# STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION PROPOSED REVISION TO STATE IMPLEMENTATION PLAN



# SUBMITTAL NUMBER 2019-03

# PROPOSED REVISION TO THE HILLSBOROUGH COUNTY LEAD (PB) MAINTENANCE STATE IMPLEMENTATION PLAN

January 23, 2020

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# **Executive Summary**

# 1. Introduction

The Department of Environmental Protection (Department) is proposing a revision to the Department's Maintenance State Implementation Plan (SIP) for the Hillsborough County Lead Maintenance Area under the federal Clean Air Act (CAA). On September 11, 2018, the U.S. Environmental Protection Agency (EPA) redesignated the Hillsborough County Lead Nonattainment Area to attainment and approved Florida's proposed Maintenance Plan into Florida's SIP that ensures that the Hillsborough County Lead Maintenance Area will continue to attain the 2008 Lead National Ambient Air Quality Standard (NAAQS) through 2029.

As part of Florida's Maintenance Plan, the Department requested that the permit conditions applicable to the EnviroFocus facility for the pollutant lead that were approved into the Hillsborough County Lead Nonattainment Area SIP be carried over and incorporated into the Hillsborough County Lead Maintenance SIP.

On September 13, 2019, the EnviroFocus facility submitted a complete permit application that requested, among other things, an increase in the permitted refined lead production limit for the facility. On November 6, 2019, the Department issued a final permit to EnviroFocus that increases the refined lead production limit for the facility from 150,000 tons per year (TPY) to 200,000 TPY. This SIP submittal proposes to update the Hillsborough County Lead Maintenance Plan to incorporate the production increase for the EnviroFocus facility, incorporate other minor changes associated with the production increase, and revise the attainment emissions inventory and projected future emissions inventories. No other changes to the Department's currently approved Maintenance SIP are being proposed, including the contingency measures that are part of the current Hillsborough County Lead Maintenance SIP. The Department will continue to implement those contingency measures.

# 2. Background

On September 11, 2018, EPA redesignated the Hillsborough County Lead Nonattainment Area to attainment and approved Florida's proposed Maintenance Plan into Florida's SIP that ensures that the Hillsborough County Lead Maintenance Area will continue to attain the 2008 Lead NAAQS through 2029.

The modeling analysis approved as part of the Maintenance Plan relied on EnviroFocus permit number 0570057-020-AC,<sup>1</sup> as modified by permit number 0570057-027-AC,<sup>2</sup> to show that the Hillsborough County Lead Maintenance Area will continue to maintain compliance with the 2008 Lead NAAQS. Permit number 0570057-020-AC authorized EnviroFocus to undergo a complete reconstruction and modernization, implementing a variety of top-level controls associated with lead recycling including a negative-pressure total enclosure of all process areas. The permit also authorized a production limit of 150,000 TPY of refined lead. This permit was updated in December 2012 to reflect the "as-built" reconstructed facility and change the unit IDs. The updated permit, 0570057-027-AC, formed the basis of the Hillsborough County Lead Nonattainment Plan attainment demonstration and the Hillsborough County Lead Maintenance Plan attainment demonstration.

<sup>&</sup>lt;sup>1</sup> See permit no. 0570057-020-AC issued by the Florida Department of Environmental Protection on September 22, 2009. <sup>2</sup> See permit no. 0570057-027-AC issued by the Florida Department of Environmental Protection on December 14, 2012.

On July 14, 2014, the Department issued EnviroFocus permit number 0570057-030-AC<sup>3</sup>, which modified permit number 0570057-027-AC, after EnviroFocus requested changes. This updated permit 0570057-030-AC represents the "Final Build-Out" of the EnviroFocus facility's reconstruction and modernization.

# 3. EnviroFocus Permit Number 0570057-037-AC

On September 13, 2019, EnviroFocus submitted a complete air construction permit application to, among other things, increase the refined lead production limit from 150,000 TPY to 200,000 TPY. On November 6, 2019, the Department issued the final permit number 0570057-037-AC to EnviroFocus that authorizes this production increase. The Department is proposing to update the Hillsborough County Lead Maintenance SIP to incorporate EnviroFocus permit number 0570057-037-AC.

Specifically, the Department is requesting to replace the following permit conditions:

- Section 3, Subsection B, Specific Condition 10 from permit 0570057-030-AC will be revised by Section 3, Subsection B, Specific Condition 2 from permit 0570057-037-AC (increasing the refined lead production limit to 200,000 TPY);
- Section 3, Subsection C, Specific Condition 6 from permit 0570057-030-AC will be revised by Section 3, Subsection C, Specific Condition 1 from permit 0570057-037-AC (increasing the refined lead production limit to 200,000 TPY);
- Section 3, Subsection G, Specific Condition 5 from permit 0570057-030-AC will be revised by Section 3, Subsection D, Specific Condition 1 from permit 0570057-037-AC (increasing the refined lead production limit to 200,000 TPY); and
- Section 3, Subsection A, Specific Condition 1 from permit 0570057-035-AC will be revised by Section 3, Subsection B, Specific Condition 3a from permit 0570057-037-AC (increasing the maximum capacity of the reverb furnace to 338,400 TPY).

These specific conditions are detailed in the Materials to be Incorporated into the SIP section below.

# 4. Air Quality Modeling

The Hillsborough County Lead Maintenance Plan included a modeling demonstration showing attainment of the 2008 Lead NAAQS. The modeling demonstration estimated potential lead emissions from the Facility Grounds and Roadways (EU 036<sup>4</sup>) using AP-42 emission factors and techniques using a conservative refined lead production level of 160,000 TPY. Potential lead emissions from EU 036 were derived from estimated truck traffic and routes along with average surface dust silt loading and measured silt lead content from samples taken in 2006 at a similar facility in Eagan, Minnesota. The total lead emissions potential from EU 036 in the attainment demonstration was estimated to be 0.0213 TPY.

The increase in the refined lead production limit to 200,000 TPY as part of permit number 0570057-037-AC will result in an increase in truck traffic moving raw materials to the facility and moving product from the facility. EnviroFocus also requested the ability to receive solid soda ash by truck in addition to rail, which will further increase potential truck traffic. In order to develop new lead

<sup>&</sup>lt;sup>3</sup> See permit no. 0570057-030-AC issued by the Florida Department of Environmental Protection on July 14, 2014.

<sup>&</sup>lt;sup>4</sup> Permit no. 0570057-027-AC changed the Facility Grounds and Roadways unit ID from EU 009 to EU 036.

emissions potential from EU 036, EnviroFocus reviewed the previous truck traffic and lead emission factors that were included in the Hillsborough County Lead Nonattainment Plan and Maintenance Plan attainment demonstrations.

Specifically, for the truck traffic, EnviroFocus remeasured every truck route and updated assumed vehicle weights. EnviroFocus also accounted for the increase in truck traffic from receiving solid soda ash by truck in the updated truck traffic estimates. For the re-entrained dust emission factors, EnviroFocus performed onsite measurements of the silt loading and silt lead content at multiple locations on the plant property along the primary traffic movement routes. This new assessment showed that the silt loading at EnviroFocus is on average about one-third of that measured at the Eagan, Minnesota facility, and the silt lead content is approximately 50 percent of that found at the Eagan, Minnesota facility (**Table 1**). The Eagan, Minnesota assessment had only one measurement of silt loading and lead concentration, which was used for all truck routes. Because the EnviroFocus on-site analysis sampled five different areas along various truck routes, the silt loading and silt lead content the final silt loading and silt lead concentration factors for that truck route. The result of the updated site-specific analysis demonstrates that the potential lead emissions from EU 036 will be much lower than originally estimated in the Hillsborough County Lead Nonattainment Plan and Maintenance Plan attainment demonstrations.

**Table 1**: Comparison of silt loading and silt lead concentration measurements from the Eagan,

 Minnesota facility and EnviroFocus. The Eagan, Minnesota assessment had one measurement of silt

 loading and silt lead concentration. The EnviroFocus on-site assessment sampled five different areas.

Silt Loading (g/m <sup>2</sup> )		Percent Pb Concentration of Silt	
Eagan, MN	Eagan, MN EnviroFocus		EnviroFocus
	0.257	5.35%	0.42%
	0.502		1.2%
1.48	0.964		8.1%
	0.078		2.5%
	0.39		4.1%

Using the updated truck traffic information and updated silt lead content measurements, EnviroFocus estimated the future lead emissions potential by scaling up the average daily truck counts from the previously used conservative refined lead production level of 160,000 TPY to the proposed refined lead production limit of 200,000 TPY, which also accounts for the additional truck traffic for receiving solid soda ash, resulting in a lead emissions potential from EU 036 of 0.0046 TPY.

This estimate of lead emissions potential from in EU 036 is significantly lower than the lead emissions potential used in the Hillsborough County Lead Maintenance Plan modeling demonstration (**Table 2**). This is due to the reduced surface silt and silt lead content loadings measured on the EnviroFocus roadways. Pursuant to the EnviroFocus permit application, it is expected that the potential lead emissions will not increase from any other emissions units. Therefore, the modeling analysis included in the Hillsborough County Lead Maintenance Plan is conservative and still valid for demonstrating continued attainment in the Hillsborough County Lead Maintenance Area. The Maintenance Area is expected to continue to attain the 2008 Lead NAAQS after the production limit increase is implemented. As such, a revised modeling demonstration is not necessary to demonstrate continued attainment in the Maintenance Area.

	Maintenance Plan Modeling Demonstration	Permit No. 0570057-037-AC	Percent Change
Refined Lead Production Limit	160,000	200,000	25%
Potential Lead Emissions Estimate from EU 036	0.0213	0.0046	-78%

**Table 2:** Changes in refined lead production limit and potential lead emissions for EnviroFocus EU 036 (Facility Grounds and Roadways)

# 5. Attainment Inventory and Projected Future Emissions Inventories

The Department is proposing to update the Hillsborough County Lead Maintenance Area attainment inventory and projected future emissions inventories in the Maintenance Plan to: (1) correct an error in the original attainment emissions inventory; (2) update the attainment emissions inventory to reflect the EnviroFocus site-specific lead emission factors; and (3) update the projected future emissions inventories to reflect the increase in truck traffic due to the refined lead production rate increase.

# 5.1 <u>Correcting an Error in the 2014 Attainment Inventory</u>

The Maintenance Area attainment inventory year is 2014, which is the year after the monitored ambient lead concentrations in the area fell below the NAAQS. The "Original" column in **Table 3** below shows the EnviroFocus lead emissions by unit from the facility's 2014 Annual Operating Report (AOR) that were used to develop the 2014 attainment inventory. Because EnviroFocus is the only source of lead emissions in the Hillsborough County Lead Maintenance Area, the attainment inventory is comprised only of the EnviroFocus emissions. The "Original" column in **Table 4** shows the 2014 attainment emissions inventory from the Hillsborough County Lead Maintenance Plan. **Appendix B** contains calculations for the original attainment emissions inventory for EU 036 showing emissions of 0.178 TPY.

**Table 3:** Original 2014 lead emissions inventory for the EnviroFocus facility in Hillsborough Countyfrom the 2014 EnviroFocus Annual Operating Report (Original column), the corrected inventory using94 percent control efficiency (Original - Corrected) and updated 2014 lead emissions using site-specific<br/>factors (Updated – Site-Specific).

	Unit Description	2014 Lead Emissions (tons)		
EU ID		Original	Original -	Updated –
		- 8 -	Corrected	Site-Specific
026	Battery Breaking Area	0.016381	0.016381	0.016381
030	Feed Dryer	0.00	0.00	0.00
031	Collocated Reverberatory Furnace	0.128958	0.128958	0.128958
032	Collocated Blast Furnace	0.02	0.02	0.02
033	Furnace Tapping, Charging, and Refining	0.065407	0.065407	0.065407
035	Building Ventilation	0.025727	0.025727	0.025727
036	Facility Grounds and Roadways	0.178	0.0213	0.0026
038	Additional Building Ventilation	0.012863	0.012863	0.012863
Total 20	14 EnviroFocus Facility Lead Emissions	0.447 tons	0.291 tons	0.272 tons

	2014 Lead Emissions (tons)			
Source Type	Original	Original - Corrected	Updated – Site-Specific	
Point	0.447	0.291	0.272	
Area	0.00	0.00	0.00	
Non-Road	0.00	0.00	0.00	
On-Road	0.00	0.00	0.00	
Total	0.447	0.291	0.272	

**Table 4:** Original 2014 attainment emissions inventory from the Hillsborough County LeadMaintenance Plan (Original column) corrected inventory (Original – Corrected) and updated 2014attainment emissions inventory (Updated – Site-Specific).

Before updating the attainment emissions inventory, the Department first corrected an error identified in the facility's 2014 AOR lead emissions estimate. The 2014 lead emissions estimate for EU 036 (0.178 TPY) reported in the AOR was based on an incorrect control efficiency of 50 percent due to human error. The correct control efficiency is 94 percent, which is based on wet suppression controls used by EnviroFocus and which are shown in AP-42 to approach 95 percent control efficiency.<sup>5</sup> With the correct control efficiency of 94 percent, the lead emissions estimate for EU 036 is 0.0213 TPY. This is the emissions estimate that was used in the Maintenance Plan modeling demonstration and is the value that should have been reflected in the 2014 AOR and therefore in the attainment emissions inventory. The "Original – Corrected" columns in **Table 3** and **Table 4** show the 2014 attainment emissions inventory using the correct control efficiency. **Appendix C** contains calculations for the corrected attainment and projected future emissions inventories for EU 036 showing emissions of 0.0213 TPY.

# 5.2 Updating the 2014 Attainment Inventory with Site-Specific Lead Emission Factors

After correcting the control efficiency error, the Department then updated the attainment inventory to reflect updated site-specific factors. The original 2014 attainment demonstration and emissions inventory used the silt level and silt lead loading factors from the Eagan, Minnesota facility and the truck route distances and vehicle weight estimates that were available at the time. As noted in section 5.1 above, this results in an emissions estimate for EU 036 of 0.0213 TPY.

EnviroFocus has since taken on-site measurements of silt levels and silt lead loading (**Table 1**) and updated the truck route distances and estimated vehicle weights. To reflect the updated site-specific factors, the Department updated the 2014 EU 036 emissions estimate, which lowers the 2014 emissions estimate for EU 036 from 0.0213 TPY to 0.0026 TPY and results in an updated facility-wide emissions estimate of 0.272 TPY, as shown in the "Updated – Site-Specific" column in **Table 3**. The updated 2014 attainment inventory is shown in the "Updated – Site-Specific" column in **Table 4**. Appendix D contains calculations for the updated site-specific attainment inventory for EU 036, including updated truck route distances and estimated vehicle weights.

In summary, the Department first corrected the control efficiency error to obtain an attainment emissions inventory value of 0.291 TPY. Then, the Department updated the estimate to reflect site-specific measurements, obtaining the final attainment emissions inventory value of 0.272 TPY.

<sup>&</sup>lt;sup>5</sup> See AP-42, Section 13.2.2-12 Unpaved Roads, available at <u>https://www3.epa.gov/ttn/chief/ap42/ch13/final/c13s0202.pdf</u>. *SIP Revision 2019-03* Page 8 of 44 January 23, 2020

## 5.3 Updated Projected Future Emissions Inventories due to Production Increase

The Department then updated the projected future emissions inventories to reflect the increase in refined lead production limit to 200,000 TPY. **Table 5** below shows the original projected future emissions inventories every three years for the next 10-year period (through 2029) from the Hillsborough County Lead Maintenance Plan. Future emissions inventories were projected to be identical to the original 2014 attainment inventory, since no change in lead emissions was anticipated at the time.

Source Type	Projected 2020 Lead Emissions (tons)	Projected 2023 Lead Emissions (tons)	Projected 2026 Lead Emissions (tons)	Projected 2029 Lead Emissions (tons)
Point	0.447	0.447	0.447	0.447
Area	0.00	0.00	0.00	0.00
Non-Road	0.00	0.00	0.00	0.00
On-Road	0.00	0.00	0.00	0.00
Total	0.447	0.447	0.447	0.447

**Table 5:** Projected future emissions inventories from the current Hillsborough County Lead

 Maintenance Plan.

The only anticipated change in lead emissions is for the Facility Grounds and Roadways (EU 036) unit, which will have an emissions increase due to the increased truck traffic from the production increase. Therefore, the updated projected emissions inventories are the same as the updated attainment emissions inventory for all EnviroFocus units except for EU 036. The future emissions estimate for EU 036 (detailed in section 4 above) is estimated to be 0.0046 TPY. With emissions from all other units projected to remain the same as the attainment inventory (**Table 6**), this results in final projected future emissions inventories of 0.274 TPY (**Table 7**). Appendix E contains calculations for the updated projected future emissions inventories for EU 036 showing emissions of 0.0046 TPY.

**Table 6:** Future lead emissions inventory for the EnviroFocus facility reflecting the increased refined lead production limit of 200,000 TPY

EU ID	Unit Description	Future Lead Emissions (tons)			
026	Battery Breaking Area	0.016381			
030	Feed Dryer	0.00			
031	Collocated Reverberatory Furnace	0.128958			
032	Collocated Blast Furnace	0.02			
033	Furnace Tapping, Charging, and Refining	0.065407			
035	Building Ventilation	0.025727			
036	<b>Facility Grounds and Roadways</b>	0.0046			
038	Additional Building Ventilation	0.012863			
	Total EnviroFocus Facility Lead Emissions 0.274 tons				

Source Type	Projected 2020 Lead Emissions (tons)	Projected 2023 Lead Emissions (tons)	Projected 2026 Lead Emissions (tons)	Projected 2029 Lead Emissions (tons)
Point	0.274	0.274	0.274	0.274
Area	0.00	0.00	0.00	0.00
Non-Road	0.00	0.00	0.00	0.00
On-Road	0.00	0.00	0.00	0.00
Total	0.274	0.274	0.274	0.274

**Table 7:** Updated projected future emissions inventories for the Hillsborough County Lead Maintenance Area.

Although there is a slight increase from the attainment emissions inventory to the projected future emissions inventories (from 0.272 to 0.274 TPY), the increase is small (less than 1 percent). This increase is solely due to the increase in emissions from EU 036, the facility grounds and roadways. Truck traffic on the facility grounds and roadways re-entrains surface dust into airborne fugitive emissions. To accommodate the increased refined lead production, there will be increased truck traffic moving raw materials to the facility and moving product from the facility, and therefore, an increase in fugitive emissions of lead from EU 036. As described above in section 4, the future estimate of lead emissions potential from EU 036 (0.0046 TPY) is significantly lower than the lead emissions potential used in the Hillsborough County Lead Maintenance Plan modeling demonstration (0.0213 TPY) which demonstrated attainment of the 2008 Lead NAAQS. Therefore, the Maintenance Area will continue to attain the 2008 Lead NAAQS after the refined lead production limit increase is implemented.

# 6. SIP Development Process

Section 403.061(35), Florida Statutes, authorizes the Department to "exercise the duties, powers, and responsibilities required of the state under the federal Clean Air Act." These duties and responsibilities include the development and periodic updating of Florida's SIP. Pursuant to this statutory authority, the Department has developed this proposed SIP revision.

Pursuant to state administrative procedures and 40 CFR 51.102, on December 18, 2019, the Department published a notice in the Florida Administrative Register (FAR) announcing the opportunity for the public to provide comments, request a public hearing, and participate in a public hearing to be held on January 21, 2020, if requested, regarding the proposed revision to Florida's SIP. No public hearing was requested, and no public hearing was held.

In accordance with the 30-day notice requirement of 40 CFR 51.102, the pre-hearing submittal regarding the proposed SIP revision was transmitted to EPA on December 18, 2019 and posted on the website for the Department's Division of Air Resource Management. At the same time, notice of the opportunity to submit comments, request a public hearing, and participate in the public hearing, if requested, was transmitted to the Department's District offices and Florida's local air pollution control programs.

# Response to 40 CFR Part 51, Appendix V, Criteria

Pursuant to 40 CFR Part 51, Appendix V, the following materials shall be included in State Implementation Plan (SIP) submissions for review and approval by the U.S. Environmental Protection Agency (EPA).

### 1. Administrative Materials

a. A formal letter of submittal from the Governor or his designee, requesting EPA approval of the plan or revision thereof (hereafter "the plan").

A Submittal Letter signed by the Director of the Division of Air Resource Management, Florida Department of Environmental Protection (Department), on behalf of the Governor of the State of Florida, is attached to this SIP Submittal.

b. Evidence that the State has adopted the plan in the State code or body of regulations; or issued the permit, order, consent agreement (hereafter "document") in final form. That evidence shall include the date of adoption or final issuance as well as the effective date of the plan, if different from the adoption/issuance date.

See air construction permit number 0570057-037-AC contained in **Appendix A**, issued by the Florida Department of Environmental Projection to EnviroFocus on November 6, 2019, proposed to be incorporated into Florida's Maintenance SIP.

c. Evidence that the State has the necessary legal authority under State law to adopt and implement the plan.

The Department has the necessary legal authority to adopt and implement this proposed revision to Florida's SIP. References to the pertinent Florida Statutes and Florida Administrative Code (F.A.C.) rules may be found in the "Legal Authority" section of this submittal.

d. A copy of the actual regulation, or document submitted for approval and incorporation by reference into the plan, including indication of the changes made (*such as, redline/strikethrough*) to the existing approved plan, where applicable. The submittal shall include a copy of the official State regulation/document signed, stamped and dated by the appropriate State official indicating that it is fully enforceable by the State. The effective date of any regulation/document contained in the submission shall, whenever possible, be indicated in the regulation/document itself. *If the State submits an electronic copy, it must be an exact duplicate of the hard copy with changes indicated, signed documents need to be in portable document format, rules need to be in text format and files need to be submitted in manageable amounts (e.g., a file for each section or chapter, depending on size, and separate files for each distinct document) unless otherwise agreed to by the State and Regional Office.* 

See air construction permit number 0570057-037-AC contained in **Appendix A**, issued by the Florida Department of Environmental Projection to EnviroFocus on November 6, 2019, proposed to be incorporated into Florida's Maintenance SIP.

e. Evidence that the State followed all of the procedural requirements of the State's laws and constitution in conducting and completing the adoption/issuance of the plan.

State law (Section 120.525, F.S.) requires the Department to give notice of public meetings, hearings, and workshops by publication in the Florida Administrative Register (FAR) not less than seven days before the event. Through publication in the FAR of the notice of opportunity to participate in a public hearing, if requested, at least 30 days before the event, the Department has

complied with all state procedural requirements relevant to the development of this proposed SIP revision. A copy of the notice of proposed SIP revision may be found in the "Public Participation" section of this submittal.

f. Evidence that public notice was given of the proposed change consistent with procedures approved by EPA, including the date of publication of such notice.

The Department has complied with all public hearing requirements of 40 CFR 51.102. Copies of all relevant notices and notification emails may be found in the "Public Participation" section of this submittal.

g. Certification that public hearing(s) were held in accordance with the information provided in the public notice and the State's laws and constitution, if applicable and consistent with the public hearing requirements in 40 CFR 51.102.

Certification of compliance with all state and federal public notice and hearing requirements will be provided in the "Letter of Submittal" for the final SIP revision.

### h. Compilation of public comments and the State' response thereto.

Written comments received during the public notice period on this proposed SIP revision, and the Department's response thereto, will be included in the "Public Participation" section of this submittal.

### 2. Technical Support

### a. Identification of all regulated pollutants affected by the plan.

This SIP revision addresses only the air pollutant lead (Pb).

**b.** Identification of the locations of affected sources including the EPA attainment/nonattainment designation of the locations and the status of the attainment plan for the affected areas(s).

This SIP revision applies to the Lead Maintenance Area in Hillsborough County defined as follows:

Tampa, FL: Hillsborough County (part) Area is located within a 1.5 km radius centered at UTM coordinates 364104 meters E, 3093830 meters N, Zone 17, which surrounds the EnviroFocus Technologies facility.

c. Quantification of the changes in plan allowable emissions from the affected sources; estimates of changes in current actual emissions from affected sources or, where appropriate, quantification of changes in actual emissions from affected sources through calculations of the differences between certain baseline levels and allowable emissions anticipated as a result of the revision.

This proposed SIP revision would increase the refined lead production limit of EnviroFocus from 150,000 TPY to 200,000 TPY, increase the maximum capacity of the reverb furnace from 262,800 TPY to 338,400 TPY, and revise the SIP conditions that relate to the facility roadways.

d. The State's demonstration that the national ambient air quality standards, prevention of significant deterioration increments, reasonable further progress demonstration, and visibility, as applicable, are protected if the plan is approved and implemented. For all requests to redesignate an area to attainment for a national primary ambient air quality standard, under section 107 of the Act, a revision must be submitted to provide for the maintenance of the national primary ambient air quality standards for at least 10 years as required by section 175A of the Act.

Not Applicable.

e. Modeling information required to support the proposed revision, including input data, output data, models used, justification of model selections, ambient monitoring data used, meteorological data used, justification for use of offsite data (where used), modes of models used, assumptions, and other information relevant to the determination of adequacy of the modeling analysis.

The Department is not updating the modeling demonstration included in the Hillsborough County Lead Maintenance SIP Submittal in this proposed action.

f. Evidence, where necessary, that emission limitations are based on continuous emission reduction technology.

See air construction permit number 0570057-037-AC contained in **Appendix A**, issued by the Florida Department of Environmental Projection to EnviroFocus on November 6, 2019, proposed to be incorporated into Florida's Maintenance SIP.

# g. Evidence that the plan contains emission limitations, work practice standards and recordkeeping/reporting requirements, where necessary, to ensure emission levels.

See air construction permit number 0570057-037-AC contained in **Appendix A**, issued by the Florida Department of Environmental Projection to EnviroFocus on November 6, 2019, proposed to be incorporated into Florida's Maintenance SIP.

### h. Compliance/enforcement strategies, including how compliance will be determined in practice.

See air construction permit number 0570057-037-AC contained in **Appendix A**, issued by the Florida Department of Environmental Projection to EnviroFocus on November 6, 2019, proposed to be incorporated into Florida's Maintenance SIP.

i. Special economic and technological justifications required by any applicable EPA policies, or an explanation of why such justifications are not necessary.

Not Applicable.

### 3. Exceptions

Not applicable.

# Materials to be Incorporated into the SIP

# 1. Permitted Limits and Conditions

The Department is proposing that four specific conditions from the EnviroFocus air construction permit number 0570057-037-AC be incorporated into the Hillsborough County Lead Maintenance SIP. EPA's approval of the revised refined lead production limit into Florida's SIP will continue to ensure that Florida's SIP maintains the 2008 Lead NAAQS in the Hillsborough County Lead Maintenance Area.

### 2. Specific Limits and Conditions from the EnviroFocus Permit

The Department is proposing that the following permit conditions from the EnviroFocus air construction permit (Permit No. 0570057-037-AC) be incorporated into Florida's SIP:

- Section 3, Subsection B, Specific Condition 2;
- Section 3, Subsection C, Specific Condition 1;
- Section 3, Subsection D, Specific Condition 1;
- Section 3, Subsection B, Specific Condition 3a

### Affected Units:

- EU 036 Facility Grounds and Roadways
- EU 030, 031, and 032 Lead Smelting
- EU 033 Furnace Tapping, Charging and Refining
- EU 035 and 038 Building Ventilation

### Increase in Lead Production:

- Section 3, Subsection B, Specific Condition 2 and Section 3, Subsection C, Specific Condition 1 state that "[t]he maximum refined lead produced from the EFT facility shall not exceed 200,000 tons in any consecutive twelve-month period."
- Section 3, Subsection D, Specific Condition 1 states that "[t]he maximum refined lead produced from the enclosed facility shall not exceed 200,000 tons any consecutive twelve-month period."

### Increase in Reverb Furnace Capacity:

• Section 3, Subsection B, Specific Condition 3a states that "[t]he reverb furnace shall still be limited to a maximum charge rate of 960 tons per day (TPD) with a maximum capacity of 338,400 tons in any twelve-month consecutive period."

For ease of reference, the entirety of the EnviroFocus permit number 0570057-037-AC is provided in **Appendix A**.

# Legal Authority

Chapter 403 of the Florida Statutes (F.S.), entitled "Environmental Control," provides the legal framework for most of the activities of the air resource management program within the Florida Department of Environmental Protection (Department). Except as provided at sections 403.8055 and 403.201, F.S., for fast-track rulemaking and the granting of variances under Chapter 403, F.S., respectively, Chapter 120, F.S., Florida's "Administrative Procedure Act," sets forth the procedures the Department must follow for rulemaking, variances, and public meetings. The most recent version of the Florida Statutes can be found online at <u>http://www.leg.state.fl.us/Statutes</u>.

The principal sections of Chapter 403, F.S., that grant the Department authority to operate its air program are listed below. Authority to develop and update Florida's State Implementation Plan (SIP) and 111(d) Designated Facilities Plan is expressly provided by subsection 403.061(35), F.S., which provides that the Department shall have the power and the duty to control and prohibit pollution of air and water in accordance with the law and rules adopted and promulgated by it and, for this purpose, to "exercise the duties, powers, and responsibilities required of the state under the federal Clean Air Act, 42 U.S.C. ss. 7401 et seq."

- <u>403.031</u> Definitions, including the definition of "regulated air pollutant" (403.031(19)).
- 403.061 Authority to: promulgate plans to provide for air quality control and pollution abatement (403.061(1)); adopt rules for the control of air pollution in the state (403.061(7)); take enforcement action against violators of air pollution laws, rules and permits (403.061(8)); establish and administer an air pollution control program (403.061(9)); set ambient air quality standards (403.061(11)); monitor air quality (403.061(12)); require reports from air pollutant emission sources (403.061(13)); require permits for construction, operation, and modification of air pollutant emission sources (403.061(14)); and exercise the duties, powers, and responsibilities required of the state under the federal Clean Air Act (403.061(35)).
- <u>403.087</u> Authority to issue, deny, modify, and revoke permits.
- <u>403.0872</u> Authority to establish an air operating permit program as required by Title V of the Clean Air Amendments of 1990.
- <u>403.0877</u> Authority to require engineering certification of permit applications.
- <u>403.121</u> Authority to seek judicial and administrative remedies for violations.
- <u>403.131</u> Authority to seek injunctive relief for violations.
- <u>403.141</u> Authority to find civil liability for violations.
- <u>403.161</u> Authority to assess civil and criminal penalties for violations.
- <u>403.182</u> Authority for local pollution control programs.
- <u>403.201</u> Authority to grant variances.
- <u>403.8052</u> Authority to establish a Small Business Assistance Program for small-business sources of air pollutant emissions.
- <u>403.8055</u> Authority to adopt U.S. Environmental Protection Agency (EPA) standards by reference through a fast-track process.
- <u>403.814</u> Authority to allow use of general permits (permits-by-rule) for minor sources.

Other statutory authorities, outside of Chapter 403, F.S., for Florida's air program are as follows: 112.3143 Requirement that public officials disclose potential conflicts of interest. 112.3144 Requirement for disclosure of financial interests by public officials. 120.569 Authority of agency head to issue an emergency order in response to an immediate threat to public health, safety, or welfare. 316.2935 Authority to prohibit the sale and operation of motor vehicles whose emission control systems have been tampered with, and to prohibit the operation of motor vehicles that emit excessive smoke. Authority to establish Air Pollution Control Trust Fund and use \$1 fee on every motor 320.03 vehicle license registration sold in the state for air pollution control purposes, including support of approved local air pollution control programs. 376.60 Authority to establish a fee for asbestos removal projects.

Current and historical versions of Florida Administrative Code (F.A.C.) rule sections and chapters back to January 1, 2006, may be accessed from the Florida Department of State (DOS) website <u>https://www.flrules.org</u>. The DOS website also provides access to materials adopted by reference since January 1, 2011. Department rule chapters containing State Implementation Plan (SIP) or 111(d) State Plan provisions are as follows:

<u>62-204</u>	Air Pollution Control – General Provisions
<u>62-210</u>	Stationary Sources – General Requirements
<u>62-212</u>	Stationary Sources – Preconstruction Review
<u>62-243</u>	Tampering with Motor Vehicle Air Pollution Control Equipment
<u>62-252</u>	Gasoline Vapor Control
<u>62-256</u>	Open Burning
<u>62-296</u>	Stationary Sources – Emission Standards
<u>62-297</u>	Stationary Sources – Emissions Monitoring

Other air-related Department rule chapters-not part of the SIP or 111(d) State Plan-include:

- <u>62-213</u> Operation Permits for Major Sources of Air Pollution (Title V)
- 62-214 Requirements for Sources Subject to the Federal Acid Rain Program
- <u>62-257</u> Asbestos Program

# Notice of Opportunity to Submit Comments and Participate in Public Hearing

#### Florida Administrative Register

he/she will need to ensure that a verbatim record of the proceeding is made, which record includes the testimony and evidence from which the appeal is to be issued.

For more information, you may contact: Leon Simmonds, (850)921-0041.

DEPARTMENT OF ENVIRONMENTAL PROTECTION RULE NO.: RULE TITLE:

62-304.715 Lake Worth Lagoon Basin TMDLs

The Department of Environmental Protection announces a workshop to which all persons are invited.

DATE AND TIME: January 22, 2020, 11:00 a.m.

PLACE: Lantana Road Branch Library, 4020 Lantana Road, Lake Worth, Florida

GENERAL SUBJECT MATTER TO BE CONSIDERED: To receive public comments on draft nutrient total maximum daily loads (TMDLs) for impaired waters in the Lake Worth Lagoon Basin, to be adopted in Rule 62-304.715, F.A.C. The draft TMDLs to be presented at the public workshop are for Pine Lake (3245C4) and Lake Osborne (3256A). These nutrient TMDLs, if adopted, will constitute site-specific numeric interpretations of the narrative nutrient criterion set forth in paragraph 62-302.530(48)(b), F.A.C., that would replace the otherwise applicable numeric nutrient criteria in subsection 62-302.531(2) for these particular waters. The Department will accept written comments on the draft TMDLs, as well as the establishment of these nutrient TMDLs as site-specific interpretations of the narrative nutrient criterion, through February 5, 2020. Written comments should be directed to: Ansel Bubel, Environmental Administrator, Florida Department of Environmental Protection, MS 3555, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, Ansel.Bubel@Floridadep.gov.

A copy of the agenda may be obtained by contacting: Ms. Shamyah Gibson, Department of Environmental Protection, MS 3555, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, (850)245-8556.

Pursuant to the provisions of the Americans with Disabilities Act, any person requiring special accommodations to participate in this workshop/meeting is asked to advise the agency at least 48 hours before the workshop/meeting by contacting: Ms. Shamyah Gibson, (850)245-8449. If you are hearing or speech impaired, please contact the agency using the Florida Relay Service, 1(800)955-8771 (TDD) or 1(800)955-8770 (Voice).

DEPARTMENT OF ENVIRONMENTAL PROTECTION The Department of Environmental Protection, Division of Air Resource Management, announces a hearing, if requested, to which all persons are invited.

DATE AND TIME: January 21, 2020, 10:00 a.m.

#### Volume 45, Number 244, December 18, 2019

PLACE: Department of Environmental Protection, Bob Martinez Center, 2600 Blair Stone Road, Room 195, Tallahassee, Florida.

GENERAL SUBJECT MATTER TO BE CONSIDERED: Pursuant to 40 CFR 51.102, the Department of Environmental Protection (DEP) announces a public hearing and opportunity to offer comments on a proposed revision to Florida's State Implementation Plan (SIP) under the Clean Air Act. This SIP submittal proposes to revise Florida's Maintenance Plan for the Hillsborough County Lead Maintenance Area to incorporate recent permit revisions for the EnviroFocus Technologies, LLC facility. These recent permit revisions increased the permitted refined lead production limit for the facility and incorporated other minor changes associated with the production increase. This SIP submittal also proposes to revise the attainment emissions inventory and projected future emissions inventories. The materials comprising DEP's proposed SIP revision may be the through Department's obtained website at https://floridadep.gov/air/air-business-planning/content/air-

regulatory-projects or by contacting Hastings Read at Hastings.Read@Floridadep.gov. The materials may also be inspected during normal business hours at DEP. Division of Air Resource Management offices, Bob Martinez Center, 2600 Blair Stone Road, Tallahassee, Florida. A public hearing will be held, if requested, at the date, time and place given above. Any request for a public hearing must be submitted by letter or e-mail to Hastings Read, Department of Environmental Protection, Division of Air Resource Management, 2600 Blair Stone Road, MS #5500, Tallahassee, Florida 32399-2400 (Hastings.Read@Floridadep.gov), and received no later than January 17, 2020. A copy of the agenda may be obtained by contacting: Mr. Read by letter or email at the above addresses or by calling (850)717-9017. It is not necessary that the hearing be held or attended for persons to comment on DEP's proposed submittal to EPA. Any comments must be submitted to Hastings Read by letter or e-mail, with a copy to Terri Long (Terri.Long@Floridadep.gov), and received no later than January 17, 2020.

If no request for a public hearing is received, the hearing will be cancelled, and notice of the cancellation will be posted at the following website:

https://floridadep.gov/events/month?field\_county\_tid=All&fie ld\_is\_a\_public\_notice\_value=Yes.

Persons may also contact Terri Long at (850)717-9023 to find out if the hearing has been cancelled. Pursuant to the provisions of the Americans with Disabilities Act, any person requiring special accommodations to participate in this workshop/meeting is asked to advise the agency at least 48 hours before the workshop/meeting by contacting Terri Long at (850)717-9023 or Terri.Long@Floridadep.gov. If you are hearing or speech impaired, please contact the agency using the

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Florida Relay Service, 1(800)955-8771 (TDD) or 1(800)955-8770 (Voice).

For more information, you may contact Hastings Read by letter or e-mail, or by calling (850)717-9017.

DEPARTMENT OF HEALTH

Board of Osteopathic Medicine

The Board of Osteopathic Medicine announces a telephone conference call to which all persons are invited.

DATE AND TIME: January 3, 2020, 10:30 a.m. ET

PLACE: Telephone conference phone number 1(888)585-9008, Conference room number 742-225-236

GENERAL SUBJECT MATTER TO BE CONSIDERED: General business of the board.

A copy of the agenda may be obtained by contacting: www.floridasosteopathicmedicine.gov/meeting-information

Pursuant to the provisions of the Americans with Disabilities Act, any person requiring special accommodations to participate in this workshop/meeting is asked to advise the agency at least 7 days before the workshop/meeting by contacting: Christa Peace, Regulatory Specialist III, at (850)245-4161 or christa.peace@flhealth.gov or 4052 Bald Cypress Way, #C-06, Tallahassee, FL 32399. If you are hearing or speech impaired, please contact the agency using the Florida Relay Service, 1(800)955-8771 (TDD) or 1(800)955-8770 (Voice).

If any person decides to appeal any decision made by the Board with respect to any matter considered at this meeting or hearing, he/she will need to ensure that a verbatim record of the proceeding is made, which record includes the testimony and evidence from which the appeal is to be issued.

DEPARTMENT OF HEALTH

Division of Environmental Health

The DEPARTMENT OF HEALTH announces a public meeting to which all persons are invited.

DATE AND TIME: January 10, 2020, 8:30 a.m. - 9:15 a.m. ET PLACE: Recorded teleconference call-in phone number is: 1(888)585-9008, participant code 754-420-028: 754-420-028. No physical location.

GENERAL SUBJECT MATTER TO BE CONSIDERED: The Department's Lifeguard and Swimming Instructor Certification Program Advisory Board will review, discuss, and make recommendations to the Department regarding submitted requests for verification of equivalence to national aquatic training agencies which meet the established standards, objectives and standards of care provided in the American Red Cross or YMCA programs.

A copy of the agenda may be obtained by contacting: Mr. August Ursin, telephone (850)245-4444, ext. 2716, or email august.ursin@flhealth.gov ,or write DOH, 4052 Bald Cypress Way, Bin A08, Tallahassee, FL, 32399-1710.

Pursuant to the provisions of the Americans with Disabilities Act, any person requiring special accommodations to participate in this workshop/meeting is asked to advise the agency at least 3 days before the workshop/meeting by contacting: August Ursin as listed above. If you are hearing or speech impaired, please contact the agency using the Florida Relay Service, 1(800)955-8771 (TDD) or 1(800)955-8770 (Voice).

For more information, you may contact: August Ursin as listed above.

#### DEPARTMENT OF CHILDREN AND FAMILIES Refugee Services

The Broward Area Refugee Task Force announces a public meeting to which all persons are invited.

DATE AND TIME: Thursday, January 16, 2019, 10:00 a.m. - 12:00 Noon

PLACE: Department of Children and Families, 1400 W. Commercial Blvd., Conference Room - Second Floor, Ft. Lauderdale, FL 33309

GENERAL SUBJECT MATTER TO BE CONSIDERED: The purpose of the Broward Area Refugee Task Force meeting is to increase awareness of the refugee populations, share best practices, spot trends in refugee populations, build collaborations between agencies, help create good communication among service providers, get informed about upcoming community events, and discuss refugee program service needs and possible solutions to meeting those needs.

A copy of the agenda may be obtained by contacting: Miriam Rosario at (561)227-6722 or David Draper at (407)317-7335.

Pursuant to the provisions of the Americans with Disabilities Act, any person requiring special accommodations to participate in this workshop/meeting is asked to advise the agency at least 5 days before the workshop/meeting by contacting: Miriam Rosario at (561)227-6722 or David Draper at (407)317-7335. If you are hearing or speech impaired, please contact the agency using the Florida Relay Service, 1(800)955-8771 (TDD) or 1(800)955-8770 (Voice).

For more information, you may contact: Miriam Rosario at (561)227-6722 or David Draper at (407)317-7335.

#### DEPARTMENT OF CHILDREN AND FAMILIES Refugee Services

The Jacksonville Area Refugee Task Force announces a public meeting to which all persons are invited.

DATE AND TIME: Wednesday, January 8, 2020, 1:30 p.m. – 3:30 p.m.

PLACE: Jacksonville Baptist Association, 2700 University Boulevard South, Jacksonville, FL 32216

GENERAL SUBJECT MATTER TO BE CONSIDERED: The purpose of the Jacksonville Area Refugee Task Force meeting is to increase awareness of the refugee populations, share best

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# **Public Participation**

## **Response to 40 CFR 51.102 Requirements**

(a) Except as otherwise provided in paragraph (c) of this section and within the 30-day notification period as required by paragraph (d) of this section, States must provide notice, provide the opportunity to submit written comments and allow the public the opportunity to request a public hearing. The State must hold a public hearing or provide the public the opportunity to request a public hearing. The notice announcing the 30-day notification period must include the date, place and time of the public hearing. If the State provides the public the opportunity to request a public hearing and a request is received the State must hold the scheduled hearing or schedule a public hearing (as required by paragraph (d) of this section). The State may cancel the public hearing through a method it identifies if no request for a public hearing is received the learning the 30 day notification period clearly states: *If no request for a public hearing has been cancelled; and provides a contact phone number for the public to call to find out if the hearing has been cancelled*.

The opportunity to submit written comments, request a public hearing, and participate in a public hearing, if requested, on the proposed SIP revision was advertised in the Florida Administrative Register (FAR) at least 30 days prior to the scheduled date of the hearing. Information regarding the date, place, and time of the public hearing was included in the notice along with information on how to request the hearing or ascertain whether the hearing would be cancelled. A copy of the notice is included in this section. No hearing was requested; therefore, no hearing was held.

# (b) Separate hearings may be held for plans to implement primary and secondary standards.

Not applicable.

(c) No hearing will be required for any change to an increment of progress in an approved individual compliance schedule unless such change is likely to cause the source to be unable to comply with the final compliance date in the schedule. The requirements of §§51.104 and 51.105 will be applicable to such schedules, however.

Not applicable.

(d) Any hearing required by paragraph (a) of this section will be held only after reasonable notice, which will be considered to include, at least 30 days prior to the date of such hearing(s):

# (1) Notice given to the public by prominent advertisement in the area affected announcing the date(s), time(s), and place(s) of such hearing(s);

The opportunity to submit comments, request a public hearing, and participate in a public hearing, if requested, on the proposed SIP revision was advertised in the FAR at least 30 days prior to the scheduled date of the hearing (see response (a)).

## (2) Availability of each proposed plan or revision for public inspection in at least one location in each region to which it will apply, and the availability of each compliance schedule for public inspection in at least one location in the region in which the affected source is located;

The materials proposed to be incorporated into the SIP were made available for public inspection in the offices of DEP's Division of Air Resource Management (DARM) and on the DARM website. The materials were also made accessible to the public through each of the DEP's district offices and in the offices of each DEP-approved local air pollution control program. The notifications that such information be made available by the district and local offices are included in this section.

# (3) Notification to the Administrator (through the appropriate Regional Office);

The Region 4 office of the EPA was notified at least 30 days in advance of the scheduled hearing date and provided with copies of the materials proposed to be incorporated into the SIP. The prehearing submittal letter is included in the "Pre-Hearing Submittal to EPA" section of this submittal.

# (4) Notification to each local air pollution control agency which will be significantly impacted by such plan, schedule or revision;

Notification to affected local programs occurred with the transmittal of e-mails requesting that the material proposed to be incorporated into the SIP be made available for public inspection (see response (d)(2)).

# (5) In the case of an interstate region, notification to any other States included, in whole or in part, in the regions which are significantly impacted by such plan or schedule or revision.

Not applicable.

(e) The State must prepare and retain, for inspection by the Administrator upon request, a record of each hearing. The record must contain, as a minimum, a list of witnesses together with the text of each presentation.

No hearing was requested; therefore, no hearing was held.

## (f) The State must submit with the plan, revision, or schedule, a certification that the requirements in paragraph (a) and (d) of this section were met. Such certification will include the date and place of any public hearing(s) held or that no public hearing was requested during the 30-day notification period.

Certification is provided in the letter of submittal that the opportunity to submit comments, request a public hearing, and participate in a public hearing on the proposed SIP revision was noticed in accordance with the requirements of 40 CFR 51.102. No hearing was requested; therefore, no hearing was held.

# (g) Upon written application by a State agency (through the appropriate Regional Office), the Administrator may approve State procedures for public hearings. [...]

Not applicable.

# **Requests for Districts/Locals to Provide Assistance to Public**

From:	Long, Terri
To:	"John Hickey"; "Tallam, Laxmana"; "Fernandez, Lorenzo"; "woodard@epchc.org"; Willaims Michael C; "Palomino,
	<u>Susana (RER)"; Hamilton, Shawn; Strong, Greg; Watkins, Aaron; Iglehart, Jon; "Schneider, Sheila"</u>
Cc:	Read, Hastings
Subject:	Florida DEP - Notice of Proposed SIP Revision - Districts - Locals
Date:	Wednesday, December 18, 2019 11:19:33 AM
Attachments:	FAR Notice 12-18-19.odf

Good afternoon,

Notice is hereby given that, pursuant to 40 CFR 51.102 the Florida Department of Environmental Protection is accepting comments and will hold a public hearing, if requested, on a proposed revision to Florida's State Implementation Plan (SIP) amending the Hillsborough County Lead Maintenance Plan.

Attached please find the notice of opportunity to offer comments and request a public hearing. This notice was published on Wednesday, December 18, 2019, in the Florida Administrative Register. The comment period for this proposed SIP revision will close on January 17, 2019, and the public hearing, if requested, will be held on Tuesday, December 21, 2019.

The materials comprising the proposed SIP revision will be posted at <u>https://floridadep.gov/air/air-business-planning/content/air-regulatory-projects</u>. Please assist any member of the public who may contact you to view these materials. In the event that members of the public have substantive questions related to the proposed revision, please direct them to <u>Hastings.Read@FloridaDEP.gov</u>, (850) 717-9017.

Thank you

Terri Long Office of Business Planning Division of Air Resource Management Florida Department of Environmental Protection (850) 717-9023 Terri.long@FloridaDEP.gov

# **Public Comments of SIP Notice**

No public comments were received.

# **DEP Response to Public Comments**

No public comments were received; therefore, DEP did not prepare any responses to public comments.

# **Pre-Hearing Submittal Letter to EPA**



# FLORIDA DEPARTMENT OF Environmental Protection

Bob Martinez Center 2600 Blair Stone Road Tallahassee, FL 32399-2400 Ron DeSantis Governor

Jeanette Nuñez Lt. Governor

Noah Valenstein Secretary

Via Electronic Mail

December 18, 2019

Ms. Mary Walker Regional Administrator U. S. Environmental Protection Agency (EPA) – Region 4 61 Forsyth Street, SW – Mail Code: 9T25 Atlanta, GA 30303-8909

Re: Air Program Pre-Hearing Submittal: Proposed Revision to Florida's State Implementation Plan – Amendment to the Maintenance Plan for the Hillsborough County Lead Maintenance Area

Dear Ms. Walker:

Notice is hereby given that, pursuant to 40 C.F.R. 51.102, the Florida Department of Environmental Protection (Department) is accepting comments and will hold a public hearing, if requested, on a proposed revision to Florida's State Implementation Plan (SIP) under the Clean Air Act (CAA). The notice of opportunity to submit comments and request a public hearing was published on December 18, 2019, in the Florida Administrative Register. The public hearing, if requested, will be held on January 21, 2020.

This SIP submittal proposes to revise Florida's Maintenance Plan for the Hillsborough County Lead Maintenance Area to incorporate recent permit revisions for the EnviroFocus Technologies, LLC facility. These recent permit revisions increased the permitted refined lead production limit for the facility and incorporated other minor changes associated with the production increase. This SIP submittal also proposes to revise the attainment emissions inventory and projected future emissions inventories.

The public notice and pre-hearing SIP submittal are enclosed. The Department respectfully requests that EPA provide any comments on this submittal by January 17, 2020. If you have any questions, please contact Hastings Read at (850) 717-9017 or by e-mail at Hastings.Read@FloridaDEP.gov.

Ms. Mary Walker Page 2 of 2 December 18, 2019

Sincerely,

Jeffang J. Kann

Jeffery F. Koerner, Director Division of Air Resource Management

JFK/tl

cc (with Pre-Hearing SIP package): Kenneth L. Mitchell, PhD, Division Director, Air & Radiation Division, EPA Region 4; Lynorae Benjamin, Acting Chief, Air Planning & Implementation Branch, EPA Region 4

# **EPA Comments on Pre-Hearing Submittal**



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION 4 ATLANTA FEDERAL CENTER 61 FORSYTH STREET ATLANTA, GEORGIA 30303-8960

January 16, 2020

Mr. Jeff Koerner Director Division of Air Resource Management Florida Department of Environmental Protection 2600 Blair Stone Road Tallahassee, Florida 32399-2400

Dear Mr. Koerner:

Thank you for your letter dated December 18, 2019, transmitting a prehearing package regarding a proposed revision to Florida's State Implementation Plan, entitled Amendment to the Maintenance Plan for the Hillsborough County Lead Maintenance Area. These rules are the subject of a public hearing scheduled for January 21, 2020, if requested, and written comments due by the close of business on January 17, 2019. We have completed our review of the submittal and offer no comments at this time.

We look forward to continuing to work with you and your staff. If you have any questions, please contact Ms. Lynorae Benjamin, Chief, Air Regulatory Management Section at (404) 562-9040, or have your staff contact Ms. Tiereny Bell at (404) 562-9088.

Sincerely, R. Scott Davis

Chief Air Planning and Implementation Branch

# **DEP Response to EPA Comments**

No EPA comments were received; therefore, DEP did not prepare any responses.



# FLORIDA DEPARTMENT OF Environmental Protection

Bob Martinez Center 2600 Blair Stone Road Tallahassee, FL 32399-2400 Ron DeSantis Governor

Jeanette Nuñez Lt. Governor

Noah Valenstein Secretary

### PERMITTEE

EnviroFocus Technologies, LLC (dba Gopher Resources) 6505 Jewel Avenue Tampa, Florida 33619 Air Permit No. 0570057-037-AC (PSD-FL-404E) Permit Expires: December 31, 2021 Minor Air Construction Permit EnviroFocus Technologies Refined Lead Production Increase

Authorized Representative: Angela Fogarty, Environmental Director

### PROJECT

This is the final air construction permit, which authorizes EnviroFocus to increase the refined lead production rate from 150,000 tons per year (TPY) to 200,000 TPY, install a new coke feeder for the Reverb Furnace (emission unit (EU) 031), install low range differential pressure (dP) sensors to control the furnace draft/damper position, increase the annual throughput of the Alkaline Reagent Silo (EU 028), and increase the annual charge rate of the Reverb Furnace. The proposed work will be conducted at the existing EnviroFocus Technologies (EFT) Facility, which is a Primary Metal Industry categorized under Standard Industrial Classification No. 3341 for Secondary Smelting & Refining of Nonferrous Metals. The existing facility is in Hillsborough County at 1901 N 66th Street in Tampa, Florida. The UTM coordinates are Zone 17, 364 kilometers (km) East and 3093.5 km North.

This final permit is organized into the following sections: Section 1 (General Information); Section 2 (Administrative Requirements); Section 3 (Emissions Unit Specific Conditions); and Section 4 (Appendices). Because of the technical nature of the project, the permit contains numerous acronyms and abbreviations, which are defined in Appendix A of Section 4 of this permit.

### 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. This project is subject to the general preconstruction review requirements in Rule 62-212.300, F.A.C. and is not subject to 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

and Lyle Rearly P. E. Digitally signed by David Read Date: 2019.11.06 07:26:25 -05'00'

*For:* Syed Arif, P.E., Program Administrator Office of Permitting and Compliance Division of Air Resource Management

### FINAL PERMIT

### **CERTIFICATE OF SERVICE**

The undersigned duly designated deputy agency clerk hereby certifies that this Final Air Construction Permit package 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 the date indicated below to the following persons.

Ms. Angela Fogarty, EnviroFocus Technologies (<u>Angela.Fogarty@gopherresource.com</u>) Mr. Russell Kemp, P.E., Ramboll (<u>rkemp@ramboll.com</u>) Ms. Aubrey Jones, Ramboll (<u>ajones@ramboll.com</u>) Ms. Diana Lee, Hillsborough County EPC (<u>lee@epche.org</u>) Ms. Kelly Fortin, EPA Region 4 (<u>Fortin.kelly@Epa.gov</u>) Ms. Lynn Scearce, DEP OPC: (<u>lynn.scearce@dep.state.fl.us</u>)

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.

EnviroFocus Technologies, LLC EnviroFocus Technologies Permit No. 0570057-037-AC (PSD-FL-404E) Refined Lead Production Increase

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### SECTION 1. GENERAL INFORMATION

### FACILITY DESCRIPTION

The EFT Facility is a lead acid battery recycling plant in Hillsborough County which recycles automotive and industrial lead-acid batteries, as well as other lead-acid bearing scrap materials to produce lead ingots. The process involves several key operations (or steps) including: the 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.

Each regulated EU at the existing facility is listed in the table below and those affected by this permitting action are highlighted in blue.

EU No.	Emission Unit Description
<mark>026</mark>	Battery Breaking Area
028	Alkaline Reagent Silo
<mark>030</mark>	Feed Dryer
<mark>031</mark>	Collocated Reverb Furnace
032	Collocated Blast Furnace
<mark>033</mark>	Furnace Tapping, Charging and Refining
<mark>034</mark>	Combustion Gases from Refining Kettles
035	Building Ventilation
<mark>036</mark>	Facility Grounds and Roadways
037	Emergency generator
038	Additional building ventilation

{Permitting Note: This project does not authorize any physical modifications that would result in a change of emissions to the building ventilation systems identified under EU 035 and 038. Only the referenced maximum lead production rate from the enclosed facility is revised, as seen in Section 3, Subsection D of this permit.}

### PROPOSED PROJECT

The purpose of this project is to increase the refined lead production rate from 150,000 TPY to 200,000 TPY. A portion of this production increase will be achieved by optimizing the position of the Reverb Furnace burners (EU 031). The existing burners will not be replaced. The position and angle of the existing burners will be adjusted to improve heat utilization and decrease wear of the furnace refractory. The remaining production increase will be achieved through optimizing the process and does not require physical modification of the facility. Yet, the permitted annual charge rate limit of the Reverb Furnace will be increased from 262,800 TPY to 338,400 TPY to align with the limit for the upstream feed dryer (EU 030). Additionally, EnviroFocus is planning to install low range dP sensors to control furnace draft/damper position. This change is simply an instrumentation improvement/upgrade and will not impact the lead production rate. A new coke feeder will also be installed for better control of coke addition to the Reverb Furnace to optimize the lead smelting rate.

As part of the proposed project, EnviroFocus requests that the annual throughput limit for the alkaline reagent silo (EU 028) be increased from 25,000 TPY to 45,000 TPY. An increase in the reagent usage is required to desulfurize the additional feed needed to achieve a lead production rate of 200,000 TPY. The hourly silo fill rate, which is currently limited to 50 tons per hour (TPH), will not change.

Permit No. 0570057-035-AC was issued in July 2017 and authorized the replacement of the burner on the existing Reverb Furnace, along with other miscellaneous minor changes. The lead production increase would not be achievable without the installation of this new burner. Therefore, Permit No. 0570057-035-AC is considered to be part of the same project to increase the annual refined lead production rate. The PSD avoidance limits

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#### SECTION 1. GENERAL INFORMATION

established by Permit No. 0570057-035-AC are being revised to include the emission increases resulting from this permitting action.

### FACILITY REGULATORY CLASSIFICATION

- The facility is not a major source of hazardous air pollutants (HAP).
- The facility does not operate units subject to the acid rain provisions of the Clean Air Act (CAA).
- The facility is a Title V major source of air pollution in accordance with Chapter 213, F.A.C.
- The facility is a major stationary source in accordance with Rule 62-212.400 (PSD), F.A.C.
- The project includes units subject to applicable New Source Performance Standards (NSPS) in Title 40, Part 60 of the Code of Federal Regulations.
- The project includes units subject to applicable National Emissions Standards for Hazardous Air Pollutants (NESHAP) in Title 40, Part 63 of the Code of Federal Regulations.

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#### SECTION 2. ADMINISTRATIVE REQUIREMENTS

- 1. <u>Permitting Authority</u>: The permitting authority for this project is the Office of Permitting and Compliance in the Division of Air Resource Management of the Department of Environmental Protection (Department). The Office of Permitting and Compliance mailing address is 2600 Blair Stone Road (MS #5505), Tallahassee, Florida 32399-2400.
- <u>Compliance Authority</u>: 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. <u>Appendices</u>: The following Appendices are attached as a part of this permit: Appendix A (Citation Formats and Glossary of Common Terms); Appendix B (General Conditions); Appendix C (Common Conditions); and Appendix D (Common Testing Requirements).
- 4. <u>Applicable Regulations, Forms and Application Procedures</u>: 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. 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. <u>New or Additional Conditions</u>: 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 shall allow the permittee a reasonable time to conform to the new or additional conditions, and on application of the permittee, the Department may grant additional time. [Rule 62-4.080, F.A.C.]
- 6. <u>Modifications</u>: 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 <u>construction</u> 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. <u>Construction and Expiration</u>: The expiration date shown on the first page of this permit provides time to complete the physical construction activities authorized by this permit, complete any necessary compliance testing, and obtain an operation permit. Notwithstanding this expiration date, all specific emissions limitations and operating requirements established by this permit shall remain in effect until the facility or emissions unit is permanently shut down. For good cause, the permittee may request that a permit be extended. Pursuant to Rule 62-4.080(3), F.A.C., such a request shall be submitted to the Permitting Authority in writing before the permit expires. [Rules 62-4.070(3) & (4), 62-4.080 & 62-210.300(1), F.A.C.]
- 8. <u>Source Obligation</u>:
  - a. 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.
  - b. 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 exceeding its projected actual emissions, 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), F.A.C.]

9. <u>Application for Title V Permit</u>: This permit authorizes construction of the permitted emissions units and initial operation to determine compliance with Department rules. A Title V air operation permit is required

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#### SECTION 2. ADMINISTRATIVE REQUIREMENTS

for regular operation of the permitted emissions unit. 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 and Chapter 62-213, F.A.C.]

10. <u>PSD Avoidance Limits (Applicable to EU 026 & EU 030 - EU 034)</u>: The total emissions from EU 026 and EU 030 - EU 034 shall not exceed 815.5 TPY of carbon monoxide (CO), 61.0 TPY of volatile organic compounds (VOC) and 749.5 TPY of sulfur dioxide (SO<sub>2</sub>) on a 12-month averaging basis. For the process stack, compliance with the CO and SO<sub>2</sub> emissions shall be demonstrated by continuous emissions monitoring systems (CEMS) on a 12-month rolled monthly averaging basis. For the hygiene stack, compliance with the SO<sub>2</sub> emissions shall be demonstrated by CEMS on a 12-month rolled monthly average basis. Stack testing shall be conducted on the hygiene stack and process stack to determine the VOC emission rates. For the battery breaking area (EU 026), compliance with the VOC and SO<sub>2</sub> emissions shall be demonstrated by stack testing. Compliance for EU 034 (Combustion Gases from Refining Kettles), shall be determined by multiplying the monthly heat input rate by the appropriate AP-42 emission factor for natural gas or propane combustion.

[Application No. 0570057-057-AC; and Rule 62-212.400(12), F.A.C. (PSD Avoidance)]

- Actual Emissions Reporting: This permit is based on an analysis that compared baseline actual emissions with projected actual emissions and avoided the requirements of subsection 62-212.400(4) through (12), F.A.C. for several pollutants. Therefore, pursuant to Rule 62-212.300(1)(e), F.A.C., the permittee is subject to the following monitoring, reporting and recordkeeping provisions.
  - a. The permittee shall monitor the emissions of any PSD pollutant that the Department identifies could increase as a result of the construction or modification and that is emitted by any emissions unit that could be affected; and, using the most reliable information available, calculate and maintain a record of the annual emissions, in tons per year on a calendar year basis, for a period of 10 years following resumption of regular operations after the change. Emissions shall be computed in accordance with the provisions in Rule 62-210.370, F.A.C., which are provided in Appendix C of this permit.
  - b. The permittee shall report to the Department's permitting and compliance authority 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 report shall contain the following:
    - (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 C 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.
  - c. 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 Department, which shall make it available for review to the general public.
  - d. The permittee shall compute and report annual emissions in accordance with Rule 62-210.370(2), F.A.C. as provided by Appendix C of this permit. For this project, the permittee shall use the following methods in reporting the actual annual CO, VOC, and SO<sub>2</sub> emissions for EU 026 & EU 030 EU 034:
    - (1) For the process stack, compliance with the CO and SO<sub>2</sub> emissions shall be demonstrated by CEMS on a 12-month rolled monthly averaging basis. For the hygiene stack, compliance with the SO<sub>2</sub> emissions shall be demonstrated by CEMS on a 12-month rolled monthly average basis. Stack testing shall be conducted on the hygiene stack and process stack to determine the VOC emission rates.

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#### SECTION 2. ADMINISTRATIVE REQUIREMENTS

- (2) For the battery breaking area (EU 026), compliance with the VOC and SO<sub>2</sub> emissions shall be demonstrated by stack testing.
- (3) Compliance for EU 034 (Combustion Gases from Refining Kettles), shall be determined by multiplying the monthly heat input rate by the appropriate AP-42 emission factor for natural gas or propane combustion.
- (4) As defined in Rule 62-210.370(2), F.A.C., the permittee shall use a more accurate methodology if it becomes available.
- e. Baseline emissions of CO, VOC and SO<sub>2</sub> were determined to be 364.8 TPY, 27.6 TPY and 261.2 TPY, respectively. The could have accommodated emissions were determined to be 360.7 TPY for CO, 5.73 TPY for VOC and 452.3 TPY for SO<sub>2</sub>.

[Application 0570057-057-AC; and Rules 62-212.300(1)(e) and 62-210.370, F.A.C.]

12. Design Fan Speeds & Design Motor Capacities: This permit does not authorize construction on the fans, fan speeds, or motors to any control device. The permittee shall provide the design revolutions per minute (RPM) and the design motor capacities in brake horsepower (BHP) with the application required in Section 2, Condition 9. Any changes in the design fan speeds or the design motor capacities would require an air construction permit prior to making a change. Prior to the issuance of this permit, the following design specifications have been provided:

EU No.	EU Description	Control Device	Design Fan Speed (RPM)	Design Motor Capacity (BHP)		
026	Battery Breaking Area	Scrubber	2,336	114.44		
030	Feed Dryer	Dryer Baghouse	1,760	86.0		
031	Reverb Furnace		1.000	245		
032	Blast Furnace	everb and Blast Baghouse	1,800	345		
033	Furnace Tapping, Charging, and Refining	Hygiene Baghouse	971	107.1		
035	Building Ventilation	Torit Filters A B C	1,420	156		
038	038 Additional Building Torit Filters D, E 1,393 246					
<ul> <li>a. Fan speed and motor capacities based on a temperature of 70°F and fan static pressure of 20.0" of water.</li> <li>b. Fan speed and motor capacities based on a temperature of 250°F and fan static pressure of 25.5" of water.</li> <li>c. Fan speed and motor capacities based on a temperature of 325°F and fan static pressure of 28.0" of water.</li> <li>d. Fan speed and motor capacities based on a temperature of 70°F and fan static pressure of 17.5" of water.</li> <li>e. Fan speed and motor capacities based on a temperature of 70°F and fan static pressure of 12.0" of water.</li> <li>e. Fan speed and motor capacities based on a temperature of 70°F and fan static pressure of 12.0" of water.</li> <li>f. Fan speed and motor capacities based on a temperature of 70°F and fan static pressure of 16.0" of water.</li> <li>Application 0570057-067-06.</li> </ul>						

[Application 0570057-057-AC; and Rule6-24.070(3), F.A.C.]

13. <u>Other Permits</u>. The conditions of this permit supplement all previously issued air construction and operation permits for these emissions units. Unless otherwise specified below, these conditions are in addition to all other applicable permit conditions and regulations. The facility remains subject to all of the requirements contained in all previously issued air construction permits for this facility. [Rule 62-4.070, F.A.C.]

Changes to any previously established permit conditions are highlighted in yellow with deletions shown in strike through text and additions in <u>double underline</u> text.

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### SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS A. Alkaline Reagent Silo (EU 028)

This section of the permit addresses the following emissions unit.

	EU No.	Emission Unit Description
L	028	Alkaline Reagent Silo

The alkaline reagent is received and stored in the  $85^{\circ}$  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<sub>2</sub> emissions from the reverb and blast furnaces. Emissions from the silo consist of PM and are 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.

### PERMITS MODIFIED

1. The following revision replaces Specific Condition 2 (Maximum Fill Rate) in Section 3, Subsection E of Permit No. 0570057-030-AC (PSD-FL-404C):

Maximum Fill Rate: The maximum fill rate for each silo shall not exceed 50 TPH with a maximum capacity of <u>45,00025,000</u> tons per any consecutive twelve-month period. [Application No. 0570057-<u>037020</u>-AC; Rules 62-4.070(3) and 62-210.200(PTE), F.A.C.]

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### SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS B. Lead Smelting (EU 030, 031 & 032)

This section of the permit addresses the following emissions units.

EU 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/hour) 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 actual cubic feet per minute (acfm) at approximately 200°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/hour 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 delivered in pre-filled super sacs from the supplier. Blast and Reverb Operating Collocated: Exhaust gases from both furnaces are ducted to a 10 MMBtu/hour 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 fleed 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.

### EQUIPMENT

- 1. <u>Reverb Furnace</u>: The permittee is authorized to make the following changes to the reverb furnace (EU 031).
  - a. *Burners*. That permittee is authorized to reposition and adjust the angle of the existing reverb burners to improve fuel consumption, heat utilization and decrease wear of the furnace refractory.
  - b. Differential Pressure (dP) Sensors. The permittee is authorized to install low range dP sensors to control furnace draft/damper position.
  - c. *Coke Feeder*. The permittee is authorized to install a new coke feeder for better control of coke addition to the reverb furnace.

[Application No. 0570057-037-AC; Rules 62-4.070(3) and 62-210.200(PTE), F.A.C.]

### PERMITS BEING MODIFIED

2. The following revision replaces Specific Condition 10 (Lead Production) in Section 3, Subsection B of Permit No. 0570057-030-AC (PSD-FL-404C).

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### SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS B. Lead Smelting (EU 030, 031 & 032)

<u>Lead Production</u>: The maximum <u>refined</u> lead produced from the EFT facility shall not exceed <u>200,000150,000</u> tons in any consecutive twelve-month period. [Application No. 0570057-<u>037020</u>-AC and Rule 62-210.200(PTE), F.A.C.]

- 3. The following revisions replace the referenced specific conditions in Permit No. 0570057-035-AC (PSD-FL-404D).
  - a. Section 3, Subsection A, Specific Condition 1 (Furnace Capacities)

62-4.070(3) and 62-210.200(PTE), F.A.C.I

<u>Furnace Capacities</u>: Any equipment or any other changes authorized as part of this permit, shall not result in any capacity increase of the reverb or blast furnaces. The reverb furnace shall still be limited to a maximum charge rate of is-960 tons per day (TPD) with a maximum capacity of <u>338,400262,800</u> tons in any twelve-month consecutive period. The blast furnace shall still have a maximum charge rate of 180 TPD with a maximum capacity of 65,700 tons in any twelve-month consecutive period. [Application No. 0570057-<u>037035</u>-AC; Rules 62-4.070(3) and 62-210.200(PTE), F.A.C.]

- b. Section 3, Subsection A, Specific Condition 2 (Lead Production) <u>Lead Production:</u> Any equipment or any other changes authorized as part of this permit, shall not result in any lead production increase. The maximum lead produced from the EFT facility shall continue not exceed 150,000 tons in any consecutive twelve month period. [Application No. 0570057 035 AC: Rules
- c. Section 3, Subsection A, Specific Condition 13 (Nitrogen Oxides (NO<sub>x</sub>) Emission Standard) <u>NO<sub>x</sub> Emission Standard</u>: NO<sub>x</sub> 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. NO<sub>x</sub> 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. NO<sub>x</sub> emissions from the blast furnace and reverb furnace shall not exceed 1.80 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. NO<sub>x</sub> emissions from the process stack shall not exceed 158 tons per year (tpy) on a 12-month rolled month CEMS average basis. [Application No. 0570057-037035-AC; Rules 62-4.070(3), 62-210.200(PTE), and-62-212.400(10)(c), F.A.C., and PSD Avoidance]
- d. Section 3, Subsection A, Specific Condition 14 (CO Emission Standard)

<u>CO Emission Standard</u>: 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. <del>CO emissions from the process stack shall not exceed 464 tpy on a 12 month rolled month CEMS</del> average basis.

[Application No. 0570057-<u>037</u>035-AC; Rules 62-4.070(3); and 62-210.200(PTE), F.A.C.; and PSD Avoidance]

e. Section 3, Subsection A, Specific Condition 15 (SO<sub>2</sub> Emission Standard)

<u>SO<sub>2</sub> Emission Standard</u>: SO<sub>2</sub> emissions from the feed dryer, blast furnace and reverb furnace combined with SO<sub>2</sub> 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. <u>SO<sub>2</sub>-emissions from the process stack</u> shall not exceed 202 tpy on a 12 month rolled month CEMS average basis. [Application No. 0570057-037035-AC; Rules 62-4.070(3); and 62-210.200(PTE), F.A.C.; and PSD Avoidance]

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## SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS (DRAFT)

### C. Furnace Tapping, Charging and Refining (EU 033)

This section of the permit addresses the following emissions unit.

EU N	0.	Emission Unit Description
033		Furnace Tapping, Charging and Refining

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 66 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,  $NO_{X_3}$ , 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.

### PERMITS MODIFIED

1. The following revision replaces Specific Condition 6 (Lead Production) in Section 3, Subsection C of Permit No. 0570057-030-AC (PSD-FL-404C):

Lead Production: The maximum <u>refined</u> lead produced from the EFT facility shall not exceed 200,000150,000 tons in any consecutive twelve-month period. [Application No. 0570057-037020 and Rule 62-210.200(PTE), F.A.C.]

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### SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS D. Building Ventilation (EU 035 & 038)

This section of the permit addresses the following emissions units.

EU 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.

EnviroFocus has enclosed all process areas of the facility and ventilated the air exhausted from the facility through two large 195,000 and 160,000 acfm Torit cartridge collectors identified as Torit filters. The 160,000 acfm Torit collector have a high efficiency particulate air (HEPA) filter downstream of the cartridge collector. This air flow produces an inward draft velocity at all openings in the building to prevent PM and Pb emissions from escaping uncontrolled. The filtered gases are emitted from two new stacks identified as the Torit stacks.

#### PERMITS MODIFIED

1. The following revision replaces Specific Condition 5 (Production) in Section 3, Subsection G of Permit No. 0570057-030-AC (PSD-FL-404C):

<u>Production</u>: <u>Upon completion of the total enclosure, (T</u>he maximum <u>refined</u> lead produced from the enclosed facility shall not exceed <u>200,000150,000</u> tons any consecutive twelve-month period. [Application No. 0570057-<u>037020</u>-AC and Rule 62-210.200(PTE), F.A.C.]

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### SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS E. Facility Grounds and Roadways (EU 036)

This section of the permit addresses the following emissions unit.

EU No.	Emission Unit Description
036	Facility Grounds and Roadways

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) 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.

### PERFORMANCE RESTRICTIONS

1. <u>Permitted Capacity</u>: The permittee is authorized to receive up to 45,000 tons of solid soda ash during a 12month period (for feed desulfurization) by truck or by rail shipment. [Application No. 0570057-037-AC and Rule 62-210.200(PTE), F.A.C.]

### WORK PRACTICE STANDARDS

- 2. Additional Work Practice Standards:
  - a. Silt and Lead Sampling. Upon submitting a Title V renewal application, the permittee shall include silt and lead sampling results utilizing the same protocols in sampling that was submitted in Application No. 0570057-037-AC. The sampling shall be completed no earlier than 60 days prior to the due date of a Title V permit renewal application. [Application No. 0570057-03-AC and Pb Attainment SIP]
  - *b.* Scrap Yard Cover. The entire adjacent scrap yard, recently purchased by EnviroFocus, shall be covered with vegetation within six months of the effective date of this permit. [Pb Attainment SIP]
  - c. Scrap Yard Maintenance Plan. With the Title V permit application, required by Section 2, Condition 9 of this permit, the application shall include a Maintenance Plan to minimize fugitive dust arising from the scrap yard. The Maintenance Plan at a minimum shall include a landscaping protocol to include based on sprinklers (zones, times, durations, etc. to ensure the cover is health and there are and that there are minimal bare spots, i.e., open dirt surfaces. [Pb Attainment SIP]
  - d. *Truck Traffic and Parking.* Trucks leaving, arriving or parking at the EFT Facility that are involved in delivery of feedstocks, are prohibited from traversing or parking at the adjacent scrap yard. Vehicle traffic is only permitted for maintenance purposes. A new air construction permit application will be required, with possible additional air dispersion modeling for lead, to allow trucks to utilize the scrap yard or to repurpose the scrap yard to another purpose such as storage. [Rules 62-4.070(3); 62-210.200(PTE) and 62-212.400(12), F.A.C. (PSD Avoidance)]

### **RECORDS AND REPORTS**

- 3. <u>Operational Data</u>: Records of the tons of solid soda ash received by truck during any 12-month period shall be submitted to the Department, upon request. [Rule 62-4.070(3), F.A.C.]
- 4. <u>Design Concept Report</u>: The 100% design concept for the vegetative cover of the scrap yard shall be submitted to the Permitting Authority and Compliance Authority within five business days from the receival date from an engineering firm. [Rule 62-4.070(3), F.A.C. and Pb Attainment SIP]

EnviroFocus Technologies, LLC EnviroFocus Technologies Permit No. 0570057-037-AC (PSD-FL-404E) Refined Lead Production Increase

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# 2014 EU036 Lead Emissions from 2014 EnviroFocus Annual Operating Report

**Control Efficiency:** 50% Silt Loading/Lead Content Factors: Eagan, MN Facility Refined Lead Production Level: 160,000 TPY

		Shipping	Daily	Empty	Load	Loaded
Vehicle Traffic	Total Trucks	Days	Trucks	Weight	Weight	Weight
Inbound raw materials	12775	365	35	16	20	36
Outgoing product lead shipments	8030	365	22	16	20	36
Other large trucks (blast fluxes)	730	365	2	16	20	36
Other large trucks (refining fluxes)	730	365	2	16	20	36
Plastics shipments	365	365	1	16	20	36
Caustic Soda deliveries	730	365	2	16	17	33
Slag rolloffs, internal	1825	365	5	10	20	30
slag/ scrap metal offsite shipping	1825	365	5	16	20	36
Loaders	5840	365	16	12	3	15
Miscellaneous deliveries	1460	365	4	5	2	7

Lead-Bearing Trucks (R/T)	57	Daily Avg.	1734	Monthly
Other Scaled Trucks (R/T)	12	Daily Avg.	365	Monthly
All Scaled Trucks (R/T)	69	Daily Avg.	2099	Monthly

Description Incoming Batteries Warehouse (loaded) Incoming Batteries Warehouse (unloaded) Incoming Batteries Direct (loaded)	Distance (ft) 780 300	Segment(s) 1	Trips/Year	W (tons)	sL	VMT (miles)	E (PM10)	E (TSP)	E (Pb)	PM10 (tons)	(tons)	(tons)
Incoming Batteries Warehouse (unloaded)	300	•	1,278	36.0	1.48	189	2.7E-01	1.4E+00	7.5E-02	2.58E-02	1.32E-01	7.07E-03
		8	1,278	16.0	1.48	73	8.1E-02	4.1E-01	2.2E-02	2.93E-03	1.51E-02	8.06E-04
	650	2	11.498	36.0	1.48	1.415	2.7E-01	1.4E+00	7.5E-02	1.93E-01	9.92E-01	5.31E-02
Incoming Batteries Direct (unloaded)	250	9	11,498	16.0	1.48	544	8.1E-02	4.1E-01	2.2E-02	2.20E-02	1.13E-01	6.04E-03
Outgoing Lead (unloaded)	1030	3	8,030	16.0	1.48	1,566	8.1E-02	4.1E-01	2.2E-02	6.33E-02	3.25E-01	1.74E-02
Outgoing Lead (loaded)	730	10	8,030	36.0	1.48	1,110	2.7E-01	1.4E+00	7.5E-02	1.52E-01	7.78E-01	4.16E-02
Plastics outgoing (loaded)	300	8	365	36.0	1.48	21	2.7E-01	1.4E+00	7.5E-02	2.83E-03	1.45E-02	7.77E-04
Plastics outgoing (unloaded)	780	1	365	16.0	1.48	54	8.1E-02	4.1E-01	2.2E-02	2.18E-03	1.12E-02	5.99E-04
Other Large Trucks, blast, bins (loaded)	1090	4	730	36.0	1.48	151	2.7E-01	1.4E+00	7.5E-02	2.06E-02	1.06E-01	5.65E-03
Other Large Trucks blast, bins (unloaded)	740	11	730	16.0	1.48	102	8.1E-02	4.1E-01	2.2E-02	4.13E-03	2.12E-02	1.14E-03
Other Large Trucks, refining fluxes (loaded)	1030	3	730	36.0	1.48	142	2.7E-01	1.4E+00	7.5E-02	1.95E-02	9.98E-02	5.34E-03
Other Large Trucks, refining fluxes (unloaded)	730	10	730	16.0	1.48	101	8.1E-02	4.1E-01	2.2E-02	4.08E-03	2.09E-02	1.12E-03
Slag/ scrap metal offsite shipping (loaded)	750	12	1,825	36.0	1.48	259	2.7E-01	1.4E+00	7.5E-02	3.54E-02	1.82E-01	9.72E-03
Slag/ scrap metal offsite shipping (unloaded)	980	5	1,825	16.0	1.48	339	8.1E-02	4.1E-01	2.2E-02	1.37E-02	7.03E-02	3.76E-03
Caustic Soda (loaded)	300	6	730	33.0	1.48	41	2.4E-01	1.2E+00	6.6E-02	4.97E-03	2.55E-02	1.36E-03
Caustic Soda (unloaded)	570	13	730	16.0	1.48	79	8.1E-02	4.1E-01	2.2E-02	3.18E-03	1.64E-02	8.75E-04
Miscellaneous (loaded)	1030	3	1,460	7.0	1.48	285	2.3E-02	1.2E-01	6.4E-03	3.31E-03	1.71E-02	9.14E-04
Miscellaneous (unloaded)	730	10	1,460	5.0	1.48	202	1.4E-02	7.2E-02	3.9E-03	1.40E-03	7.30E-03	3.90E-04
Loaders (loaded)	690	7	5,840	15.0	1.48	763	7.3E-02	3.8E-01	2.0E-02	2.80E-02	1.44E-01	7.69E-03
Loaders (unloaded)	670	14	5,840	12.0	1.48	741	5.2E-02	2.7E-01	1.4E-02	1.94E-02	9.98E-02	5.34E-03
Slag Rolloffs (loaded)	600	16	1,825	30.0	1.48	207	2.1E-01	1.1E+00	5.7E-02	2.15E-02	1.11E-01	5.91E-03
Slag Rolloffs (unloaded)	600	15	1,825	10.0	1.48	207	4.0E-02	2.0E-01	1.1E-02	4.13E-03	2.12E-02	1.14E-03
Lead-Bearing Trucks Other Scaled Trucks All Scaled Trucks Total Facility 6.47							6.47E-01	3.32E+00	1.26E-01 3.03E-02 1.56E-01 <b>0.178</b>			

Lead-Bearing	Trucks
Other Scaled	
Other Scaled	TTUCKS

EnviroFocus Facility Grounds and Roadways (EU 036) Emissions Calculations.xlsx / 2014 AOR

k = particle size multiplier (lb/VMT, 0.016 for PM10 and 0.082 for PM)

W = average weight of vehicles traveling the road (tons)

AP-42 Section 13.2.1

 $E = k(sL/2)^{0.65} x (W/3)^{1.5} - C)*CNTRL$ 

sL = road surface silt loading (g/m<sup>2</sup>)

E = emission factor (lb/VMT)

VMT = vehicle miles traveled

CNTRL = Control efficiency

C = Emission factor for vehicle exhaust, brake wear, and tire wear (0.00047 lb/VMT)

90 % of incoming raw materials directly to dock, not warehouse

# 2014 EU036 Lead Emissions using Correct Control Efficiency (Emissions used in Attainment Modeling Demonstration)

**Control Efficiency:** 94% Silt Loading/Lead Content Factors: Eagan, MN Facility Refined Lead Production Level: 160,000 TPY

		Shipping	Daily	Empty	Load	Loaded
Vehicle Traffic	Total Trucks	Days	Trucks	Weight	Weight	Weight
Inbound raw materials	12775	365	35	16	20	36
Outgoing product lead shipments	8030	365	22	16	20	36
Other large trucks (blast fluxes)	730	365	2	16	20	36
Other large trucks (refining fluxes)	730	365	2	16	20	36
Plastics shipments	365	365	1	16	20	36
Caustic Soda deliveries	730	365	2	16	17	33
Slag rolloffs, internal	1825	365	5	10	20	30
slag/ scrap metal offsite shipping	1825	365	5	16	20	36
Loaders	5840	365	16	12	3	15
Miscellaneous deliveries	1460	365	4	5	2	7

Lead-Bearing Trucks (R/T)	57	Daily Avg.	1734	Monthly
Other Scaled Trucks (R/T)	12	Daily Avg.	365	Monthly
All Scaled Trucks (R/T)	69	Daily Avg.	2099	Monthly

Description	Distance (ft)	Segment(s)	Trips/Year	W (tons)	sL	VMT (miles)	E (PM10)	E (TSP)	E (Pb)	PM10 (tons)	
Incoming Batteries Warehouse (loaded)	780	1	1,278	36.0	1.48	189	3.3E-02	1.7E-01	9.0E-03	3.09E-03	1
Incoming Batteries Warehouse (unloaded)	300	8	1,278	16.0	1.48	73	9.7E-03	5.0E-02	2.7E-03	3.52E-04	1
Incoming Batteries Direct (loaded)	650	2	11,498	36.0	1.48	1,415	3.3E-02	1.7E-01	9.0E-03	2.32E-02	1
Incoming Batteries Direct (unloaded)	250	9	11,498	16.0	1.48	544	9.7E-03	5.0E-02	2.7E-03	2.64E-03	1
Outgoing Lead (unloaded)	1030	3	8,030	16.0	1.48	1,566	9.7E-03	5.0E-02	2.7E-03	7.59E-03	00
Outgoing Lead (loaded)	730	10	8,030	36.0	1.48	1,110	3.3E-02	1.7E-01	9.0E-03	1.82E-02	Ş
Plastics outgoing (loaded)	300	8	365	36.0	1.48	21	3.3E-02	1.7E-01	9.0E-03	3.40E-04	1
Plastics outgoing (unloaded)	780	1	365	16.0	1.48	54	9.7E-03	5.0E-02	2.7E-03	2.61E-04	1
Other Large Trucks, blast, bins (loaded)	1090	4	730	36.0	1.48	151	3.3E-02	1.7E-01	9.0E-03	2.47E-03	1
Other Large Trucks blast, bins (unloaded)	740	11	730	16.0	1.48	102	9.7E-03	5.0E-02	2.7E-03	4.96E-04	2
Other Large Trucks, refining fluxes (loaded)	1030	3	730	36.0	1.48	142	3.3E-02	1.7E-01	9.0E-03	2.33E-03	1
Other Large Trucks, refining fluxes (unloaded)	730	10	730	16.0	1.48	101	9.7E-03	5.0E-02	2.7E-03	4.89E-04	2
Slag/ scrap metal offsite shipping (loaded)	750	12	1,825	36.0	1.48	259	3.3E-02	1.7E-01	9.0E-03	4.25E-03	2
Slag/ scrap metal offsite shipping (unloaded)	980	5	1,825	16.0	1.48	339	9.7E-03	5.0E-02	2.7E-03	1.64E-03	8
Caustic Soda (loaded)	300	6	730	33.0	1.48	41	2.9E-02	1.5E-01	7.9E-03	5.97E-04	6.5
Caustic Soda (unloaded)	570	13	730	16.0	1.48	79	9.7E-03	5.0E-02	2.7E-03	3.82E-04	1
Miscellaneous (loaded)	1030	3	1,460	7.0	1.48	285	2.8E-03	1.4E-02	7.7E-04	3.97E-04	2
Miscellaneous (unloaded)	730	10	1,460	5.0	1.48	202	1.7E-03	8.7E-03	4.6E-04	1.69E-04	8
Loaders (loaded)	690	7	5,840	15.0	1.48	763	8.8E-03	4.5E-02	2.4E-03	3.36E-03	-
Loaders (unloaded)	670	14	5,840	12.0	1.48	741	6.3E-03	3.2E-02	1.7E-03	2.33E-03	1
Slag Rolloffs (loaded)	600	16	1,825	30.0	1.48	207	2.5E-02	1.3E-01	6.8E-03	2.59E-03	1
Slag Rolloffs (unloaded)	600	15	1,825	10.0	1.48	207	4.8E-03	2.5E-02	1.3E-03	4.95E-04	2

Total Facility	7.77E-0
All Scaled Trucks	
Other Scaled Trucks	
Lead-Bearing Trucks	

EnviroFocus Facility Grounds and Roadways (EU 036) Emissions Calculations.xlsx / 2014 Corrected

AP-42 Section 13.2.1  $E = k(sL/2)^{0.65} \times (W/3)^{1.5} - C)*CNTRL$ E = emission factor (lb/VMT) k = particle size multiplier (lb/VMT, 0.016 for PM10 and 0.082 for PM) sL = road surface silt loading (g/m<sup>2</sup>) W = average weight of vehicles traveling the road (tons) VMT = vehicle miles traveled C = Emission factor for vehicle exhaust, brake wear, and tire wear (0.00047 lb/VMT) CNTRL = Control efficiency

90 % of incoming raw materials directly to dock, not warehouse

	TSP	Pb
S)	(tons)	(tons)
3	1.59E-02	8.49E-04
	1.81E-03	9.67E-05
2	1.19E-01	6.37E-03
3	1.36E-02	7.25E-04
}	3.90E-02	2.09E-03
2	9.33E-02	4.99E-03
	1.74E-03	9.33E-05
1	1.34E-03	7.18E-05
}	1.27E-02	6.78E-04
1	2.55E-03	1.36E-04
} 1	1.20E-02	6.40E-04
1	2.51E-03	1.34E-04
3 3 1	2.18E-02	1.17E-03
}	8.43E-03	4.51E-04
1	3.06E-03	1.64E-04
1	1.96E-03	1.05E-04
1	2.05E-03	1.10E-04
1	8.76E-04	4.68E-05
	1.72E-02	9.23E-04
3	1.20E-02	6.41E-04
3	1.33E-02	7.10E-04
1	2.55E-03	1.36E-04
		1.51E-02 3.64E-03 1.88E-02
-02	3.99E-01	0.0213

# 2014 EU036 Lead Emissions Updated with Site-Specific Factors

**Control Efficiency:** 94% Silt Loading/Lead Content Factors: EnviroFocus Facility Refined Lead Production Level: 160,000 TPY Additional Updates: Route distances, truck weights

		Shipping	Daily	Empty	Load	Loaded
Vehicle Traffic	Total Trucks	Days	Trucks	Weight	Weight	Weight
Inbound raw materials	12775	365	35	16	20	36
Outgoing product lead shipments	8030	365	22	16	20	36
Other large trucks (blast fluxes)	730	365	2	16	20	36
Other large trucks (refining fluxes)	730	365	2	16	20	36
Plastics shipments	365	365	1	16	20	36
Caustic Soda deliveries	730	365	2	16	17	33
Slag rolloffs, internal	1825	365	5	10	15.5	25.5
slag/ scrap metal offsite shipping	1825	365	5	16	15.5	31.5
Loaders	5840	365	16	12	3	15
Miscellaneous deliveries	1460	365	4	5	2	7

Lead-Bearing Trucks (R/T)	57	Daily Avg.	1734	Monthly
Other Scaled Trucks (R/T)	12	Daily Avg.	365	Monthly
All Scaled Trucks (R/T)	69	Daily Avg.	2099	Monthly

											101	1.0
Description	Distance (ft)	Segment(s)	Trips/Year	W (tons)	sL	VMT (miles)	E (PM10)	E (TSP)	E (Pb)	PM10 (tons)	(tons)	(tons)
Incoming Batteries Warehouse (loaded)	480	1	1,278	36.0	0.26	116	1.1E-02	5.4E-02	2.3E-04	6.14E-04	3.15E-03	1.32E-05
Incoming Batteries Warehouse (unloaded)	257	8	1,278	16.0	0.26	62	3.1E-03	1.6E-02	6.7E-05	9.67E-05	4.99E-04	2.10E-06
Incoming Batteries Direct (loaded)	472	2	11,498	36.0	0.26	1,028	1.1E-02	5.4E-02	2.3E-04	5.43E-03	2.79E-02	1.17E-04
Incoming Batteries Direct (unloaded)	254	9	11,498	16.0	0.26	553	3.1E-03	1.6E-02	6.7E-05	8.60E-04	4.44E-03	1.87E-05
Outgoing Lead (unloaded)	669	3	8,030	16.0	0.279	1,017	3.3E-03	1.7E-02	2.3E-04	1.66E-03	8.55E-03	1.17E-04
Outgoing Lead (loaded)	556	10	8,030	36.0	0.279	846	1.1E-02	5.7E-02	7.8E-04	4.68E-03	2.40E-02	3.29E-04
Plastics outgoing (loaded)	556	8	365	36.0	0.324	38	1.2E-02	6.3E-02	1.4E-03	2.34E-04	1.20E-03	2.72E-05
Plastics outgoing (unloaded)	669	8	365	16.0	0.324	46	3.6E-03	1.9E-02	4.2E-04	8.31E-05	4.29E-04	9.69E-06
Other Large Trucks, blast, bins (loaded)	1213	4	730	36.0	0.45	168	1.5E-02	7.8E-02	2.3E-03	1.27E-03	6.50E-03	1.95E-04
Other Large Trucks blast, bins (unloaded)	916	11	730	16.0	0.45	127	4.5E-03	2.3E-02	6.9E-04	2.82E-04	1.45E-03	4.36E-05
Other Large Trucks, refining fluxes (loaded)	823	3	730	36.0	0.279	114	1.1E-02	5.7E-02	7.8E-04	6.29E-04	3.23E-03	4.43E-05
Other Large Trucks, refining fluxes (unloaded)	620	10	730	16.0	0.279	86	3.3E-03	1.7E-02	2.3E-04	1.40E-04	7.21E-04	9.87E-06
Slag/ scrap metal offsite shipping (loaded)	292	12	1,825	31.5	0.26	101	8.6E-03	4.4E-02	1.9E-04	4.36E-04	2.24E-03	9.41E-06
Slag/ scrap metal offsite shipping (unloaded)	417	5	1,825	16.0	0.26	144	3.1E-03	1.6E-02	6.7E-05	2.24E-04	1.16E-03	4.86E-06
Caustic Soda (loaded)	438	6	730	33.0	0.26	61	9.3E-03	4.8E-02	2.0E-04	2.81E-04	1.44E-03	6.06E-06
Caustic Soda (unloaded)	211	13	730	16.0	0.26	29	3.1E-03	1.6E-02	6.7E-05	4.54E-05	2.34E-04	9.84E-07
Miscellaneous (loaded)	1126	3	1,460	7.0	0.45	311	1.3E-03	6.6E-03	2.0E-04	1.98E-04	1.03E-03	3.09E-05
Miscellaneous (unloaded)	1060	10	1,460	5.0	0.45	293	7.6E-04	4.0E-03	1.2E-04	1.11E-04	5.84E-04	1.75E-05
Loaders (loaded)	486	7	5,840	15.0	0.96	538	6.6E-03	3.4E-02	2.7E-03	1.78E-03	9.17E-03	7.33E-04
Loaders (unloaded)	463	14	5,840	12.0	0.96	512	4.7E-03	2.4E-02	2.0E-03	1.21E-03	6.25E-03	5.00E-04
Slag Rolloffs (loaded)	1381	16	1,825	25.5	0.45	477	9.0E-03	4.6E-02	1.4E-03	2.15E-03	1.10E-02	3.31E-04
Slag Rolloffs (unloaded)	1416	15	1,825	10.0	0.324	489	1.8E-03	9.1E-03	2.1E-04	4.31E-04	2.24E-03	5.06E-05
						Other S	earing Trucks Scaled Trucks Scaled Trucks					5.97E-04 3.51E-04 9.48E-04
												0.0026

Lead-Bearing Trucks	
Other Scaled Trucks	
All Scaled Trucks	
Total Facility	

2.28E-02 1.17E-01 **0.0026** 

EnviroFocus Facility Grounds and Roadways (EU 036) Emissions Calculations.xlsx / 2014 Site-Specific

90 % of incoming raw materials directly to dock, not warehouse

TSP

Pb

k = particle size multiplier (lb/VMT, 0.016 for PM10 and 0.082 for PM)

W = average weight of vehicles traveling the road (tons)

C = Emission factor for vehicle exhaust, brake wear, and tire wear (0.00047 lb/VMT)

AP-42 Section 13.2.1

 $E = k(sL/2)^{0.65} x (W/3)^{1.5} - C)*CNTRL$ 

sL = road surface silt loading (g/m<sup>2</sup>)

E = emission factor (lb/VMT)

VMT = vehicle miles traveled

CNTRL = Control efficiency

# **Future Case EU036 Lead Emissions**

**Control Efficiency: 94%** Silt Loading/Lead Content Factors: EnviroFocus Facility **Refined Lead Production Level: 200,000 TPY** Additional Updates: Route distances, truck weights, added soda ash deliveries by truck

Vehicle Traffic	Total Trucks	Shipping Days	Daily Trucks^	Empty Weight	Load Weight	Loaded Weight
Inbound raw materials	15,969	365	43.8	16	20	36
Outgoing product lead shipments	10,038	365	27.5	16	20	36
Other large trucks (blast fluxes)	913	365	2.5	16	20	36
Other large trucks (refining fluxes)	913	365	2.5	16	20	36
Plastics shipments	456	365	1.3	16	20	36
Caustic Soda deliveries	1,022	365	2.8	16	17	33
Slag rolloffs, internal	2,281	365	6.3	19	15.5	34.5
slag/ scrap metal offsite shipping	2,281	365	6.3	19	15.5	34.5
Loaders	7,300	365	20.0	12	3	15
Miscellaneous deliveries	1,825	365	5.0	5	2	7
Soda Ash deliveries	2,920	365	8.0	16	20	36
	Lead-Be	aring Trucks (R/T)	71.25	Daily Avg.	2167	Monthly
	Other S	Scaled Trucks (R/T)	15.3	Daily Avg.	465.375	Monthly
	All S	Scaled Trucks (R/T)	86.55	Daily Avg.	2633	Monthly

- E = emission factor (lb/VMT)
- k = particle size multiplier (lb/VMT, 0.016 for PM10 and 0.082 for PM)

sL = road surface silt loading (g/m<sup>2</sup>) W = average weight of vehicles traveling the road (tons)

VMT = vehicle miles traveled

CNTRL = Control efficiency

90 % of incoming raw materials directly to dock, not warehouse

\*Daily Trucks have been scaled up by a ratio of 1.25, the ratio of the target production level (200,000 tpy) to the original production estimate (160,000 tpy) increasing the total truck count in Column C.

Description	Distance (ft)	Segment(s)	Trips/Year	W (tons)	sL	VMT (miles)	E (PM10)	E (TSP)	E (Pb)	PM10 (tons)	(tons)	(tons)
Incoming Batteries Warehouse (loaded)	480	1	1,597	36.0	0.26	145	1.1E-02	5.4E-02	2.3E-04	7.67E-04	3.94E-03	1.65E-05
Incoming Batteries Warehouse (unloaded)	257	8	1,597	16.0	0.26	78	3.1E-03	1.6E-02	6.7E-05	1.21E-04	6.24E-04	2.62E-06
Incoming Batteries Direct (loaded)	472	2	14,372	36.0	0.26	1,285	1.1E-02	5.4E-02	2.3E-04	6.79E-03	3.49E-02	1.46E-04
Incoming Batteries Direct (unloaded)	254	9	14,372	16.0	0.26	691	3.1E-03	1.6E-02	6.7E-05	1.08E-03	5.55E-03	2.33E-05
Outgoing Lead (unloaded)	669	3	10,038	16.0	0.279	1,272	3.3E-03	1.7E-02	2.3E-04	2.07E-03	1.07E-02	1.46E-04
Outgoing Lead (loaded)	556	10	10,038	36.0	0.279	1,057	1.1E-02	5.7E-02	7.8E-04	5.85E-03	3.00E-02	4.11E-04
Plastics outgoing (loaded)	556	8	456	36.0	0.324	48	1.2E-02	6.3E-02	1.4E-03	2.93E-04	1.50E-03	3.40E-05
Plastics outgoing (unloaded)	669	8	456	16.0	0.324	58	3.6E-03	1.9E-02	4.2E-04	1.04E-04	5.36E-04	1.21E-05
Other Large Trucks, blast, bins (loaded)	1213	4	913	36.0	0.45	210	1.5E-02	7.8E-02	2.3E-03	1.58E-03	8.13E-03	2.44E-04
Other Large Trucks blast, bins (unloaded)	916	11	913	16.0	0.45	158	4.5E-03	2.3E-02	6.9E-04	3.53E-04	1.82E-03	5.45E-05
Other Large Trucks, refining fluxes (loaded)	823	3	913	36.0	0.279	142	1.1E-02	5.7E-02	7.8E-04	7.87E-04	4.04E-03	5.54E-05
Other Large Trucks, refining fluxes (unloaded)	620	10	913	16.0	0.279	107	3.3E-03	1.7E-02	2.3E-04	1.75E-04	9.01E-04	1.23E-05
Slag/ scrap metal offsite shipping (loaded)	292	12	2,281	34.5	0.26	126	9.9E-03	5.1E-02	2.1E-04	6.25E-04	3.21E-03	1.35E-05
Slag/ scrap metal offsite shipping (unloaded)	417	5	2,281	19.0	0.26	180	4.0E-03	2.1E-02	8.7E-05	3.63E-04	1.87E-03	7.87E-06
Caustic Soda (loaded)	438	6	1,022	33.0	0.26	85	9.3E-03	4.8E-02	2.0E-04	3.93E-04	2.02E-03	8.48E-06
Caustic Soda (unloaded)	211	13	1,022	16.0	0.26	41	3.1E-03	1.6E-02	6.7E-05	6.35E-05	3.28E-04	1.38E-06
Miscellaneous (loaded)	1126	3	1,825	7.0	0.45	389	1.3E-03	6.6E-03	2.0E-04	2.47E-04	1.29E-03	3.87E-05
Miscellaneous (unloaded)	1060	10	1,825	5.0	0.45	366	7.6E-04	4.0E-03	1.2E-04	1.38E-04	7.30E-04	2.19E-05
Soda Ash Deliveries (loaded)	1126	3	2,920	36.0	0.45	623	1.5E-02	7.8E-02	2.3E-03	4.70E-03	2.41E-02	7.24E-04
Soda Ash Deliveries (unloaded)	1060	10	2,920	20.0	0.45	586	6.2E-03	3.2E-02	9.6E-04	1.83E-03	9.41E-03	2.82E-04
Loaders (loaded)	486	7	7,300	15.0	0.96	672	6.6E-03	3.4E-02	2.7E-03	2.23E-03	1.15E-02	9.17E-04
Loaders (unloaded)	463	14	7,300	12.0	0.96	640	4.7E-03	2.4E-02	2.0E-03	1.52E-03	7.81E-03	6.25E-04
Slag Rolloffs (loaded)	1381	16	2,281	34.5	0.45	597	1.4E-02	7.3E-02	2.2E-03	4.23E-03	2.17E-02	6.51E-04
Slag Rolloffs (unloaded)	1416	15	2,281	19.0	0.324	612	4.7E-03	2.4E-02	5.4E-04	1.43E-03	7.34E-03	1.66E-04
						Other S	earing Trucks Scaled Trucks Scaled Trucks			3 775-02	1945-01	7.47E-04 4.43E-04 1.19E-03 <b>0.0046</b>
						Tota	I Facility			3.77E-02	1.94E-01	0.

Total Facility	3.77
All Scaled Trucks	
Other Scaled Trucks	
Lead-Bearing Trucks	

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C = Emission factor for vehicle exhaust, brake wear, and tire wear (0.00047 lb/VMT)

Pb

TSP

AP-42 Section 13.2.1  $E = k(sL/2)^{0.65} x (W/3)^{1.5} - C)*CNTRL$