR 63.548, Monitoring Requirements, the permittee must operate and maintain a digital differential pressure monitoring system to continuously monitor each total enclosure as described in paragraphs (k)(1) through (5) of this section. Except for system breakdowns, out-of-control periods, repairs, maintenance periods, calibration checks, and zero (low-level) and high-level calibration drift adjustments, the Continuous Monitoring Systems (CMS) shall be in continuous operation to meet this requirement.[Rule 62-4.070(3); NESHAP 40 CFR 63, Subpart X and 40 CFR 63.8(c)(4); Permit No.0570057-020-AC]

G.11. 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

G.12. 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(10), F.A.C.]

NESHAP APPLICABILITY

G.13. 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. Subpart X is provided in Appendix X of this permit. Notwithstanding, NESHAP Subpart X requires:

a. that each torit stack exhaust maintain the concentration of lead compounds at or below 1.0 milligrams of lead per dry standard cubic meter (mg/dscm). This requirement is met by meeting the Pb emission limit given in **Specific Condition G.5** of this subsection.
b. that existing sources must maintain a flow-weighted average concentration of lead compounds in vent gases from a secondary lead smelting facility at or below 0.20 mg/dscm of lead.

[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. Emergency Generator

This section of the permit addresses the following emissions unit.

ID No.	Emission Unit Description
037	One 1,000 kilowatt (kW) liquid fueled emergency generator

The facility operates a diesel-fired emergency generator with a capacity of 1,000 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 100 hours per year.

H.1. Equipment: The permittee is authorized to operate and maintain one 1,000 kW emergency generator. [NSPS Subpart IIII and Rule 62-210.200(PTE), F.A.C.; Permit No. 0570057-030-AC]

H.2. Hours of Operation and Fuel Specifications: The hours of operation shall not exceed 100 hours in any consecutive 12 month period. The generator shall burn ultralow sulfur diesel fuel oil (0.0015% sulfur). [NSPS Subpart IIII and Rule 62-210.200(PTE), F.A.C.]

H.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]

H.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)]

H.5. Emissions Limits: The 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)	NMHC (g/hp-hr)	NO_X (g/hp-hr)
Subpart IIII (2006 and later)	3.5	0.2	6.4 (NMHC [b] + NO_X)	

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

[40 CFR 60, Subpart IIII and Rule 62-4.070(3), F.A.C.; Permit No. 0570057-030-AC and TV Permit Application Received on March 13, 2015]

H.6. Visible Emission (VE) Limit: The liquid-fueled emergency generator shall comply with a visible emission limit of 3% opacity. [Rules 62-296.603, 62-296.712, F.A.C.; and 40 CFR 60.122(a)(2)]

H.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]