



June 21, 2023

Mr. Zachary Bittner  
KY Dept. for Environmental Protection  
Division for Air Quality  
Permit Review Branch  
300 Sower Blvd. 2<sup>nd</sup> Floor  
Frankfort, KY 40601

Subject: Renewal Application for Permit F-18-045 R2  
EnerSys Delaware Inc.  
Richmond, (Madison County), Kentucky  
AI #2864, Facility ID #21-151-00032

Project No. 120-1810

Dear Mr. Bittner:

EnerSys Delaware Inc. (EnerSys) is submitting a renewal application for Permit F-18-045R2 in accordance with 401 KAR 52:030 Section 12. EnerSys is providing a permit markup which reflects changes to process equipment descriptions, off-permit changes since the last renewal and other administrative changes to reflect current operations. The permit mark-up and cover letters for off-permit and 502(b)10 changes can be found in Appendix B and C, respectively.

As part of this permit renewal, EnerSys requests that the Division for Air Quality (DAQ) remove the table listed under Section B, Paragraph 3, entitled "Target Production Rates for Stack Testing Purposes." This table was initially included in the permit as a means of identifying anticipated production rates during stack testing, where multiple pieces of equipment are vented to a single control device, in lieu of identifying a total weight-based maximum production throughput. Over several rounds of stack testing under the Permit, EnerSys has observed variability in individual equipment production rates, such that the Table would require frequent revision in order to identify optimized production rates for each round of testing. Further, EnerSys has observed that individual equipment production rates do not dictate the results of emission testing, because such production rates are not directly tied to the performance of lead particulate control devices or the concentration-based emission limits for lead-acid battery manufacturing plants found in 40 CFR Part 60, Subpart KK, which are expressed in grains per dry standard cubic foot of air flow. EnerSys will produce proposed production rates for stack testing in the required protocol submitted to the DAQ Source Sampling Section for each testing event. EnerSys has maintained compliance with all applicable emission limits as reflected by the stack tests performed since the issuance of permit F-18-045.

EnerSys requests to remain a conditional major source with a limit of 90 tons per year of particulate matter. Should there be any questions, please do not hesitate to contact Nicole Galavotti at (859) 294-5155 or Eric Ripberger at (859) 624-7306. Thank you.



**Lexington**  
948 Floyd Drive  
Lexington, KY 40505  
Telephone 859.294.5155  
Fax 859.294.5255  
[www.shieldenv.com](http://www.shieldenv.com)


Louisville, KY

Sincerely,

**SHIELD ENVIRONMENTAL ASSOCIATES, INC.**



Nicole Galavotti, P.E.  
Principal, Sr. Environmental Engineer  
email: nicole\_galavotti@shieldmw.com



Daniel Porter, Ph.D., P.E.  
Environmental Engineer  
email: daniel\_porter@shieldmw.com

cc: Eric Ripberger – EnerSys Delaware Inc.

Attachments

Appendix A DEP7007 AI Form

Appendix B Permit Markup

Appendix C Off-Permit and 502(b)(10) Changes

## APPENDIX A

DEP7007 Form

## Division for Air Quality

300 Sower Boulevard  
Frankfort, KY 40601  
(502) 564-3999

**DEP7007AI****Administrative Information**

- ☒ Section AI.1: Source Information  
☒ Section AI.2: Applicant Information  
☒ Section AI.3: Owner Information  
☒ Section AI.4: Type of Application  
☒ Section AI.5: Other Required Information  
☒ Section AI.6: Signature Block  
☒ Section AI.7: Notes, Comments, and Explanations

**Additional Documentation**

☒ Additional Documentation attached

**Source Name:** EnerSys Delaware Inc.

**KY EIS (AFS) #:** 21- 151-00032

**Permit #:** F-18-045 R2

**Agency Interest (AI) ID:** 2864

**Date:** 6/15/2023

**Section AI.1: Source Information**

<b>Physical Location</b>	<b>Street:</b>	<u>761 Eastern Bypass</u>		
<b>Address:</b>	<b>City:</b>	<u>Richmond</u>	<b>County:</b>	<u>Madison</u>
	<b>Street or</b>	<u>761 Eastern Bypass</u>		
<b>Mailing Address:</b>	<b>P.O. Box:</b>			
	<b>City:</b>	<u>Richmond</u>	<b>State:</b>	<u>Kentucky</u>
			<b>Zip Code:</b>	<u>40475</u>

**Standard Coordinates for Source Physical Location**

**Longitude:** -84.292892 (decimal degrees) **Latitude:** 37.734001 (decimal degrees)

**Primary (NAICS) Category:** Storage Battery Manufacturing **Primary NAICS #:** 335911

**Classification (SIC) Category:**

Electrical Storage Batteries

**Primary SIC #:**

3691

**Briefly discuss the type of business conducted at this site:**

EnerSys Delaware Inc. engages in manufacturing industrial-grade lead acid storage batteries.

**Description of Area Surrounding Source:**☐ Rural Area☐ Industrial Park☐ Residential Area☒ Urban Area☐ Industrial Area☐ Commercial Area**Is any part of the source located on federal land?**☐ Yes☒ No**Number of Employees:**

347

**Approximate distance to nearest residence or commercial property:**

0.17 miles

**Property Area:**

43 acres

**Is this source portable?**☐ Yes☒ No**What other environmental permits or registrations does this source currently hold or need to obtain in Kentucky?****NPDES/KPDES:**☒ Currently Hold☐ Need☐ N/A**Solid Waste:**☐ Currently Hold☐ Need☒ N/A**RCRA:**☒ Currently Hold☐ Need☐ N/A**UST:**☐ Currently Hold☐ Need☒ N/A**Type of Regulated Waste Activity:**☐ Mixed Waste Generator☒ Generator☐ Recycler☐ Other: \_\_\_\_\_☐ U.S. Importer of Hazardous Waste☐ Transporter☐ Treatment/Storage/Disposal Facility☐ N/A

**Section AI.2: Applicant Information**

**Applicant Name:** EnerSys Delaware Inc.

**Title:** (if individual) \_\_\_\_\_

**Mailing Address:** **Street or P.O. Box:** 761 Eastern Bypass

**City:** Richmond **State:** KY **Zip Code:** 40475

**Email:** (if individual) \_\_\_\_\_

**Phone:** 859-624-7300

**Technical Contact**

**Name:** Eric Ripberger

**Title:** EH&S Manager

**Mailing Address:** **Street or P.O. Box:** 761 Eastern Bypass

**City:** Richmond **State:** KY **Zip Code:** 40475

**Email:** eric.ripberger@enersys.com

**Phone:** 859-624-7306

**Air Permit Contact for Source**

**Name:** Nicole Galavotti, P.E. - Shield Environmental Associates, Inc.

**Title:** Sr.Environmental Engineer/Principal

**Mailing Address:** **Street or P.O. Box:** 948 Floyd Drive

**City:** Lexington **State:** KY **Zip Code:** 40505

**Email:** nicole\_galavotti@shieldmw.com

**Phone:** 859-294-5155

**Section AI.3: Owner Information**

☒ **Owner same as applicant**

**Name:** \_\_\_\_\_

**Title:** \_\_\_\_\_

**Mailing Address:** **Street or P.O. Box:** \_\_\_\_\_  
**City:** \_\_\_\_\_ **State:** \_\_\_\_\_ **Zip Code:** \_\_\_\_\_

**Email:** \_\_\_\_\_

**Phone:** \_\_\_\_\_

**List names of owners and officers of the company who have an interest in the company of 5% or more.**

Name		Position	
_____		_____	
_____		_____	
_____		_____	

## Section AI.4: Type of Application

**Current Status:**
☐ Title V ☒ Conditional Major ☐ State-Origin ☐ General Permit ☐ Registration ☐ None

**Requested Action:**
*(check all that apply)*

☐ Name Change ☐ Initial Registration ☐ Significant Revision ☐ Administrative Permit Amendment  
☒ Renewal Permit ☐ Revised Registration ☐ Minor Revision ☐ Initial Source-wide Operating Permit  
☐ 502(b)(10)Change ☐ Extension Request ☐ Addition of New Facility ☐ Portable Plant Relocation Notice  
☐ Revision ☐ Off Permit Change ☐ Landfill Alternate Compliance Submittal ☐ Modification of Existing Facilities  
☐ Ownership Change ☐ Closure

**Requested Status:**
☐ Title V ☒ Conditional Major ☐ State-Origin ☐ PSD ☐ NSR ☐ Other: \_\_\_\_\_

**Is the source requesting a limitation of potential emissions?**
☐ Yes ☐ No

**Pollutant:**
**Requested Limit:**

☒ Particulate Matter 90  
☐ Volatile Organic Compounds (VOC) \_\_\_\_\_  
☐ Carbon Monoxide \_\_\_\_\_  
☐ Nitrogen Oxides \_\_\_\_\_  
☐ Sulfur Dioxide \_\_\_\_\_  
☐ Lead \_\_\_\_\_

**Pollutant:**
**Requested Limit:**

☐ Single HAP \_\_\_\_\_  
☐ Combined HAPs \_\_\_\_\_  
☐ Air Toxics (40 CFR 68, Subpart F) \_\_\_\_\_  
☐ Carbon Dioxide \_\_\_\_\_  
☐ Greenhouse Gases (GHG) \_\_\_\_\_  
☐ Other \_\_\_\_\_

**For New Construction:**
**Proposed Start Date of Construction:**
*(MM/YYYY)*
**Proposed Operation Start-Up Date: (MM/YYYY)**
**For Modifications:**
**Proposed Start Date of Modification:**
*(MM/YYYY)*
**Proposed Operation Start-Up Date: (MM/YYYY)**

Applicant is seeking coverage under a permit shield.

☐ Yes

☒ No

Identify any non-applicable requirements for which permit shield is sought on a separate attachment to the application.




**Section AI.5 Other Required Information****Indicate the documents attached as part of this application:**

- |  |   |
|--|---|
| <input type="checkbox"/> DEP7007A Indirect Heat Exchangers and Turbines                    | <input type="checkbox"/> DEP7007CC Compliance Certification                             |
| <input type="checkbox"/> DEP7007B Manufacturing or Processing Operations                   | <input type="checkbox"/> DEP7007DD Insignificant Activities                             |
| <input type="checkbox"/> DEP7007C Incinerators and Waste Burners                           | <input type="checkbox"/> DEP7007EE Internal Combustion Engines                          |
| <input type="checkbox"/> DEP7007F Episode Standby Plan                                     | <input type="checkbox"/> DEP7007FF Secondary Aluminum Processing                        |
| <input type="checkbox"/> DEP7007J Volatile Liquid Storage                                  | <input type="checkbox"/> DEP7007GG Control Equipment                                    |
| <input type="checkbox"/> DEP7007K Surface Coating or Printing Operations                   | <input type="checkbox"/> DEP7007HH Haul Roads   |
| <input type="checkbox"/> DEP7007L Mineral Processes  | <input type="checkbox"/> Confidentiality Claim  |
| <input type="checkbox"/> DEP7007M Metal Cleaning Degreasers                                | <input type="checkbox"/> Ownership Change Form  |
| <input type="checkbox"/> DEP7007N Source Emissions Profile                                 | <input type="checkbox"/> Secretary of State Certificate                                 |
| <input type="checkbox"/> DEP7007P Perchloroethylene Dry Cleaning Systems                   | <input type="checkbox"/> Flowcharts or diagrams depicting process                       |
| <input type="checkbox"/> DEP7007R Emission Offset Credit                                   | <input type="checkbox"/> Digital Line Graphs (DLG) files of buildings, roads, etc.      |
| <input type="checkbox"/> DEP7007S Service Stations   | <input type="checkbox"/> Site Map   |
| <input type="checkbox"/> DEP7007T Metal Plating and Surface Treatment Operations           | <input type="checkbox"/> Map or drawing depicting location of facility                  |
| <input type="checkbox"/> DEP7007V Applicable Requirements and Compliance Activities        | <input type="checkbox"/> Safety Data Sheet (SDS)  |
| <input type="checkbox"/> DEP7007Y Good Engineering Practice and Stack Height Determination | <input type="checkbox"/> Emergency Response Plan  |
| <input type="checkbox"/> DEP7007AA Compliance Schedule for Non-complying Emission Units    | <input checked="" type="checkbox"/> Other: Permit Mark-Up, Prior 502(b)10 cover letters |
| <input type="checkbox"/> DEP7007BB Certified Progress Report                               |   |

**Section AI.6: Signature Block**

I, the undersigned, hereby certify under penalty of law, that I am a responsible official\*, and that I have personally examined, and am familiar with, the information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the information is on knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false or incomplete information, including the possibility of fine or imprisonment.

  
 \_\_\_\_\_  
 Authorized Signature

Troy Baxter

Type or Printed Name of Signatory

6/16/23  
 \_\_\_\_\_  
 Date

Director of Manufacturing Operations

Title of Signatory

\*Responsible official as defined by 401 KAR 52.001.

**Section AI.7: Notes, Comments, and Explanations**

Permit Markup incorporating off-permit and 502(b)(10) changes is attached.

## APPENDIX B

### Permit Markup

**Commonwealth of Kentucky  
Energy and Environment Cabinet  
Department for Environmental Protection  
Division for Air Quality  
300 Sower Boulevard, 2<sup>nd</sup> Floor  
Frankfort, Kentucky 40601  
(502) 564-3999**

**Final**

**AIR QUALITY PERMIT  
Issued under 401 KAR 52:030**

**Permittee Name:** EnerSys Delaware Inc.  
**Mailing Address:** 761 Eastern Bypass, Richmond, KY 40475

**Source Name:** EnerSys Delaware Inc.  
**Mailing Address:** 761 Eastern Bypass, Richmond, KY 40475

**Source Location:** Same as above

**Permit ID:** F-18-045 R2  
**Agency Interest #:** 2864  
**Activity ID:** APE20190003  
**Review Type:** Conditional Major, Construction/Operating  
**Source ID:** 21-151-00032

**Regional Office:** Frankfort Regional Office  
300 Sower Boulevard, 1st Floor  
Frankfort, KY 40601  
(502) 564-3358

**County:** Madison

**Application**  
**Complete Date:** October 1, 2018  
**Issuance Date:** December 23, 2018  
**Revision Date:** November 30, 2019  
**Expiration Date:** December 23, 2023

*Rick S. Shewekah*

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**For  
Melissa Duff, Director  
Division for Air Quality**

*Version 10/16/13*

Requested additions denoted in **blue**  
Requested deletions denoted in **~~red-strikethrough~~**

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Permit number	Permit type	Activity#	Complete Date	Issuance Date	Summary of Action
F-18-045	Renewal	APE20180003	10/1/2018	12/23/2018	Renewal Permit
F-18-045 R1	Minor Revision	APE20180005	12/20/2018	6/1/2019	Replace natural gas burners with electric, re-route EP 11, 21 and 31 to baghouse for EP 35
F-18-045 R2	Minor Revision	APE20190003	7/19/2019	11/30/2019	Replacement of process baghouse BH06, associated with EP 38

## **SECTION A - PERMIT AUTHORIZATION**

Pursuant to a duly submitted application the Kentucky Energy and Environment Cabinet (Cabinet) hereby authorizes the operation of the equipment described herein in accordance with the terms and conditions of this permit. This permit has been issued under the provisions of Kentucky Revised Statutes (KRS) Chapter 224 and regulations promulgated pursuant thereto.

The permittee shall not construct, reconstruct, or modify any affected facilities without first submitting a complete application and receiving a permit for the planned activity from the permitting authority, except as provided in this permit or in 401 KAR 52:030, Federally-enforceable permits for non-major sources.

Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by the Cabinet or any other federal, state, or local agency.

## SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

Emission Point	Process	Process Equipment	40 CFR 60, Subpart KK Affected Facility type	Max. Capac. (ton/hr)	Control Devices <sup>1</sup>
EP01	<b>Lead Casting</b> Const. date: 1976, Modified 2017	13 casters; 13 melt pots heated by 13 electric heaters; associated dross drums; 1 vacuum system; 1 reclaim furnace heated by 1 electric heater 1 <del>associated dross drum</del> ; dip tank inlet conveyors; 4 lead oxide silos. <del>Oxide Dept-1 melt pot heated by electric, 1 dross drum</del>	Grid casting facility, reclaim furnace, & Other lead-emitting operation <sup>2</sup>	13.36	Baghouse BH01 Flowrate: <del>54,178 dscfm</del> <del>67,349 acfm</del>
EP02	<b>Assembly</b> Const. date: 1976	Assembly – 4 sleeve stations; 1 battery burn line; 5 button burn lines; 2 assembly lines; (2) 4 wrap stations. Small part casting – 13 casters; 9 melt pots heated by 9 electric heaters; tinning pot; 1 trimming station; 1 electric melt pot in Cable Making Area. <del>Lab equipment ventilation</del>	Three-process operation facility	10.31	Baghouse BH02 Flowrate: <del>59,843 dscfm</del> <del>67,142 acfm</del>
EP03	<b>Plate Finishing</b> Const. date: 1977	3 assembly lines; 2 plate brushing stations.	Three-process operation facility	11.01	Baghouse BH03 Flowrate: <del>61,721 dscfm</del> <del>67,178 acfm</del>
EP 24	<b>Assembly</b> Const. date: 1997	<del>1 assembly line; 1 melt pot heated by 1 electric heater</del> ; 1 cut saw; 1 vacuum system.	Three-process operation facility	3.75	Baghouse BH24 Flowrate: <del>27,750 dscfm</del> <del>31,204 acfm</del>
EP 24V	<b>Central Vacuum</b> Const. date: 1997	Central vacuum	Other lead-emitting operation	NA	HEPA filter HP24V Flowrate: <del>806 dscfm</del> <del>1,076 acfm</del>
EP 25	<b>Pasting Process</b> Const. date: 1998	2 paste mixing units; 2 pasting units; 2 brushing stations; 2 flash dryers heated by 2 natural gas burners: NG-25A and NG-25B, 0.25 MMBtu/hr each (See Section C); oxide silo bldg. fugitives. <del>Oxide Dept- 2 lead pots heated by 2 electric heaters, 2 dross drums</del>	Paste mixing facility	<del>7.2</del> 9.6	Baghouse BH25 Flowrate: <del>61,304 dscfm</del> <del>60,343 acfm</del>
<del>EP-34A</del>	<del>Cable-Lead Pot</del> Const date: <del>2007</del>	<del>1 lead pot heated by 1 electric heater</del>	<del>Other lead-emitting operation</del>	0.005	<del>HEPA filter HP34A</del> Flowrate: <del>1,031 acfm</del>

## SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emission Point	Process	Process Equipment	40 CFR 60, Subpart KK Affected Facility type	Max. Capac. (ton/hr)	Control Devices <sup>1</sup>
EP 34B	<del>Cable Flux Pot</del> Const. date: 2007	<del>1 tin alloying pot heated by 1 electric heater</del>	<del>Other lead-emitting operation</del>	0.001	<del>HEPA filter HP34B</del> Flowrate: <del>509 acfm</del>
EP 35	<b>Casting</b> Const. date: 2013	3 casters; 4 melt pots heated by 4 electric heaters; associated dross drums	Grid casting facility	0.84	Baghouse BH35 Flowrate: <del>26,934 dscfm-30,226 acfm</del>
	<b>Oxide Mill B</b> Const. date: 1977	1 oxide mill reactor; <del>1 pot heated by electric heater; 1 dross drum</del> Baghouse (BH11) for product collection and HEPA filter (HP11) prior to BH35.	Lead oxide manufacturing facility	1.15	
	<b>Oxide Mill A</b> Const. date: 1994	1 oxide mill reactor; <del>1 pot heated by electric heater; 1 dross drum</del> Baghouse (BH21) for product collection and HEPA filter (HP21) prior to BH35.	Lead oxide manufacturing facility	1.15	
	<b>Oxide Mill C</b> Const. date: 2000	1 oxide mill reactor; <del>1 pot heated by electric heater; 1 dross drum</del> Baghouse (BH31) for product collection and HEPA filter (HP31) prior to BH35.	Lead oxide manufacturing facility	1.15	
EP 36	<b>Cable Flux Pot</b> Const. date: 2007	1 tin alloying pot heated by 1 electric heater	Other lead-emitting operation	<del>0.001</del> 0.0015	HEPA filter HP36 Flowrate: <del>407 dscfm-370 acfm</del>
EP 38	<b>Ironclad Filling</b> Const. date: 2013	Ironclad filling machines (3); 1 vacuum system.	Other lead-emitting operation	4.16	Baghouse BH38 Flowrate: <del>30,193 dscfm-33,359 acfm</del>
EP 45	<b>Oxide Roof Vent HV-1</b> Const. date: 2005	Oxide Roof Vent HV-1	Other lead-emitting operation	NA	HEPA filter HP45 Flowrate: <del>2,569 dscfm-4,841 acfm</del>



## SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emission Point	Process	Process Equipment	40 CFR 60, Subpart KK Affected Facility type	Max. Capac. (ton/hr)	Control Devices <sup>1</sup>
EP 46	Oxide Roof Vent HV-2 Const. date: 2005	Oxide Roof Vent HV-2	Other lead-emitting operation	NA	HEPA filter HP46 Flowrate: 3,199 dscfm- 4,458 acfm
EP 47	Oxide Roof Vent HV-3 Const. date: 2007	Oxide Roof Vent HV-3	Other lead-emitting operation	NA	HEPA filter HP47 Flowrate: 3,192 dscfm- 4,632 acfm
EP 48	Oxide Roof Vent HV-4 Const. date: 2007	Oxide Roof Vent HV-4	Other lead-emitting operation	NA	HEPA filter HP48 Flowrate: 3,238 dscfm- 3,884 acfm
EP 49	Oxide Roof Vent HV-5 Const. date: 2007	Oxide Roof Vent HV-5	Other lead-emitting operation	NA	HEPA filter HP49 Flowrate: 3,195 dscfm- 4,234 acfm

<sup>1</sup>Flowrate indicated is identified in the most recent performance test report.

<sup>2</sup>See 40 CFR 60.372(b)

### **APPLICABLE REGULATIONS:**

401 KAR 59:010, New process operations

401 KAR 60:005, Section 2(2)(rr), 40 C.F.R. 60.370 to 60.374 (Subpart KK), Standards of Performance for Lead-Acid Battery Manufacturing Plants

401 KAR 63:002, Section 2(4)(ooooo), 40 C.F.R. 63.11421 to 63.11427, Table 1 (Subpart PPPPPP), National Emission Standards for Hazardous Air Pollutants for Lead Acid Battery Manufacturing Area Sources

### **NON-APPLICABLE REGULATIONS:**

401 KAR 63:002, Section 2(4)(ttttt), 40 C.F.R. 63.11494 to 63.11503, Tables 1 to 9 (Subpart VVVVVV), National Emission Standards for Hazardous Air Pollutants for Chemical Manufacturing Area Sources does not apply to the Oxide Mills under EP 35.

### **1. Operating Limitations:**

- a. To preclude applicability of 401 KAR 51:017 for particulate matter (PM/PM<sub>10</sub>/PM<sub>2.5</sub>) emissions, the associated control device(s) shall be operational at all times that the emission unit is in operation.
- b. See Section D, Source Emission Limitations and Testing Requirements, Condition 3.

**SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****2. Emission Limitations:**

- a. Pursuant to 401 KAR 59:010, emissions of particulate matter from a control device or stack of any affected facility up to a process rate of 1000 lbs/hr shall not exceed **2.34** lbs/hr. For processing rates greater than 1000 lbs/hr up to 60,000 lbs/hr, particulate emissions shall not exceed the emission rate calculated by the following equation:

$$E = 3.59(P)^{0.62}$$

E = the PM emissions rate (pounds/hour)

P = the process rate (tons/hour)

**Compliance Demonstration Method:**

The permittee is assumed in compliance with the particulate matter emissions limitation when in compliance with **1. Operating Limitations**, a.

- b. The opacity of visible emissions from each stack shall not equal or exceed 20 percent [401 KAR 59:010, Section 3(1)].

**Compliance Demonstration Method:**

The permittee shall meet compliance with the opacity limit under 401 KAR 59:010 by meeting compliance with the opacity limits under 40 CFR 60.372(a)(7) or (8), as applicable. See **2. Emission Limitations**, Conditions i. and j. below.

- c. Pursuant to 40 CFR 60.372(a)(1), from any grid casting facility, no owner or operator shall discharge into the atmosphere any gases that contain in excess of 0.40 milligram of lead per dry standard cubic meter of exhaust (0.000175 gr/dscf).
- d. Pursuant to 40 CFR 60.372(a)(2), from any paste mixing facility, no owner or operator shall discharge into the atmosphere any gases that contain in excess of 1.00 milligram of lead per dry standard cubic meter of exhaust (0.000437 gr/dscf).
- e. Pursuant to 40 CFR 60.372(a)(3), from any three-process operation facility, no owner or operator shall discharge into the atmosphere any gases that contain in excess of 1.00 milligram of lead per dry standard cubic meter of exhaust (0.000437 gr/dscf).
- f. Pursuant to 40 CFR 60.372(a)(4), from any lead oxide manufacturing facility, no owner or operator shall discharge into the atmosphere any gases that contain in excess of 5.0 milligrams of lead per kilogram of lead feed (0.010 lb/ton).
- g. Pursuant to 40 CFR 60.372(a)(5), from any lead reclamation facility, no owner or operator shall discharge into the atmosphere any gases that contain in excess of 4.50 milligrams of lead per dry standard cubic meter of exhaust (0.00197 gr/dscf).
- h. Pursuant to 40 CFR 60.372(a)(6), from any other lead-emitting operation, no owner or operator shall discharge into the atmosphere any gases that contain in excess of 1.00 milligram of lead per dry standard cubic meter of exhaust (0.000437 gr/dscf).
- i. Pursuant to 40 CFR 60.372(a)(7), no owner or operator shall cause to be discharged into the atmosphere from any affected facility other than a lead reclamation facility any gases with greater than 0 percent opacity (measured according to Method 9 and rounded to the nearest whole percentage).

## SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- j. Pursuant to 40 CFR 60.372(a)(8), no owner or operator shall cause to be discharged into the atmosphere from any lead reclamation facility any gases with greater than 5 percent opacity (measured according to Method 9 and rounded to the nearest whole percentage).
- k. Pursuant to 40 CFR 60.372(b), when two or more facilities at the same plant (except the lead oxide manufacturing facility) are ducted to a common control device, an equivalent standard for the total exhaust from the commonly controlled facilities shall be determined as follows:

$$S_e = \sum_{a=1}^N S_a \left( \frac{Q_{sd_a}}{Q_{sd_T}} \right) \quad \text{Where:}$$

$S_e$  = is the equivalent standard for the total exhaust stream.

$S_a$  = is the actual standard for each exhaust stream ducted to the control device.

N = is the total number of exhaust streams ducted to the control device.

$Q_{sd_a}$  = is the dry standard volumetric flow rate of the effluent gas stream from each facility ducted to the control device.

$Q_{sd_T}$  = is the total dry standard volumetric flow rate of all effluent gas streams ducted to the control device.

### **Compliance Demonstration Methods:**

- a. See 4. **Specific Monitoring Requirements.**
- b. For 2. **Emission Limitations.** Conditions c. through h. and k., see 3. **Testing Requirements.**
1. Pursuant to 401 KAR 53:010, the lead emissions from each emission point shall not exceed the emission limits presented in the following table:

<b>Emission Point</b>	<b>Emission Unit Description</b>	<b>Lead Emission Limit (lb/hr)</b>
EP 01	Lead Casting	0.083
EP 02	Assembly	0.095
EP 03	Plate Finishing	0.095
EP 24	Assembly	0.028
EP 24V	Central Vacuum	0.002
EP 25	Pasting Process	0.127
<del>EP 34A</del>	<del>Cable Lead Pot</del>	<del>0.001</del>
<del>EP 34B</del>	<del>Cable Flux Pot</del>	<del>0.001</del>
EP 35	Casting and Oxide Mills A, B and C	0.0311
EP 36	Cable Flux Pot	0.0002
EP 38	Ironclad Filling	0.02
EP 45	Oxide Roof Vent HV-1	0.0022
EP 46	Oxide Roof Vent HV-2	0.0022

**SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

<b>Emission Point</b>	<b>Emission Unit Description</b>	<b>Lead Emission Limit (lb/hr)</b>
EP 47	Oxide Roof Vent HV-3	0.0022
EP 48	Oxide Roof Vent HV-4	0.0022
EP 49	Oxide Roof Vent HV-5	0.0022

**Compliance Demonstration Method:**

- a. The permittee shall monitor and maintain records of the hours of operation on a monthly basis.
- b. Refer to **3. Testing Requirements.**
- m. See **Section D, Source Emission Limitations and Testing Requirements**, Condition 3.

**3. Testing Requirements:**

- a. Pursuant to 40 CFR 60.374(b) and 40 CFR 63.11423(c), the permittee shall determine compliance with the lead standards in 40 CFR 60.372, except 40 CFR 60.372(a)(4), as follows:
  - (1) Method 12 or Method 29 shall be used to determine the lead concentration ( $C_{Pb}$ ) and, if applicable, the volumetric flow rate ( $Q_{sda}$ ) of the effluent gas. The sampling time and sample volume for each run shall be at least 60 minutes and 0.85 dscm (30 dscf).
- b. Pursuant to 401 KAR 52:030, Section 10, the permittee shall conduct subsequent performance tests to determine the lead emission rate (lb/hr) for each emission point no less frequent than every 5 years. The facility shall perform additional performance testing upon request by the Division.
- c. Refer to **Section G.4** and **G.5**.

## SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

For the purposes of determining the representativeness of the equipment operating load during performance tests, as required by Condition G.5.b, the production rates of the primary lead emitting operations associated with each emission point shown in the following table shall be used:

Target Production Rates for Stack Testing Purposes			
Emission Point	Process	Hourly Production Rate	Units
EP-01	Grid Casting	3250	Grids
	Spine Casting	1750	Spines
	Dip Tank Inlet Conveyers	1750	Plates
	Silo Bin Exhaust	6300	Pounds
	Reclaim Furnace	2500	Pounds
EP-02	Sleeve Stations	1800	Plates
	Wrap Stations	480	Plates
	SBS and Button Burn Lines (Line 6 and 7), Button Burn Lines (1, 2, and 3)	250	Equivalent Cells
	Burn Lines	250	Equivalent Cells
	Parts Casting	750	Parts
	Cable Mfg—Casting	500	Cable Ends
EP-03	SBS (Lines 1, 2, and 3)	208	Equivalent Cells
	Plate Brush Stations	2540	Plates
EP-24	COS Assembly Line	137.5	Equivalent Cells
EP-25	Pasting	3300	Plates
EP-34A	Cable Mfg—Casting	10	Pounds
EP-34B	Cable Mfg—Tinning	2	Pounds
EP-35	Grid Casting	1440	Grids
	Lead Oxide Mill B	2310	Pounds
	Lead Oxide Mill A	2310	Pounds
	Lead Oxide Mill C	2310	Pounds
EP-36	Cable Mfg—Tinning	2	Pounds
EP-38	Iron Lad Filling	1750	Plates

## **SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

### **4. Specific Monitoring Requirements:**

Pursuant to 40 CFR 63.11423(b)(2)(i) through (iii), for any emissions point controlled by a fabric filter, the permittee shall:

- a. Perform semiannual inspections and maintenance to ensure proper performance of each fabric filter. This includes inspection of structural and filter integrity. The permittee shall record the results of these inspections.
- b. Install, maintain, and operate a pressure drop monitoring device to measure the differential pressure drop across the fabric filter during all times when the process is operating. The pressure drop shall be recorded at least once per day. If a pressure drop is observed outside of the normal operational ranges, the permittee shall record the incident and take immediate corrective actions. The permittee shall also record the corrective actions taken. The permittee shall submit a monitoring system performance report in accordance with 40 CFR 63.10(e)(3).
- c. Conduct a visible emissions observation at least once per day to verify that no visible emissions are occurring at the discharge point to the atmosphere from any emissions source subject to the requirements of paragraph (a) of 40 CFR 63.11423. If visible emissions are detected, the permittee shall record the incident and conduct an opacity measurement in accordance with 40 CFR 60.374(b)(3). The permittee shall record the results of each opacity measurement. If the measurement exceeds the applicable opacity standard in 40 CFR 60.372(a)(7) or (8), the permittee shall submit this information in an excess emissions report required under 40 CFR 63.10(e)(3).
- d. Pursuant to 40 CFR 63.11423(b)(2)(iv), fabric filters equipped with a HEPA filter or other secondary filter are allowed to monitor less frequently, as specified 40 CFR 63.11423(b)(2)(iv)(A) or (B), as follows:
  - i. If the permittee is using a pressure drop monitoring device to measure the differential pressure drop across the fabric filter in accordance with 40 CFR 63.11423(b)(2)(ii), the permittee shall record the pressure drop at least once per week. If a pressure drop is observed outside of the normal operational ranges, the permittee shall record the incident and take immediate corrective actions. The permittee shall also record the corrective actions taken. The permittee shall submit a monitoring system performance report in accordance with 40 CFR 63.10(e)(3), or
  - ii. If the permittee is conducting visible emissions observations in accordance with 40 CFR 63.11423(b)(2)(iii), the permittee shall conduct such observations at least once per week and record the results in accordance with 40 CFR 63.11423(b)(2)(iii). If visible emissions are detected, the permittee shall record the incident and conduct an opacity measurement in accordance with 40 CFR 60.374(b)(3). The permittee shall record the results of each opacity measurement. If the measurement exceeds the applicable opacity standard in 40 CFR 60.372(a)(7) or (8), the permittee shall submit this information in an excess emissions report required under 40 CFR 63.10(e)(3).

**SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

- e. Pursuant to 401 KAR 52:030, Section 10 and the March 19, 2013 Agreed Order (CASE NO. DAQ 120202), the permittee shall install, calibrate, maintain, and operate monitoring devices that measure and record the pressure drop across all baghouses that emit directly to the atmosphere and the HEPA filters that secondarily control the process baghouse on Oxide Mills A, B, and C (under EP35) at least once every 15 minutes. The monitoring devices shall have an accuracy of +/-5 percent over its operating range. Monitoring every 15 minutes shall begin upon installation of the required equipment on each control device. If a pressure drop is observed outside of the normal operating ranges, the permittee must record the incident and take immediate corrective actions. The permittee must also record the corrective actions taken. The data shall be available for inspection by the Division upon request.
- f. Pursuant to 401 KAR 52:030, Section 10 and the March 19, 2013 Agreed Order (CASE NO. DAQ 120202), the installation of the recording (data logging) system equipment necessary to record pressure drops every 15 minutes shall be completed and the system shall begin recording data by one hundred and eighty (180) days after the issuance of Permit F-13-025.
- g. Pursuant to 401 KAR 52:030, Section 10, the permittee shall develop and submit to the Division a written monitoring plan which establishes the normal operating ranges for pressure drop for all operational cycles of each baghouse. The monitoring plan shall include manufacturer's specifications for pressure drop and any information used to determine or support the established pressure drop for each baghouse.

**5. Specific Recordkeeping Requirements:**

- a. Refer to 4. **Specific Monitoring Requirements.**
- b. Pursuant to 401 KAR 52:030, Section 10, the permittee shall maintain written record of any incident when lead containing material is spilled or overflows the container and contacts a burner, or flame. The record should include the date and time of the incident and any corrective action taken to minimize the emissions and their effect on air quality resulting from the occurrence.
- c. Pursuant to 401 KAR 59:005, Section 3(2), the permittee shall maintain records of the occurrence and duration of any start-up, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative.

**6. Specific Reporting Requirements:**

- a. Refer to 4. **Specific Monitoring Requirements.**
- b. Refer to **Section F, Monitoring, Recordkeeping, and Reporting Requirements.**

## SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

### 7. Specific Control Equipment Operating Conditions:

Emission Point	Control Equipment	Monitoring and Operating Parameters	Comments
EP 01, EP 02, EP 03, EP 24, EP 25, EP 35, and EP 38	Baghouse	Pressure Drop	a) Refer to <b>Section E</b> b) Exceedance of operating parameters shall be reported and/or repaired in accordance with <b>Section F</b> , Condition 8

- a. Baghouses shall be operated in accordance with design parameters and operating parameters established during testing at all times the emission point is in operation. Operating parameters shall be established during the time frame of compliance testing.
- b. The baghouse shall be inspected on a semi-annual basis. Preventive maintenance shall be performed in accordance with manufacturer's specifications. The baghouse shall be inspected on a semi-annual basis for proper operation of the following:
  1. Shaker or vibrator device to release dust cake from bags;
  2. Airflow source and equipment; and
  3. Pressure drop measuring system.



**SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****Emission Point 18 (EP 18) Water Heater**

## Description:

Model: RBI HW2400

Heat Input Capacity: 2.01 MMBtu/hr

Fuel: Natural Gas

Construction Commenced: 2007

**Emission Point 22 (EP 22) Process Boiler**

## Description:

Model: Cleaver Brooks CBE 700-100

Heat Input Capacity: 4.20 MMBtu/hr

Fuel: Natural Gas

Construction Commenced: 1995

**Emission Point 23 (EP 23) Process Boiler**

## Description:

Model: Cleaver Brooks CBE 700-100

Heat Input Capacity: 4.20 MMBtu/hr

Fuel: Natural Gas

Construction Commenced: 1995

**APPLICABLE REGULATIONS:**

401 KAR 59:015, New indirect heat exchangers

**NON-APPLICABLE REGULATIONS:**

401 KAR 60:005, Section 2(2)(b), 40 C.F.R. 60.40Da to 60.52Da (Subpart Da), Standards of Performance for Electric Utility Steam Generating Units.

401 KAR 60:005, Section 2(2)(c), 40 C.F.R. 60.40b to 60.49b (Subpart Db), Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units.

401 KAR 60:005, Section 2(2) (d) 40 C.F.R. 60.40c to 60.48c (Subpart Dc), National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources.

401 KAR 63:002, Section 2(4)(jjjjj), 40 C.F.R. 63.11193 to 63.11237, Tables 1 to 8 (Subpart JJJJJ), National Emissions Standards for Hazardous Air Pollutants for Industrial, Commercial and Institutional Boilers Area Sources.

**1. Operating Limitations:**

Pursuant to 401 KAR 59:015, Section 7, during a startup period or shutdown period as defined in 401 KAR 59:015, Section 1, the permittee shall comply with the following work practice standards:

- a. The permittee shall comply with 401 KAR 50:055, Section 2(5);
- b. The frequency and duration of startup periods or shutdown periods shall be minimized by the affected facility;

**SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

- c. All reasonable steps shall be taken by the permittee to minimize the impact of emissions on ambient air quality from the affected facility during startup periods and shutdown periods;
- d. The actions, including duration of the startup period, of the permittee of each affected facility during startup periods and shutdown periods, shall be documented by signed, contemporaneous logs or other relevant evidence; and
- e. Startups and shutdowns shall be conducted according to either:
  - i. The manufacturer's recommended procedures; or
  - ii. Recommended procedures for a unit of similar design, for which manufacturer's recommended procedures are available, as approved by the cabinet based on documentation provided by the permittee of the affected facility.

**Compliance Demonstration Method:**

See 5. **Specific Recordkeeping Requirements**, Condition b.

**2. Emission Limitations:**

- a. Pursuant to 401 KAR 59:015, Section 4(1), and Section 5(1), the permittee shall not cause emissions of particulate matter and sulfur dioxide in excess of the following:

Emission Point	Particulate Limit (lb/MMBtu)	Sulfur Dioxide Limit (lb/MMBtu)
EP 18	0.49	2.35
EP 22	0.56	3.0
EP 23	0.56	3.0

**Compliance Demonstration Method:**

While burning natural gas, the permittee shall be assumed to be in compliance with the particulate matter and sulfur dioxide standards specified above.

- b. Pursuant to 401 KAR 59:015, Section 4(2), the permittee shall not cause emissions in excess of twenty (20) percent opacity.

**Compliance Demonstration Method:**

While burning natural gas, the permittee shall be assumed to be in compliance with the opacity standard specified above.

**3. Testing Requirements:**

Pursuant to 401 KAR 50:045, Section 1, performance testing using Reference methods specified in 401 KAR 50:015 shall be conducted as required by the Division.

**4. Specific Monitoring Requirements:**

See Section F, **Monitoring, Recordkeeping and Reporting Requirements**.

**5. Specific Recordkeeping Requirements:**

- a. Pursuant to 401 KAR 52:030, Section 10, the permittee shall keep record of the hours of operation of each of the indirect heat exchangers.

**SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

- b. Pursuant to 401 KAR 59:015, Section 7(1)(d), the actions, including duration of the startup period, of the permittee of each affected facility, shall be documented by signed contemporaneous logs or other relevant evidence.

**6. Specific Reporting Requirements:**

See Section F, Monitoring, Recordkeeping and Reporting Requirements.

## SECTION C – INSIGNIFICANT ACTIVITIES

The following listed activities have been determined to be insignificant activities for this source pursuant to 401 KAR 52:030, Section 6. Although these activities are designated as insignificant the permittee must comply with the applicable regulation. Process and emission control equipment at each insignificant activity subject to an opacity standard shall be inspected monthly and a qualitative visible emissions evaluation made. Results of the inspection, evaluation, and any corrective action shall be recorded in a log.

<u>Description</u>	<u>Generally Applicable Regulation</u>
1. EP 07 – Acid Dip and scrubber (4,100 lb/hr)	401 KAR 59:010
<del>2. EP 08 – Acid Mix and scrubber (5,700 lb/hr)</del>	<del>401 KAR 59:010</del>
3. EP 20 – Battery Tray Painting (0.14 lb/hr)	None
4. EP 32 – Boiler (0.68 MMBtu/hr)	None <del>401 KAR 59:010</del>
5. EP 33 – Battery Formation	None
6. OSI-1 – Natural Gas Vent (0.1 MMBtu/hr)	None <del>401 KAR 59:010</del>
7. OSI-2 – Natural Gas Vent (0.1 MMBtu/hr)	None <del>401 KAR 59:010</del>
8. OSI-3 – Natural Gas Vent (0.5 MMBtu/hr)	None <del>401 KAR 59:010</del>
9. OSI-4 – Natural Gas Vent (0.8 MMBtu/hr)	None <del>401 KAR 59:010</del>
10. NG-25A- Gas Vent 1 Flash (0.25 MMBtu/hr)	None <del>401 KAR 59:010</del>
11. NG-25B- Gas Vent 2 Flash (0.25 MMBtu/hr)	None <del>401 KAR 59:010</del>
12. Three (3) Natural Gas Heaters (0.2 MMBtu/hr each)	None <del>401 KAR 59:010</del>

## SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS

1. As required by Section 1b of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030, Section 26; compliance with annual emissions and processing limitations contained in this permit, shall be based on emissions and processing rates for any twelve (12) consecutive months.
2. Lead and particulate matter emissions, measured by applicable reference methods, or an equivalent or alternative method specified in 40 C.F.R. Chapter I, or by a test method specified in the state implementation plan shall not exceed the respective limitations specified herein.
3. Pursuant to 401 KAR 53:005, Section 1(3), no person shall violate, or interfere with the attainment or maintenance of, ambient air quality standards as specified in 401 KAR 53:010.

To preclude the applicability of 401 KAR 52:020, *Title V permits*, and 401 KAR 51:017, *Prevention of significant deterioration of air quality*, the total annual source-wide particulate matter (PM/PM<sub>10</sub>/PM<sub>2.5</sub>) emissions (from all units in Section B and C of the permit) shall not exceed 90 tons per year.

### **Compliance Demonstration:**

Compliance shall be demonstrated by operating and maintaining each particulate control device in accordance with the manufacturer's recommendations at all times that the associated process equipment is operating. See Section B, Conditions 7. a. through c.

**SECTION E - SOURCE CONTROL EQUIPMENT REQUIREMENTS**

Pursuant to 401 KAR 50:055, Section 2(5), at all times, including periods of startup, shutdown and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Division which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

## SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS

1. Pursuant to Section 1b-IV-1 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 26, when continuing compliance is demonstrated by periodic testing or instrumental monitoring, the permittee shall compile records of required monitoring information that include:
  - a. Date, place (as defined in this permit), and time of sampling or measurements;
  - b. Analyses performance dates;
  - c. Company or entity that performed analyses;
  - d. Analytical techniques or methods used;
  - e. Analyses results; and
  - f. Operating conditions during time of sampling or measurement.
2. Records of all required monitoring data and support information, including calibrations, maintenance records, and original strip chart recordings, and copies of all reports required by the Division for Air Quality, shall be retained by the permittee for a period of five (5) years and shall be made available for inspection upon request by any duly authorized representative of the Division for Air Quality [401 KAR 52:030, Section 3(1)(f)1a, and Section 1a-7 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030, Section 26].
3. In accordance with the requirements of 401 KAR 52:030, Section 3(1)f, the permittee shall allow authorized representatives of the Cabinet to perform the following during reasonable times:
  - a. Enter upon the premises to inspect any facility, equipment (including air pollution control equipment), practice, or operation;
  - b. To access and copy any records required by the permit;
  - c. Sample or monitor, at reasonable times, substances or parameters to assure compliance with the permit or any applicable requirements.Reasonable times are defined as during all hours of operation, during normal office hours; or during an emergency.
4. No person shall obstruct, hamper, or interfere with any Cabinet employee or authorized representative while in the process of carrying out official duties. Refusal of entry or access may constitute grounds for permit revocation and assessment of civil penalties.
5. Summary reports of any monitoring required by this permit shall be submitted to the Regional Office listed on the front of this permit at least every six (6) months during the life of this permit, unless otherwise stated in this permit. For emission units that were still under construction or which had not commenced operation at the end of the 6-month period covered by the report and are subject to monitoring requirements in this permit, the report shall indicate that no monitoring was performed during the previous six months because the emission unit was not in operation [Sections 1b-V-1 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030, Section 26].

## **SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS (CONTINUED)**

6. The semi-annual reports are due by January 30th and July 30th of each year. All reports shall be certified by a responsible official pursuant to 401 KAR 52:030, Section 22. If continuous emission and opacity monitors are required by regulation or this permit, data shall be reported in accordance with the requirements of 401 KAR 59:005, General Provisions, Section 3(3). All deviations from permit requirements shall be clearly identified in the reports.
7. In accordance with the provisions of 401 KAR 50:055, Section 1, the owner or operator shall notify the Regional Office listed on the front of this permit concerning startups, shutdowns, or malfunctions as follows:
  - a. When emissions during any planned shutdowns and ensuing startups will exceed the standards, notification shall be made no later than three (3) days before the planned shutdown, or immediately following the decision to shut down, if the shutdown is due to events which could not have been foreseen three (3) days before the shutdown.
  - b. When emissions due to malfunctions, unplanned shutdowns and ensuing startups are or may be in excess of the standards, notification shall be made as promptly as possible by telephone (or other electronic media) and shall be submitted in writing upon request.
8. The permittee shall promptly report deviations from permit requirements, including those attributable to upset conditions as defined in the permit, the probable cause of such deviations, and any corrective actions or preventive measures taken shall be submitted to the Regional Office listed on the front of this permit. Where the underlying applicable requirement contains a definition of prompt or otherwise specifies a time frame for reporting deviations, that definition or time frame shall govern. Where the underlying applicable requirement does not identify a specific time frame for reporting deviations, prompt reporting, as required by Sections 1b-V, 3 and 4 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030, Section 26 shall be defined as follows:
  - a. For emissions of a hazardous air pollutant or a toxic air pollutant (as identified in an applicable regulation) that continue for more than an hour in excess of permit requirements, the report must be made within 24 hours of the occurrence.
  - b. For emissions of any regulated air pollutant, excluding those listed in F.8.a., that continue for more than two hours in excess of permit requirements, the report must be made within 48 hours.
  - c. All deviations from permit requirements, including those previously reported, shall be included in the semiannual report required by F.6.
9. Pursuant to 401 KAR 52:030, Section 21, the permittee shall annually certify compliance with the terms and conditions contained in this permit by completing and returning a Compliance Certification Form (DEP 7007CC) (or an alternative approved by the regional office) to the Regional Office listed on the front of this permit in accordance with the following requirements:
  - a. Identification of each term or condition;
  - b. Compliance status of each term or condition of the permit;
  - c. Whether compliance was continuous or intermittent;
  - d. The method used for determining the compliance status for the source, currently and over the reporting period.



**SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS (CONTINUED)**

- e. For an emissions unit that was still under construction or which has not commenced operation at the end of the 12-month period covered by the annual compliance certification, the permittee shall indicate that the unit is under construction and that compliance with any applicable requirements will be demonstrated within the timeframes specified in the permit.
  - f. The certification shall be submitted by January 30th of each year. Annual compliance certifications shall be sent to the Division for Air Quality, Frankfort Regional Office, 300 Sower Boulevard, 1<sup>st</sup> Floor, Frankfort, KY 40601.
10. In accordance with 401KAR 52:030, Section 3(1)(d), the permittee shall provide the Division with all information necessary to determine its subject emissions within 30 days of the date the Kentucky Emissions Inventory System (KYEIS) emissions survey is mailed to the permittee. If a KYEIS emissions survey is not mailed to the permittee, then the permittee shall comply with all other emissions reporting requirements in this permit.
11. The Cabinet may authorize the temporary use of an emission unit to replace a similar unit that is taken off-line for maintenance, if the following conditions are met:
- a. The owner or operator shall submit to the Cabinet, at least ten (10) days in advance of replacing a unit, the appropriate Forms DEP7007AI to DD that show:
    - (1) The size and location of both the original and replacement units; and
    - (2) Any resulting change in emissions;
  - b. The potential to emit (PTE) of the replacement unit shall not exceed that of the original unit by more than twenty-five (25) percent of a major source threshold, and the emissions from the unit shall not cause the source to exceed the emissions allowable under the permit;
  - c. The PTE of the replacement unit or the resulting PTE of the source shall not subject the source to a new applicable requirement;
  - d. The replacement unit shall comply with all applicable requirements; and
  - e. The source shall notify Regional office of all shutdowns and start-ups.
  - f. Within six (6) months after installing the replacement unit, the owner or operator shall:
    - (1) Re-install the original unit and remove or dismantle the replacement unit; or
    - (2) Submit an application to permit the replacement unit as a permanent change.

## SECTION G - GENERAL PROVISIONS

### 1. General Compliance Requirements

- a. The permittee shall comply with all conditions of this permit. A noncompliance shall be a violation of 401 KAR 52:030, Section 3(1)(b), and a violation of Federal Statute 42 USC 7401 through 7671q (the Clean Air Act). Noncompliance with this permit is grounds for enforcement action including but not limited to the termination, revocation and reissuance, revision, or denial of a permit [Section 1a-2 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030, Section 26].
- b. The filing of a request by the permittee for any permit revision, revocation, reissuance, or termination, or of a notification of a planned change or anticipated noncompliance, shall not stay any permit condition [Section 1a-5 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030, Section 26].
- c. This permit may be revised, revoked, reopened and reissued, or terminated for cause in accordance with 401 KAR 52:030, Section 18. The permit will be reopened for cause and revised accordingly under the following circumstances:
  - (1) If additional applicable requirements become applicable to the source and the remaining permit term is three (3) years or longer. In this case, the reopening shall be completed no later than eighteen (18) months after promulgation of the applicable requirement. A reopening shall not be required if compliance with the applicable requirement is not required until after the date on which the permit is due to expire, unless this permit or any of its terms and conditions have been extended pursuant to 401 KAR 52:030, Section 12;
  - (2) The Cabinet or the United States Environmental Protection Agency (U. S. EPA) determines that the permit must be revised or revoked to assure compliance with the applicable requirements;
  - (3) The Cabinet or the U. S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.

Proceedings to reopen and reissue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of the permit for which cause to reopen exists. Reopenings shall be made as expeditiously as practicable. Reopenings shall not be initiated before a notice of intent to reopen is provided to the source by the Division, at least thirty (30) days in advance of the date the permit is to be reopened, except that the Division may provide a shorter time period in the case of an emergency.
- d. The permittee shall furnish information upon request of the Cabinet to determine if cause exists for modifying, revoking and reissuing, or terminating the permit; or to determine compliance with the conditions of this permit [Sections 1a- 6 and 7 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030, Section 26].
- e. Emission units described in this permit shall demonstrate compliance with applicable requirements if requested by the Division [401 KAR 52:030, Section 3(1)(c)].

**SECTION G - GENERAL PROVISIONS (CONTINUED)**

- f. The permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to the permitting authority [401 KAR 52:030, Section 7(1)].
- g. Any condition or portion of this permit which becomes suspended or is ruled invalid as a result of any legal or other action shall not invalidate any other portion or condition of this permit [Section 1a-11 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030, Section 26].
- h. The permittee shall not use as a defense in an enforcement action the contention that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance [Section 1a-3 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030, Section 26].
- i. All emission limitations and standards contained in this permit shall be enforceable as a practical matter. All emission limitations and standards contained in this permit are enforceable by the U.S. EPA and citizens except for those specifically identified in this permit as state-origin requirements. [Section 1a-12 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030, Section 26].
- j. This permit shall be subject to suspension if the permittee fails to pay all emissions fees within 90 days after the date of notice as specified in 401 KAR 50:038, Section 3(6) [Section 1a-9 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030, Section 26].
- k. Nothing in this permit shall alter or affect the liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance [401 KAR 52:030, Section 11(3)].
- l. This permit does not convey property rights or exclusive privileges [Section 1a-8 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030, Section 26].
- m. Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by the Cabinet or any other federal, state, or local agency.
- n. Nothing in this permit shall alter or affect the authority of U.S. EPA to obtain information pursuant to Federal Statute 42 USC 7414, Inspections, monitoring, and entry.
- o. Nothing in this permit shall alter or affect the authority of U.S. EPA to impose emergency orders pursuant to Federal Statute 42 USC 7603, Emergency orders.

**SECTION G - GENERAL PROVISIONS (CONTINUED)**

- p. This permit consolidates the authority of any previously issued PSD, NSR, or Synthetic Minor source preconstruction permit terms and conditions for various emission units and incorporates all requirements of those existing permits into one single permit for this source.
- q. Pursuant to 401 KAR 52:030, Section 11, a permit shield shall not protect the owner or operator from enforcement actions for violating an applicable requirement prior to or at the time of permit issuance. Compliance with the conditions of this permit shall be considered compliance with:
  - (1) Applicable requirements that are included and specifically identified in this permit; and
  - (2) Non-applicable requirements expressly identified in this permit.

**2. Permit Expiration and Reapplication Requirements**

- a. This permit shall remain in effect for a fixed term of five (5) years following the original date of issue. Permit expiration shall terminate the source's right to operate unless a timely and complete renewal application has been submitted to the Division at least six (6) months prior to the expiration date of the permit. Upon a timely and complete submittal, the authorization to operate within the terms and conditions of this permit, including any permit shield, shall remain in effect beyond the expiration date, until the renewal permit is issued or denied by the Division [401 KAR 52:030, Section 12].
- b. The authority to operate granted through this permit shall cease to apply if the source fails to submit additional information requested by the Division after the completeness determination has been made on any application, by whatever deadline the Division sets [401 KAR 52:030, Section 8(2)].

**3. Permit Revisions**

- a. Minor permit revision procedures specified in 401 KAR 52:030, Section 14(3), may be used for permit revisions involving the use of economic incentive, marketable permit, emission trading, and other similar approaches, to the extent that these minor permit revision procedures are explicitly provided for in the State Implementation Plan (SIP) or in applicable requirements and meet the relevant requirements of 401 KAR 52:030, Section 14(2).
- b. This permit is not transferable by the permittee. Future owners and operators shall obtain a new permit from the Division for Air Quality. The new permit may be processed as an administrative amendment if no other change in this permit is necessary, and provided that a written agreement containing a specific date for transfer of permit responsibility coverage and liability between the current and new permittee has been submitted to the permitting authority within ten (10) days following the transfer.

**SECTION G - GENERAL PROVISIONS (CONTINUED)****4. Construction, Start-Up, and Initial Compliance Demonstration Requirements****No construction authorized**

~~Pursuant to a duly submitted application the Kentucky Division for Air Quality hereby authorizes the construction of the equipment described herein; equipment associated with the routing of emissions from the Oxide Mills A, B and C to the baghouse associated with EP 35 and the replacement of process baghouse BH06 associated with EP 38 in accordance with the terms and conditions of permit F-18-045 R1 and F-18-045 R2, respectively.~~

- ~~a. Construction of any process and/or air pollution control equipment authorized by permit F-18-045 R1 or F-18-045 R2 shall be conducted and completed only in compliance with the conditions of the corresponding permit.~~
- ~~b. Within thirty (30) days following commencement of construction and within fifteen (15) days following start-up and attainment of the maximum production rate specified in the permit application, or within fifteen (15) days following the issuance date of permit F-18-045 R1 or F-18-045 R2, as applicable, whichever is later, the permittee shall furnish to the Regional Office listed on the front of the respective permit in writing, notification of the following:
  - ~~(1) The date when construction commenced.~~
  - ~~(2) The date of start-up of the affected facilities listed in F-18-045 R1 or F-18-045 R2.~~
  - ~~(3) The date when the maximum production rate specified in the respective permit application was achieved.~~~~
- ~~c. Pursuant to 401 KAR 52:030, Section 3(2), unless construction is commenced within eighteen (18) months after the corresponding permit is issued, or begins but is discontinued for a period of eighteen (18) months or is not completed within a reasonable timeframe then the construction and operating authority granted by permit F-18-045 R1 or F-18-045 R2, respectively for those affected facilities for which construction was not completed shall immediately become invalid. Upon written request, the Cabinet may extend these time periods if the source shows good cause.~~
- ~~d. For those affected facilities for which construction is authorized by permit F-18-045 R1 or F-18-045 R2, a source shall be allowed to construct with the submittal of a complete application. Pursuant to 401 KAR 50:055, Section 2(1)(a), an owner or operator of any affected facility subject to any standard within the administrative regulations of the Division for Air Quality shall demonstrate compliance with the applicable standard(s) within sixty (60) days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial start-up of such facility. Pursuant to 401 KAR 52:030, Section 3(3)(c), sources that have not demonstrated compliance within the timeframes prescribed in 401 KAR 50:055, Section 2(1)(a), shall operate the affected facility only for purposes of demonstrating compliance unless authorized under an approved compliance plan or an order of the cabinet.~~
- ~~e. Permit F-18-045 R1 and F-18-045 R2 shall allow time for the initial start-up, operation, and compliance demonstration of the affected facilities listed herein. However, within sixty (60) days after achieving the maximum production rate at which the affected facilities will be operated but not later than 180 days after initial start-up of such facilities, the permittee shall conduct a performance demonstration on the affected facilities in~~

**SECTION G - GENERAL PROVISIONS (CONTINUED)**

~~accordance with 401 KAR 50:055, General compliance requirements. Testing must also be conducted in accordance with General Provisions G.5 of permit F-18-045 R1 and F-18-045 R2, respectively.~~

**5. Testing Requirements**

- a. Pursuant to 401 KAR 50:045, Section 2, a source required to conduct a performance test shall submit a completed Compliance Test Protocol form, DEP form 6028, or a test protocol a source has developed for submission to other regulatory agencies, in a format approved by the cabinet, to the Division's Frankfort Central Office a minimum of sixty (60) days prior to the scheduled test date. Pursuant to 401 KAR 50:045, Section 7, the Division shall be notified of the actual test date at least thirty (30) days prior to the test.
- b. Pursuant to 401 KAR 50:045, Section 5, in order to demonstrate that a source is capable of complying with a standard at all times, any required performance test shall be conducted under normal conditions that are representative of the source's operations and create the highest rate of emissions. If [When] the maximum production rate represents a source's highest emissions rate and a performance test is conducted at less than the maximum production rate, a source shall be limited to a production rate of no greater than 110 percent of the average production rate during the performance tests. If and when the facility is capable of operation at the rate specified in the application, the source may retest to demonstrate compliance at the new production rate. The Division for Air Quality may waive these requirements on a case-by-case basis if the source demonstrates to the Division's satisfaction that the source is in compliance with all applicable requirements.
- c. Results of performance test(s) required by the permit shall be submitted to the Division by the source or its representative within forty-five days or sooner if required by an applicable standard, after the completion of the fieldwork.

**6. Acid Rain Program Requirements**

- a. If an applicable requirement of Federal Statute 42 USC 7401 through 7671q (the Clean Air Act) is more stringent than an applicable requirement promulgated pursuant to Federal Statute 42 USC 7651 through 7651o (Title IV of the Act), both provisions shall apply, and both shall be state and federally enforceable.

**7. Emergency Provisions**

- a. Pursuant to 401 KAR 52:030, Section 23(1), an emergency shall constitute an affirmative defense to an action brought for noncompliance with the technology-based emission limitations if the permittee demonstrates through properly signed contemporaneous operating logs or other relevant evidence that:
  - (1) An emergency occurred and the permittee can identify the cause of the emergency;
  - (2) The permitted facility was at the time being properly operated;
  - (3) During an emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit; and,
  - (4) The permittee notified the Division as promptly as possible and submitted written notice of the emergency to the Division within two (2) working days of the time when

**SECTION G - GENERAL PROVISIONS (CONTINUED)**

emission limitations were exceeded due to an emergency. The notice shall include a description of the emergency, steps taken to mitigate emissions, and the corrective actions taken.

(5) Notification of the Division does not relieve the source of any other local, state or federal notification requirements.

b. Emergency conditions listed in General Provision G.7.a above are in addition to any emergency or upset provision(s) contained in an applicable requirement [401 KAR 52:030, Section 23(3)].

c. In an enforcement proceeding, the permittee seeking to establish the occurrence of an emergency shall have the burden of proof [401 KAR 52:030, Section 23(2)].

8. Ozone depleting substances

a. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:

(1) Persons opening appliances for maintenance, service, repair, or disposal shall comply with the required practices contained in 40 CFR 82.156.

(2) Equipment used during the maintenance, service, repair, or disposal of appliances shall comply with the standards for recycling and recovery equipment contained in 40 CFR 82.158.

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

(4) Persons disposing of small appliances, MVACs, and MVAC-like appliances (as defined at 40 CFR 82.152) shall comply with the recordkeeping requirements pursuant to 40 CFR 82.166.

(5) Persons owning commercial or industrial process refrigeration equipment shall comply with the leak repair requirements pursuant to 40 CFR 82.156.

(6) Owners/operators of appliances normally containing 50 or more pounds of refrigerant shall keep records of refrigerant purchased and added to such appliances pursuant to 40 CFR 82.166.

b. If the permittee performs service on motor (fleet) vehicle air conditioners containing ozone-depleting substances, the source shall comply with all applicable requirements as specified in 40 CFR 82, Subpart B, *Servicing of Motor Vehicle Air Conditioners*.

9. Risk Management Provisions

a. The permittee shall comply with all applicable requirements of 401 KAR Chapter 68, Chemical Accident Prevention, which incorporates by reference 40 CFR Part 68, Risk Management Plan provisions. If required, the permittee shall comply with the Risk Management Program and submit a Risk Management Plan to U.S. EPA using the RMP\* eSubmit software.

b. If requested, submit additional relevant information to the Division or the U.S. EPA.

## **SECTION H – ALTERNATE OPERATING SCENARIOS**

None

## **SECTION I – COMPLIANCE SCHEDULE**

None

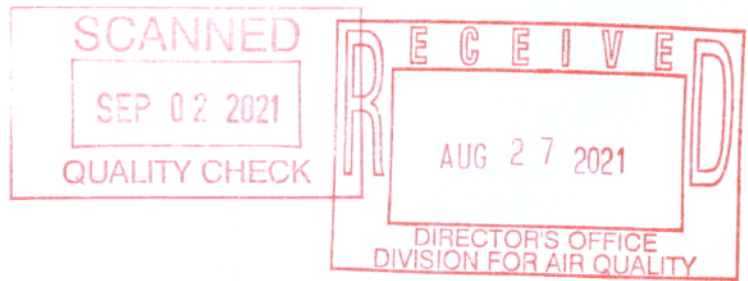


## APPENDIX C

### 502(b)10/Off-Permit Changes

August 13, 2021

Energy and Environmental Cabinet  
Department for Environmental Protection  
300 Sower Boulevard  
Frankfort, Kentucky 40601



**RE: 502(b)(10) Change – Emission Point 34A and 34B Removal from Permit**

Source ID: 21-151-00032

Agency Interest: 2864

Permit: F-13-045

To Whom It May Concern:

EnerSys Delaware Inc. (EnerSys) would like to request a 502(b)(10) change for its lead-acid battery manufacturing facility in Richmond, KY (Source ID 21-151-00032), currently operating under Permit number F-13-045. The facility is classified as a conditional major (i.e., federally enforceable synthetic minor) source with respect to the Title V and Prevention of Significant Deterioration (PSD) permitting programs. Kentucky Department of Environmental Protection (KYDEP), Division of Air Quality, is currently reviewing a recent permit application for EnerSys. We request that this change be incorporated into that permit before it is finalized.

**1. Description of the change:**

EnerSys has decided to no longer use lead pot (EP-34A) and the lead flux pot (EP-34B).

**2. Specifics and planned date of the changes:**

As of May 10, 2021, the EP34-A and EP34-B pots were removed from the plant and will not be used again.

**3. Change in Emissions:**

The plant is expected to slightly lower emissions after removal of the pots. The following is the break-down of emissions that will no longer be emitted as a result of removing the two (2) pots

**Emissions Data**

- 0.6 ef PM lb/ton (Table 12.17-2 AP-42)
- 0.5 ef Pb lb/ton (Table 12.17-2 AP-42)
- 0.005 Capacity 34A ton/hr (from current permit)
- Capacity 34B ton/hr (from current permit)
- 99.97% Control efficiency (%) (from current permit)

**Uncontrolled Annual Emissions by Unit**

- 0.013 ton/yr PM 34A
- 0.003 ton/yr PM 34B
- 0.011 ton/yr Pb 34A

- 0.002 ton/yr Pb 34B Uncontrolled Annual Emissions Both Units
- 0.016 ton/yr PM both units
- 0.013 ton/yr Pb both units

Controlled Annual Emissions Both Units

- 4.7304E-06 ton/yr PM both units
- 3.942E-06 ton/yr Pb both units

**4. Permit terms or conditions that are no longer applicable as a result of the changes:**

No permit conditions are expected to change.

Based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. Please contact EHS Manager Eric Ripberger at (859) 582-7225 if you have any questions or need additional information.

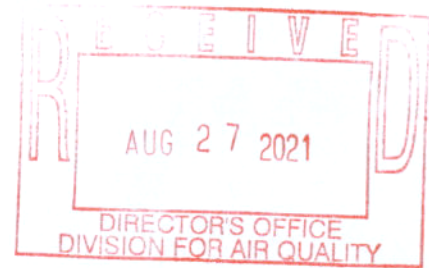
Sincerely,

A handwritten signature in black ink, appearing to read "Troy Baxter".

Troy Baxter  
Plant Manger

August 16, 2021

Energy and Environmental Cabinet  
Department for Environmental Protection  
300 Sower Boulevard  
Frankfort, Kentucky 40601



**RE: Insignificant Activity Addition**

Source ID: 21-151-00032  
Agency Interest: 2864  
Permit: F-13-045

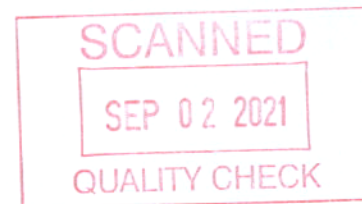
To Whom It May Concern:

EnerSys Delaware Inc. (EnerSys) is requesting to add three (3) Modine Model PDP200AE0130 0.2 Mmbtu/hr natural gas heaters to Permit F-13-045. Per 401 KAR 59.015, the heaters meet the definition of insignificant activities. Included in this packet is Form DEP7007DD, natural gas heater manufacturer specifications, and PTE calculations.

Based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. Please contact EHS Manager Eric Ripberger at (859) 582-7225 if you have any questions or need additional information.

Sincerely,

Troy Baxter  
Plant Manger



<div>Division for Air Quality  300 Sower Boulevard Frankfort, KY 40601 (502) 564-3999</div>						<div>DEP7007N Source Emissions Profile <div><div><input checked="" type="checkbox"/> Section N.1: Emission Summary</div><div><input checked="" type="checkbox"/> Section N.2: Stack Information</div><div><input type="checkbox"/> Section N.3: Fugitive Information</div><div><input type="checkbox"/> Section N.4: Notes, Comments, and Explanations</div></div><div>Additional Documentation  <input checked="" type="checkbox"/> Complete DEP7007AI</div></div>											
Source Name:						EnerSys Delaware Inc.											
KY EIS (AFS) #:						21- 151-00032											
Permit #:						F-18-045 R2											
Agency Interest (AI) ID:						2864											
Date:						8/8/2023											
N.1: Emission Summary																	
Emission Unit #	Emission Unit Name	Process ID	Process Name	Control Device Name	Control Device ID	Stack ID	Maximum Design Capacity (SCC Units/hour) **	Pollutant	Uncontrolled Emission Factor (lb/SCC Units)	Emission Factor Source (e.g. AP-42, Stack Test, Mass Balance)	Capture Efficiency (%)	Control Efficiency (%)	Hourly Emissions		Annual Emissions		
													Uncontrolled Potential (lb/hr)	Controlled Potential (lb/hr) *	Uncontrolled Potential (tons/yr)	Controlled Potential (tons/yr) *	
EP 25	Pasting Process	1	Pasting Process	BH25	BH25	BH25	9.6 tons/hr	Lead	N/A	40 CFR 60.372(a)	100.00%		N/A	0.127	N/A	0.56	
								PM/PM10	N/A				N/A	2.30	N/A	10.07	
EP 36	Cable Flux Pot	1	Cable Flux Pot	BH36	BH36	BH36	0.0015 tons/hr	Lead	N/A	40 CFR 60.372(a)	100.00%		N/A	0.0002	N/A	0.001	
								PM/PM10	N/A				N/A	0.015	N/A	0.067	
*The potential emissions/limit stated in the permit have remained unchanged.																	
**Like the prior applications in 2013 and 2018, the requested revision to the throughput rates do not reflect any physical changes or changes to method of operation. The variability of air flow coupled with the NSPS limit in gr/dscf does not allow the facility to correlate capacity (ton/hr) to potential or actual emissions.																	
N/A = Emission must be controlled to meet the NSPS limits.																	

**Section N.2: Stack Information****UTM Zone:**

Stack ID	Identify all Emission Units (with Process ID) and Control Devices that Feed to Stack	Stack Physical Data			Stack UTM Coordinates		Stack Gas Stream Data		
		Equivalent Diameter (ft)	Height (ft)	Base Elevation (ft)	Northing (m)	Easting (m)	Flowrate (acfm)	Temperature (° F)	Exit Velocity (ft/sec)
25	EP 25	5	60	~995			66000	110	56.02
36	EP 36	0.8	40	~995			438	80	13.38

## Balaji, Sriram (EEC)

---

**From:** Daniel Porter <Daniel\_Porter@shieldmw.com>  
**Sent:** Friday, April 26, 2024 11:27 AM  
**To:** Balaji, Sriram (EEC)  
**Cc:** Galavotti, Nicole  
**Subject:** RE: AI 2864 - Renewal Final Questions  
**Attachments:** AA BLUE.pdf

**\*\*CAUTION\*\* PDF attachments may contain links to malicious sites. Please contact the COT Service Desk [ServiceCorrespondence@ky.gov](mailto:ServiceCorrespondence@ky.gov) for any assistance.**

### This Message Originated from Outside the Organization

This Message Is From an External Sender.

Report Suspicious

Sriram,

Good morning. For EP 21, Battery Tray Painting, we use the worst-case aerosol for VOC and HAPs (See attached SDS) to determine VOC and HAP emissions.

Usage (lb/hr) = 0.2

Usage (lb/yr) = 1752

VOC (%) = 64.25 (highest value used in the given range for each VOC)

Total HAPs (%) = 32.65 (highest value used in the given range for each HAP)

VOC emissions (tons) = 0.57

Total HAPs (tons) = 0.29

If you have any questions, let me know.

### Daniel Porter, Ph.D., P.E.

Environmental Engineer

Shield Environmental Associates, Inc.

948 Floyd Drive

Lexington, KY 40505

Office| 859.294.5155 Ext. 109

Mobile| 859.229.8637

Fax| 859.294.5255

<https://www.shieldenvassociates.com/>





**From:** Nicole Galavotti <Nicole\_Galavotti@shieldmw.com>  
**Sent:** Wednesday, April 24, 2024 3:16 PM  
**To:** Balaji, Sriram (EEC) <sriram.balaji@ky.gov>  
**Cc:** Daniel Porter <Daniel\_Porter@shieldmw.com>  
**Subject:** RE: AI 2864 - Renewal Final Questions

Sriram,

Below is the information we found for the Acid Dip and Scrubber as well as the Battery Formation. The facility personnel have stated these are still accurate. The Battery Tray Painting you mentioned is a touch up operation for scratches/dings for trays that are coated offsite. This touch-up is now performed with spray cans, so there will only be one chemical (paint) instead of the three materials listed below. Facility personnel requested the number of cans purchased/used in 2023 and are providing the SDSs. We will update the table and send it over to you once we get the data.

Nicole

Emissions Inventory  
EnerSys Delaware Inc. - Richmond, KY

**Potential Emission Calculations - Sulfuric Acid Mist (SAM) and Emissions from Coating Operations**

Emission Point (EP) ID No. <sup>1</sup>	Emission Units	Maximum Potential Production Rate (lb/hr)	Raw Material	SAM		
				Hourly (lb/hr)		Potential (lb/yr)
				Hourly (lb/hr)	Annual (tpy)	Hourly (lb/hr)
EP07	Acid Dip and Scrubber	4,100	Plates <sup>3</sup>	0.48	2.09	--
EP08	Acid Mix and Scrubber	5,700	Acid <sup>3</sup>	0.66	2.91	--
EP12	Battery Cover Gluing	0.13	Hardener <sup>4</sup>	--	--	0.01
		0.042	Activator <sup>5</sup>	--	--	0.04
		2.25	Adhesive <sup>6</sup>	--	--	0.4
EP20	Battery Tray Painting	0.058	Paint <sup>7</sup>	--	--	0.01
		0.060	Activator <sup>8</sup>	--	--	0.01
		0.017	Thinner <sup>9</sup>	--	--	0.01
EP33	Battery Formation	52,500	N/A - ACFM Rating <sup>10</sup>	0.20	0.86	--

Notes

1 All miscellaneous emission points listed here qualify for treated as Insignificant Activities pursuant to 401 KAR 52.030, Section 6. Refer

2 Annual potential emissions estimates in all cases conservatively assume continuous operation (i.e., 8,760 hr/yr).

3 Emission factor of 0.233 lb/ton plates produced from AEI.

4 Hardener used in Battery Cover Gluing operation contains 7.4% phenol (HAP) per review of the material SDS. This is the only VOC present in this material.

5 Activator used in Battery Cover Gluing operation assumed to be 100% volatile per review of the material SDS. No HAP present in this material.

6 Adhesive applied in Battery Cover Gluing operation contains 70% VOC (all assumed to be HAP) per review of the SDS. 30% of the material is HAP by the adhesive material manufacturer.

7 Paint used in Battery Tray Painting operations assumed to contain 51% VOC and 49% HAP per review of the material SDS.

8 Activator used in Battery Tray Painting operations assumed to be 64% VOC and 40% HAP per review of the material SDS.

9 Thinner used in Battery Tray Painting operations assumed to be 100% volatile (all assumed to be HAP) per review of the material SDS.

10 Emissions of SAM were estimated based on the OSHA TWA of 1 mg/m<sup>3</sup> for sulfuric acid (29 CFR 1910.1000, Table Z-1).

**From:** Peters, Nathan <Nathan.Peters@enersys.com>  
**Sent:** Tuesday, April 23, 2024 5:29 PM  
**To:** Balaji, Sriram (EEC) <sriram.balaji@ky.gov>  
**Cc:** Hamm, Jimmy <Jimmy.Hamm@enersys.com>; Wiggs, David <David.Wiggs@enersys.com>; Nicole Galavotti <Nicole\_Galavotti@shieldmw.com>; Daniel Porter <Daniel\_Porter@shieldmw.com>  
**Subject:** Re: AI 2864 - Renewal Final Questions



Thanks, Siriam.

I'm adding in our two plant folks and our consultants on this. They will be able to get you this info quickly.

Thanks,  
Nathan

On Apr 23, 2024, at 5:24 PM, Balaji, Sriram (EEC) <[sriram.balaji@ky.gov](mailto:sriram.balaji@ky.gov)> wrote:

Good Evening Nathan,

The Enersys Permit Renewal is almost done but I noticed that we were missing some emissions from a couple insignificant activities. These in particular are EP07 (Acid Dip and Scrubber), EP20 (Battery Tray Painting), and EP33 (Battery Formation). If I could get a DEP7007DD with the TPY of pollutants being emitted from these insignificant activities that would be the last thing we need before final review.

Thanks for your help,

Sriram Balaji  
Office: 502-782-0159 - [sriram.balaji@ky.gov](mailto:sriram.balaji@ky.gov)

Environmental Engineer Assistant II  
KY Division for Air Quality  
Permit Review Branch - Chemical Section

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# Safety Data Sheet

**ALKDV**

**AA BLUE sm325481**

---

## SECTION 1: Identification

### Product identifier

Product name

Product number

ALKDV

Brand

ALKDV SERIES

### Supplier's details

Name

SOUTHERN AEROSOLS

Address

PO BOX 67  
CLEVELAND, NC 27013  
USA

Telephone

704-278-9800

### Emergency phone number(s)

INFOTRAC Chemical Emergency Response System  
1-800-535-5053

---

## SECTION 2: Hazard identification

### Classification of the substance or mixture

#### GHS classification in accordance with OSHA (29 CFR 1910.1200)

- Flammable gases (chapter 2.2), Cat. 1
- Gases under pressure (chapter 2.5), compressed gas
- Aspiration hazard (chapter 3.10), Cat. 2
- Skin corrosion/irritation (chapter 3.2), Cat. 2
- Eye damage/irritation (chapter 3.3), Cat. 2B
- Sensitization, respiratory (chapter 3.4), Cat. 1
- Specific target organ toxicity, single exposure (chapter 3.8), Cat. 3
- Germ cell mutagenicity (chapter 3.5), Cat. 2
- Carcinogenicity (chapter 3.6), Cat. 2
- Specific target organ toxicity, repeated exposure (chapter 3.9), Cat. 1
- Hazardous to the aquatic environment - acute hazard (chapter 4.1), Cat. 3

### GHS label elements, including precautionary statements

# Safety Data Sheet

## PPG ALK200R DV16

### Pictogram



### Signal word

**Danger**

### Hazard statement(s)

H222	Extremely flammable aerosol
H280	Contains gas under pressure; may explode if heated
H305	May be harmful if swallowed and enters airways
H315	Causes skin irritation
H320	Causes eye irritation
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled
H335	May cause respiratory irritation
H336	May cause drowsiness or dizziness
H341	Suspected of causing genetic defects
H351	Suspected of causing cancer
H372	Causes damage to organs through prolonged or repeated exposure
H402	Harmful to aquatic life

### Precautionary statement(s)

P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P210	Keep away from heat, hot surfaces, sparks, open flames, and other ignition sources. No smoking.
P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P264	Wash ... thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P271	Use only outdoors or in a well-ventilated area.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P284	[In case of inadequate ventilation] wear respiratory protection.
P301+P310	IF SWALLOWED: Immediately call a POISON CENTER/doctor/...
P302+P352	IF ON SKIN: Wash with plenty of water/...
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.
P308+P313	IF exposed or concerned: Get medical advice/attention.
P312	Call a POISON CENTER/doctor/... if you feel unwell.
P314	Get medical advice/attention if you feel unwell.
P321	Specific treatment (see ... on this label).
P332+P313	If skin irritation occurs: Get medical advice/attention.
P337+P313	If eye irritation persists: Get medical advice/attention.
P342+P311	If experiencing respiratory symptoms: Call a POISON CENTER/doctor/...
P362+P364	Take off contaminated clothing and wash it before reuse.
P377	Leaking gas fire: Do not extinguish, unless leak can be stopped safely.
P381	Eliminate all ignition sources if safe to do so.
P403	Store in a well ventilated place.
P403+P233	Store in a well ventilated place. Keep container tightly closed.
P405	Store locked up.
P410+P403	Protect from sunlight. Store in a well ventilated place.
P501	Dispose of contents/container to ...

### Other hazards which do not result in classification

## SECTION 3: Composition/information on ingredients

### Mixtures

#### Hazardous components

Component	Concentration
<b>ACETONE (CAS no.: 67-64-1; EC no.: 200-662-2; Index no.: 606-001-00-8)</b>	<b>50 - &lt; 65 %</b>
CLASSIFICATIONS: Flammable liquids (chapter 2.6), Cat. 2; Eye damage/irritation (chapter 3.3), Cat. 2; Specific target organ toxicity, single exposure (chapter 3.8), Cat. 3. HAZARDS: H225 - Highly flammable liquid and vapor; H319 - Causes serious eye irritation; H336 - May cause drowsiness or dizziness.	
<b>Propane, liquid (CAS no.: 74-98-6; EC no.: 200-827-9; Index no.: 601-003-00-5)</b>	<b>20 - &lt; 30 %</b>
CLASSIFICATIONS: Flammable gases (chapter 2.2), Cat. 1; Press. Gas. HAZARDS: H220 - Extremely flammable gas.	
<b>METHYL ETHYL KETONE (CAS no.: 78-93-3; EC no.: 201-159-0; Index no.: 606-002-00-3)</b>	<b>10 - &lt; 15 %</b>
CLASSIFICATIONS: Flammable liquids (chapter 2.6), Cat. 2; Eye damage/irritation (chapter 3.3), Cat. 2; Specific target organ toxicity, single exposure (chapter 3.8), Cat. 3. HAZARDS: H225 - Highly flammable liquid and vapor; H319 - Causes serious eye irritation; H336 - May cause drowsiness or dizziness.	
<b>XYLENES (MIXED) (CAS no.: 1330-20-7; EC no.: 215-535-7; Index no.: 601-022-00-9)</b>	<b>10 - 15 %</b>
CLASSIFICATIONS: Flammable liquids (chapter 2.6), Cat. 3; Acute toxicity (chapter 3.1), Cat. 4; Skin corrosion/irritation (chapter 3.2), Cat. 2. HAZARDS: H226 - Flammable liquid and vapor; H312 - Harmful in contact with skin; H315 - Causes skin irritation; H332 - Harmful if inhaled.	
<b>ETHYLBENZENE (CAS no.: 100-41-4; EC no.: 202-849-4; Index no.: 601-023-00-4)</b>	<b>1.5 - 2.5 %</b>
CLASSIFICATIONS: Flammable liquids (chapter 2.6), Cat. 2; Acute toxicity (chapter 3.1), Cat. 4. HAZARDS: H225 - Highly flammable liquid and vapor; H332 - Harmful if inhaled.	
<b>ETHYLENE GLYCOL MONOBUTYL ETHER (CAS no.: 111-76-2; EC no.: 203-905-0; Index no.: 603-014-00-0)</b>	<b>1.5 - 2 %</b>
CLASSIFICATIONS: Acute toxicity (chapter 3.1), Cat. 4; Eye damage/irritation (chapter 3.3), Cat. 2; Skin corrosion/irritation (chapter 3.2), Cat. 2. HAZARDS: H302 - Harmful if swallowed; H312 - Harmful in contact with skin; H315 - Causes skin irritation; H319 - Causes serious eye irritation; H332 - Harmful if inhaled.	
<b>TOLUENE (CAS no.: 108-88-3; EC no.: 203-625-9; Index no.: 601-021-00-3)</b>	<b>0.05 - 0.15 %</b>
CLASSIFICATIONS: Flammable liquids (chapter 2.6), Cat. 2; Toxic to reproduction (chapter 3.7), Cat. 2; Aspiration hazard (chapter 3.10), Cat. 1; Specific target organ toxicity, repeated exposure (chapter 3.9), Cat. 2; Skin corrosion/irritation (chapter 3.2), Cat. 2; Specific target organ toxicity, single exposure (chapter 3.8), Cat. 3. HAZARDS: H225 - Highly flammable liquid and vapor; H304 - May be fatal if swallowed and enters airways; H315 - Causes skin irritation; H336 - May cause drowsiness or dizziness; H361d - Suspected of damaging the unborn child; H373 - May cause damage to organs through prolonged or repeated exposure.	

## SECTION 4: First-aid measures

### Description of necessary first-aid measures

General advice	Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.
If inhaled	If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
In case of skin contact	Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician.
In case of eye contact	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
If swallowed	Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

### Most important symptoms/effects, acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

## SECTION 5: Fire-fighting measures

# Safety Data Sheet

## PPG ALK200R DV16

### Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

### Specific hazards arising from the chemical

Carbon oxides

### Special protective actions for fire-fighters

Wear self-contained breathing apparatus for firefighting if necessary.

### Further information

Use water spray to cool unopened containers.

---

## SECTION 6: Accidental release measures

### Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas. For personal protection see section 8.

### Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

### Methods and materials for containment and cleaning up

Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13).

### Reference to other sections

For disposal see section 13.

---

## SECTION 7: Handling and storage

### Precautions for safe handling

Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Use explosion-proof equipment. Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge. For precautions see section 2.2.

### Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Storage class (TRGS 510): Flammable liquids

### Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

---

## SECTION 8: Exposure controls/personal protection

### Control parameters

#### CAS: 100-41-4

Ethyl benzene

Cal/OSHA: 100 ppm, (ST) 125 ppm PEL inhalation; NIOSH: 100 ppm, (ST) 125 ppm REL inhalation; OSHA: 100 ppm PEL inhalation; 435 mg/m<sup>3</sup> PEL inhalation

#### CAS: 108-88-3

Toluene

# Safety Data Sheet

## PPG ALK200R DV16

Cal/OSHA: See Annotated Z-2 PEL inhalation; NIOSH: See Annotated Z-2 REL inhalation; OSHA: See Annotated Z-2 ppm PEL inhalation; See Annotated Z-2 mg/m3 PEL inhalation

### CAS: 111-76-2

2-Butoxyethanol

Cal/OSHA: 20 ppm PEL inhalation; NIOSH: 5 ppm REL inhalation; OSHA: 50 ppm PEL inhalation; 240 mg/m3 PEL inhalation

### CAS: 1330-20-7

Xylenes (o-, m-, p-isomers)

Cal/OSHA: 100 ppm, (ST) 150 ppm, (C) 300 ppm PEL inhalation; NIOSH: 100 ppm, (ST) 150 ppm REL inhalation; OSHA: 100 ppm PEL inhalation; 435 mg/m3 PEL inhalation

### CAS: 67-64-1

Acetone

Cal/OSHA: 500 ppm, (ST) 750 ppm, (C) 3000 ppm PEL inhalation; NIOSH: 250 ppm REL inhalation; OSHA: 1000 ppm PEL inhalation; 2400 mg/m3 PEL inhalation

### CAS: 74-98-6

Propane

Cal/OSHA: 1000 ppm PEL inhalation; NIOSH: 1000 ppm REL inhalation; OSHA: 1000 ppm PEL inhalation; 1800 mg/m3 PEL inhalation

### CAS: 78-93-3

2-Butanone (Methyl ethyl ketone)

Cal/OSHA: 200 ppm, (ST) 300 ppm PEL inhalation; NIOSH: 200 ppm, (ST) 300 ppm REL inhalation; OSHA: 200 ppm PEL inhalation; 590 mg/m3 PEL inhalation

## Appropriate engineering controls

Distribution, Workplace and Household Settings: Ensure adequate ventilation. Product Manufacturing Plant (needed at Product-Producing Plant ONLY): Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction.

## Individual protection measures, such as personal protective equipment (PPE)

### Eye/face protection

Face shield and safety glasses. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

### Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

### Body protection

Impervious clothing, Flame retardant antistatic protective clothing., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Complete suit protecting against chemicals, Flame retardant antistatic protective clothing., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

### Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multipurpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

# Safety Data Sheet

## PPG ALK200R DV16

### Thermal hazards

No data available

### Environmental exposure controls

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

---

## SECTION 9: Physical and chemical properties

### Information on basic physical and chemical properties

Appearance/form	AEROSOL/LIQUID
Odor	TYPICAL PAINT SOLVENTS
Odor threshold	NOT AVAILABLE
pH	7
Melting point/freezing point	NOT AVAILABLE
Initial boiling point and boiling range	132-295 F
Flash point	CLOSED CUP: -20.2F
Evaporation rate	5.6 (butyl acetate = 1)
Flammability (solid, gas)	NOT AVAILABLE
Upper/lower flammability limits	12.8%/1%
Upper/lower explosive limits	13%/1%
Vapor pressure	13.5 kPa
Vapor density	1.55 (AIR = 1)
Relative density	.94
Solubility(ies)	NOT AVAILABLE
Partition coefficient: n-octanol/water	NOT AVAILABLE
Auto-ignition temperature	NOT AVAILABLE
Decomposition temperature	NOT AVAILABLE
Viscosity	>.21 cm <sup>2</sup> /s (room temperature)
Explosive properties	
Oxidizing properties	

---

## SECTION 10: Stability and reactivity

### Reactivity

None under normal use conditions.

### Chemical stability

Stable under recommended storage conditions.

### Possibility of hazardous reactions

Vapours may form explosive mixture with air.

### Conditions to avoid

Heat, flames and sparks.

### Incompatible materials

Bases, Oxidizing agents, Reducing agents, Acetone reacts violently with phosphorous oxychloride.

### Hazardous decomposition products

Other decomposition products - No data available In the event of fire: see section 5

---

## SECTION 11: Toxicological information

# Safety Data Sheet

## PPG ALK200R DV16

### Information on toxicological effects

#### Acute toxicity

ACETONE

LD50 Oral - Rat - 5,800 mg/kg

Remarks: Behavioral:Altered sleep time (including change in righting reflex). Behavioral:Tremor.

Behavioral:Headache.

Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea.

ACETONE

LC50 Inhalation - Rat - 50,100 mg/m<sup>3</sup> - 8 h

Remarks: Drowsiness Dizziness Unconsciousness

METHYL ETHYL KETONE

LD50 Skin - Rabbit - 6480 mg/kg

METHYL ETHYL KETONE

LD50 Oral - Rat - 2737 mg/kg

ETHYLBENZENE

LC50 Inhalation - Rat - 4000 ppg - 4 hrs

ETHYLENE GLYCOL MONOBUTYL ETHER

LC50

ETHYLBENZENE

LD50 Skin - Rabbit - 17.8 g/kg

ETHYLBENZENE

LD50 Oral - Rat - 3.5 g/kg

XYLENES (MIXED)

LD50 Skin - Rabbit - >1.7g/kg

XYLENES (MIXED)

LC50 Inhalation - Rat - 6670 ppm - 4 hrs

XYLENES (MIXED)

LD50 Oral - Rat - 4.3 g/kg

TOLUENE

LC50 Inhalation - Rat - 49 g/m<sup>3</sup> - 4 hrs

TOLUENE

LC50 Inhalation - Rat - 8000 ppm - 4 hrs

TOLUENE

LD50 Skin - Rabbit - 8.39 g/kg

TOLUENE

LD50 Oral - Rat - 636 mg/kg

#### Skin corrosion/irritation

ACETONE

Skin - Rabbit - 24 hr

Result: Mild skin irritation



# Safety Data Sheet

## PPG ALK200R DV16

### ACETONE

Eyes - Human - 186300 ppm

Remarks: May cause drowsiness or dizziness.

### METHYL ETHYL KETONE

Skin - Rabbit - 24 hrs 14 milligrams

Result: Mild Irritant

### Serious eye damage/irritation

#### ACETONE

- Rabbit - 24 hr

Result: Eye irritation

### Respiratory or skin sensitization

#### ACETONE

- Guinea pig

Result: Does not cause skin sensitisation

### Germ cell mutagenicity

#### ACETONE

Result: No data available

### Carcinogenicity

#### ACETONE

Remarks: This product is or contains a component that is not classifiable as to its carcinogenicity based on its IARC, ACGIH, NTP, or EPA classification.

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

### Reproductive toxicity

#### ACETONE

### Summary of evaluation of the CMR properties

#### ACETONE

Remarks: This product is or contains a component that is not classifiable as to its carcinogenicity based on its IARC, ACGIH, NTP, or EPA classification.

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

### STOT-single exposure

#### ACETONE

Remarks: May cause drowsiness or dizziness.

### STOT-repeated exposure

#### ACETONE

# Safety Data Sheet

## PPG ALK200R DV16

Result: No data available

---

### SECTION 12: Ecological information

#### Toxicity

ACETONE

LC50 - Oncorhynchus mykiss (rainbow trout) - 5,540 mg/l - 96 h

ACETONE

LC50 - Daphnia magna (Water flea) - 8,800 mg/l - 48 hr

#### Persistence and degradability

ACETONE

OECD Test Guideline 301B

Result: 91% -Readily biodegradable.

---

### SECTION 13: Disposal considerations

#### Disposal of the product

Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

#### Disposal of contaminated packaging

Dispose of as unused product.

---

### SECTION 14: Transport information

#### DOT (US)

UN Number: 1950

Class: 2.1

Packing Group:

Proper Shipping Name: AEROSOLS

Reportable quantity (RQ): Special Provisions: LIMITED QUANTITY

Marine pollutant: NO

Poison inhalation hazard:

#### IMDG

UN Number: 1950

Class: 2.1

Packing Group:

EMS Number:

Proper Shipping Name: AEROSOLS

#### IATA

UN Number: 1950

Class: 2.1

Packing Group:

Proper Shipping Name: AEROSOLS, FLAMMABLE

---

### SECTION 15: Regulatory information

**Safety, health and environmental regulations specific for the product in question**

**California Prop. 65 components**

# Safety Data Sheet

## PPG ALK200R DV16

### Massachusetts Right To Know Components

Chemical name: Acetone  
CAS number: 67-64-1. Chemical name: Methyl ethyl ketone  
CAS number: 78-93-3. Chemical name: Xylene (mixed isomers)  
CAS number: 1330-20-7. Chemical name: Ethylbenzene  
CAS number: 100-41-4. Chemical name: Toluene  
CAS number: 108-88-3

### New Jersey Right To Know Components

Common name: ACETONE  
CAS number: 67-64-1. Common name: PROPANE  
CAS number: 74-98-6. Common name: METHYL ETHYL KETONE  
CAS number: 78-93-3. Common name: XYLENES  
CAS number: 1330-20-7. Common name: ETHYL BENZENE  
CAS number: 100-41-4. Common name: 2-BUTOXY ETHANOL  
CAS number: 111-76-2. Common name: TOLUENE  
CAS number: 108-88-3

### Pennsylvania Right To Know Components

Chemical name: 2-Propanone  
CAS number: 67-64-1. Chemical name: Propane  
CAS number: 74-98-6. Chemical name: 2-Butanone  
CAS number: 78-93-3. Chemical name: Benzene, dimethyl-  
CAS number: 1330-20-7. Chemical name: Benzene, ethyl-  
CAS number: 100-41-4. Chemical name: Ethanol, 2-butoxy-  
CAS number: 111-76-2. Chemical name: Benzene, methyl-  
CAS number: 108-88-3

### Stockholm Convention

#### HMIS Rating

Health	2
Flammability	4
Physical hazard	
Personal protection	X

#### NFPA Rating

Health hazard	2
Fire hazard	3
Reactivity hazard	
Special hazard	

---

## SECTION 16: Other information

DISCLAIMER: The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigation to determine the suitability of information for their particular purposes. In no event shall Southern Aerosols/Custom Aero Coatings be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, whatsoever arising, even if [COMPANY NAME] has been advised of the possibility of such damages.



May 12, 2025

Mr. Zachary Bittner  
KY Dept. for Environmental Protection  
Division for Air Quality  
Permit Review Branch  
300 Sower Blvd. 2<sup>nd</sup> Floor  
Frankfort, KY 40601

Subject: Addendum Application  
EnerSys Delaware Inc.  
Richmond, (Madison County), Kentucky  
AI #2864, Facility ID #21-151-00032

Project No. 120-1810

Dear Mr. Bittner:

EnerSys Delaware Inc. (EnerSys) is submitting an addendum application to the renewal application submitted on June 21, 2023. This addendum application is to include additional control for emission points EP01 and EP25 in the form of HEPA filtration. Note there will be a pre-filter to the HEPA filter.

EnerSys requests to remain a conditional major source with a limit of 90 tons per year of particulate matter. Should there be any questions, please do not hesitate to contact Nicole Galavotti at (859) 294-5155. Thank you.

Sincerely,

**SHIELD ENVIRONMENTAL ASSOCIATES, INC.**

A handwritten signature in black ink that reads 'Nicole Galavotti'.

Nicole Galavotti, P.E.  
Principal, Sr. Environmental Engineer  
email: nicole\_galavotti@shieldmw.com

A handwritten signature in black ink that reads 'Daniel S. Porter'.

Daniel Porter, Ph.D., P.E.  
Environmental Engineer  
email: daniel\_porter@shieldmw.com

cc: Jimmy Hamm – EnerSys Delaware Inc.  
Attachments

Appendix A DEP7007 Forms  
Appendix B Filter Specifications  
Appendix C Comments Previously Submitted

**Lexington**  
948 Floyd Drive  
Lexington, KY 40505  
Telephone 859.294.5155  
Fax 859.294.5255  
www.shieldenv.com

Louisville, KY

## APPENDIX A

### DEP7007 Forms

## Division for Air Quality

300 Sower Boulevard  
Frankfort, KY 40601  
(502) 564-3999

**DEP7007AI****Administrative Information**

- ☒ Section AI.1: Source Information  
☒ Section AI.2: Applicant Information  
☒ Section AI.3: Owner Information  
☒ Section AI.4: Type of Application  
☒ Section AI.5: Other Required Information  
☒ Section AI.6: Signature Block  
☒ Section AI.7: Notes, Comments, and Explanations

**Additional Documentation**

☒ Additional Documentation attached

**Source Name:** EnerSys Delaware Inc.

**KY EIS (AFS) #:** 21- 151-00032

**Permit #:** F-18-045 R2 (Draft Permit F-25-005)

**Agency Interest (AI) ID:** 2864

**Date:** 5/12/2025

**Section AI.1: Source Information**

<b>Physical Location Address:</b>	<b>Street:</b>	<u>761 Eastern Bypass</u>		
	<b>City:</b>	<u>Richmond</u>	<b>County:</b>	<u>Madison</u>
<b>Mailing Address:</b>	<b>Street or P.O. Box:</b>	<u>761 Eastern Bypass</u>		
	<b>City:</b>	<u>Richmond</u>	<b>State:</b>	<u>Kentucky</u>
		<b>Zip Code:</b>	<u>40475</u>	
		<b>Zip Code:</b>	<u>40475</u>	

**Standard Coordinates for Source Physical Location**

**Longitude:** -84.292892 (decimal degrees) **Latitude:** 37.734001 (decimal degrees)

**Primary (NAICS) Category:** Storage Battery Manufacturing **Primary NAICS #:** 335911

**Classification (SIC) Category:**

Electrical Storage Batteries

**Primary SIC #:**

3691

**Briefly discuss the type of business conducted at this site:**

EnerSys Delaware Inc. engages in manufacturing industrial-grade lead acid storage batteries.

**Description of Area Surrounding Source:**☐ Rural Area☐ Industrial Park☐ Residential Area**Is any part of the source located on federal land?**☐ Yes**Number of Employees:**

347

☒ Urban Area☐ Industrial Area☐ Commercial Area☒ No**Approximate distance to nearest residence or commercial property:**

0.17 miles

**Property Area:**

43 acres

**Is this source portable?**☐ Yes☒ No**What other environmental permits or registrations does this source currently hold or need to obtain in Kentucky?****NPDES/KPDES:**☒ Currently Hold☐ Need☐ N/A**Solid Waste:**☐ Currently Hold☐ Need☒ N/A**RCRA:**☒ Currently Hold☐ Need☐ N/A**UST:**☐ Currently Hold☐ Need☒ N/A**Type of Regulated Waste Activity:**☐ Mixed Waste Generator☒ Generator☐ Recycler☐ Other: \_\_\_\_\_☐ U.S. Importer of Hazardous Waste☐ Transporter☐ Treatment/Storage/Disposal Facility☐ N/A

**Section AI.2: Applicant Information**

**Applicant Name:** EnerSys Delaware Inc.

**Title:** (if individual) \_\_\_\_\_

**Mailing Address:** **Street or P.O. Box:** 761 Eastern Bypass

**City:** Richmond **State:** KY **Zip Code:** 40475

**Email:** (if individual) \_\_\_\_\_

**Phone:** 859-624-7300

**Technical Contact**

**Name:** Jimmy Hamm

**Title:** EH&S Manager

**Mailing Address:** **Street or P.O. Box:** 761 Eastern Bypass

**City:** Richmond **State:** KY **Zip Code:** 40475

**Email:** Jimmy.Hamm@enersys.com

**Phone:** 859-200-6144

**Air Permit Contact for Source**

**Name:** Nicole Galavotti, P.E. - Shield Environmental Associates, Inc.

**Title:** Sr.Environmental Engineer/Principal

**Mailing Address:** **Street or P.O. Box:** 948 Floyd Drive

**City:** Lexington **State:** KY **Zip Code:** 40505

**Email:** nicole\_galavotti@shieldmw.com

**Phone:** 859-294-5155



**Section AI.3: Owner Information**

☒ **Owner same as applicant**

**Name:** \_\_\_\_\_

**Title:** \_\_\_\_\_

**Mailing Address:** **Street or P.O. Box:** \_\_\_\_\_  
**City:** \_\_\_\_\_ **State:** \_\_\_\_\_ **Zip Code:** \_\_\_\_\_

**Email:** \_\_\_\_\_

**Phone:** \_\_\_\_\_

**List names of owners and officers of the company who have an interest in the company of 5% or more.**

Name		Position	
_____		_____	
_____		_____	
_____		_____	

## Section AI.4: Type of Application

**Current Status:**
☐ Title V ☒ Conditional Major ☐ State-Origin ☐ General Permit ☐ Registration ☐ None

**Requested Action:**
*(check all that apply)*

☐ Name Change ☐ Initial Registration ☐ Significant Revision ☐ Administrative Permit Amendment  
☒ Renewal Permit ☐ Revised Registration ☐ Minor Revision ☐ Initial Source-wide Operating Permit  
☐ 502(b)(10)Change ☐ Extension Request ☐ Addition of New Facility ☐ Portable Plant Relocation Notice  
☐ Revision ☐ Off Permit Change ☐ Landfill Alternate Compliance Submittal ☐ Modification of Existing Facilities  
☐ Ownership Change ☐ Closure

**Requested Status:**
☐ Title V ☒ Conditional Major ☐ State-Origin ☐ PSD ☐ NSR ☐ Other: \_\_\_\_\_

**Is the source requesting a limitation of potential emissions?**
☐ Yes ☐ No

**Pollutant:**
**Requested Limit:**

☒ Particulate Matter 90  
☐ Volatile Organic Compounds (VOC) \_\_\_\_\_  
☐ Carbon Monoxide \_\_\_\_\_  
☐ Nitrogen Oxides \_\_\_\_\_  
☐ Sulfur Dioxide \_\_\_\_\_  
☐ Lead \_\_\_\_\_

**Pollutant:**
**Requested Limit:**

☐ Single HAP \_\_\_\_\_  
☐ Combined HAPs \_\_\_\_\_  
☐ Air Toxics (40 CFR 68, Subpart F) \_\_\_\_\_  
☐ Carbon Dioxide \_\_\_\_\_  
☐ Greenhouse Gases (GHG) \_\_\_\_\_  
☐ Other \_\_\_\_\_

**For New Construction:**
**Proposed Start Date of Construction:**
*(MM/YYYY)*
**Proposed Operation Start-Up Date: (MM/YYYY)**
**For Modifications:**
**Proposed Start Date of Modification:**
*(MM/YYYY)*
05/2025
**Proposed Operation Start-Up Date: (MM/YYYY)**
05/2025
**Applicant is seeking coverage under a permit shield.**
☐ Yes

☒ No

**Identify any non-applicable requirements for which permit shield is sought on a separate attachment to the application.**

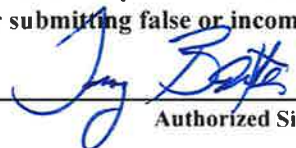
## Section AI.5 Other Required Information

Indicate the documents attached as part of this application:

- |  |  |
|--|--|
| <input type="checkbox"/> DEP7007A Indirect Heat Exchangers and Turbines                        | <input type="checkbox"/> DEP7007CC Compliance Certification                              |
| <input type="checkbox"/> DEP7007B Manufacturing or Processing Operations                       | <input type="checkbox"/> DEP7007DD Insignificant Activities                              |
| <input type="checkbox"/> DEP7007C Incinerators and Waste Burners                               | <input type="checkbox"/> DEP7007EE Internal Combustion Engines                           |
| <input type="checkbox"/> DEP7007F Episode Standby Plan   | <input type="checkbox"/> DEP7007FF Secondary Aluminum Processing                         |
| <input type="checkbox"/> DEP7007J Volatile Liquid Storage                                      | <input checked="" type="checkbox"/> DEP7007GG Control Equipment                          |
| <input type="checkbox"/> DEP7007K Surface Coating or Printing Operations                       | <input type="checkbox"/> DEP7007HH Haul Roads  |
| <input type="checkbox"/> DEP7007L Mineral Processes  | <input type="checkbox"/> Confidentiality Claim   |
| <input type="checkbox"/> DEP7007M Metal Cleaning Degreasers                                    | <input type="checkbox"/> Ownership Change Form   |
| <input checked="" type="checkbox"/> DEP7007N Source Emissions Profile                          | <input type="checkbox"/> Secretary of State Certificate                                  |
| <input type="checkbox"/> DEP7007P Perchloroethylene Dry Cleaning Systems                       | <input type="checkbox"/> Flowcharts or diagrams depicting process                        |
| <input type="checkbox"/> DEP7007R Emission Offset Credit                                       | <input type="checkbox"/> Digital Line Graphs (DLG) files of buildings, roads, etc.       |
| <input type="checkbox"/> DEP7007S Service Stations   | <input type="checkbox"/> Site Map  |
| <input type="checkbox"/> DEP7007T Metal Plating and Surface Treatment Operations               | <input type="checkbox"/> Map or drawing depicting location of facility                   |
| <input checked="" type="checkbox"/> DEP7007V Applicable Requirements and Compliance Activities | <input type="checkbox"/> Safety Data Sheet (SDS)   |
| <input type="checkbox"/> DEP7007Y Good Engineering Practice and Stack Height Determination     | <input type="checkbox"/> Emergency Response Plan   |
| <input type="checkbox"/> DEP7007AA Compliance Schedule for Non-complying Emission Units        | <input checked="" type="checkbox"/> Other: Filter Specs and Comment Previously Submitted |
| <input type="checkbox"/> DEP7007BB Certified Progress Report                                   |  |

## Section AI.6: Signature Block

I, the undersigned, hereby certify under penalty of law, that I am a responsible official\*, and that I have personally examined, and am familiar with, the information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the information is on knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false or incomplete information, including the possibility of fine or imprisonment.

  
 \_\_\_\_\_  
 Authorized Signature

Troy Baxter  
 \_\_\_\_\_  
 Type or Printed Name of Signatory

5/13/2025  
 \_\_\_\_\_  
 Date

Vice President of Global Ops, Motive Power  
 \_\_\_\_\_  
 Title of Signatory

\*Responsible official as defined by 401 KAR 52:001.

**Section AI.7: Notes, Comments, and Explanations**

EnerSys Delaware Inc. (EnerSys) is submitting an addendum application to the renewal application submitted on June 21, 2023. This addendum application is to include additional control for emission points EP01 and EP25 in the form of HEPA filtration. Note there will be a pre-filter to the HEPA filter.

Division for Air Quality

300 Sower Boulevard

Frankfort, KY 40601

(502) 564-3999

## DEP7007GG

### Control Equipment

#### Additional Documentation

- ☒ Complete Sections GG.1 through GG.12, as applicable
- ☐ Attach manufacturer's specifications for each control device
- ☒ Complete DEP7007AI

Source Name: EnerSys Delaware Inc.KY EIS (AFS) #: 21- 151-00032Permit #: F-18-045 R2 (Draft Permit F-25-005)Agency Interest (AI) ID: 2864Date: 5/12/2025

#### Section GG.1: General Information - Control Equipment

Control Device ID #	Control Device Name	Cost	Manufacturer	Model Name/ Serial #	Date Installed	Inlet Gas Stream Data For <u>All</u> Control Devices					Inlet Gas Stream Data For Condensers, Adsorbers, Afterburners, Incinerators, Oxidizers Only			Equipment Operational Data For <u>All</u> Control Devices		
						Temperature ( $^{\circ}F$ )	Flowrate (scfm @ 68 $^{\circ}F$ ) *	Average Particle Diameter ( $\mu m$ )	Particle Density (lb/ft <sup>3</sup> ) or Specific Gravity	Gas Density (lb/ft <sup>3</sup> )	Gas Moisture Content (%)	Gas Composition	Fan Type	Pressure Drop Range (in. H <sub>2</sub> O)	Pollutants Collected/Controlled	Pollutant Removal (%)
HP01	HEPA Filter		Glasfloss Industries	Magna 1000 HC	May-25	115	55,304	< 10 microns	0.08					1.25-3.0	PM/PM10 Lead	99.97
HP25	HEPA Filter		Glasfloss Industries	Magna 1000 HC	May-25	110	61,368	< 10 microns	0.08					1.25-3.0	PM/PM10 Lead	99.97
							*Flowrate in DSCFM									

Section GG.6: Filter														
Control Device ID #	Identify all Emission Units and Control Devices that Feed to Filter	Identify Type of Filter Unit: Baghouse, Cartridge Collector, or Other (specify)	Identify Type of Filtering Material: Fabric, Paper, Synthetic, or Other (specify)	Total Filter Area (ft <sup>2</sup> )	Effective Air-to-Filter Ratio (acfm/ft <sup>2</sup> )	Continuous Monitoring Instrumentation (e.g. COMS, BLDS, none)	Additional Materials Introduced into the Control System (e.g. lime, carbon)		Identify Cleaning Method: Shaker, Pulse Air, Reverse Air, Pulse Jet, or Other (specify)	Identify Gas Cooling Method: Ductwork, Heat Exchanger, Bleed-in Air, Water Spray, or Other (specify)	For Ductwork:		For Bleed-in Air:	For Water Spray:
							Material	Injection Rate (lb/hr)			Length (ft)	Diameter (ft)	Flowrate (scfm @ 68°F)	Flowrate (gal/min)
HP01	EP01 Lead Casting	Filter	glass microfiber	7,980.00	6.93				Replacement					
HP25	EP25 Pasting Process	Filter	glass microfiber	7,980.00	7.69				Replacement					

**Section GG.12: Notes, Comments, and Explanations**

A prefilter and HEPA filter are being added to both EP01 and EP25.

## Division for Air Quality

300 Sower Boulevard  
Frankfort, KY 40601  
(502) 564-3999

## DEP7007N

## Source Emissions Profile

- ☒ Section N.1: Emission Summary  
☒ Section N.2: Stack Information  
☐ Section N.3: Fugitive Information  
☐ Section N.4: Notes, Comments, and Explanations

## Additional Documentation

☒ Complete DEP7007AI

Source Name: EnerSys Delaware Inc.

KY EIS (AFS) #:

21- 151-00032

Permit #:

F-18-045 R2 (Draft Permit F-25-005)

Agency Interest (AI) ID:

2864

Date:

5/12/2025

## N.1: Emission Summary

Emission Unit #	Emission Unit Name	Process ID	Process Name	Control Device Name	Control Device ID	Stack ID	Maximum Design Capacity (SCC Units/hour) *	Pollutant	Uncontrolled Emission Factor (lb/SCC Units)	Emission Factor Source (e.g. AP-42, Stack Test, Mass Balance)	Capture Efficiency (%)	Control Efficiency (%)	Hourly Emissions		Annual Emissions	
													Uncontrolled Potential (lb/hr)	Controlled Potential (lb/hr)	Uncontrolled Potential (tons/yr)	Controlled Potential (tons/yr)
EP 01	Lead Casting	1	Lead Casting	BH01/HP01	BH01/HP01	BH01/HP01	13.36 tons/hr	Lead	N/A	40 CFR 63.11423(a)(2) Table 1	100.00%		N/A	0.017	N/A	0.073
								PM/PM10 <sup>a</sup>	N/A				N/A	0.17	N/A	0.727
EP 02	Assembly	2	Assembly	BH02	BH02	BH02	10.31 tons/hr	Lead	N/A	40 CFR 63.11423(a)(2) Table 1	100.00%		N/A	0.025	N/A	0.108
								PM/PM10 <sup>a</sup>	N/A				N/A	0.25	N/A	1.08
EP 03	Plate Finishing	3	Plate Finishing	BH03	BH03	BH03	11.01 tons/hr	Lead	N/A	40 CFR 63.11423(a)(2) Table 1	100.00%		N/A	0.027	N/A	0.119
								PM/PM10 <sup>a</sup>	N/A				N/A	0.27	N/A	1.19
EP 24	Assembly	EP 24	Assembly	BH24	BH24	BH24	3.75 tons/hr	Lead	N/A	40 CFR 63.11423(a)(2) Table 1	100.00%		N/A	0.012	N/A	0.052
								PM/PM10 <sup>a</sup>	N/A				N/A	0.12	N/A	0.52
EP 24V	Central Vacuum	EP 24V	Central Vacuum	HP24V	HP24V	HP24V	1.1 tons/hr	Lead	N/A	40 CFR 63.11423(a)(2) Table 1	100.00%		N/A	0.001	N/A	0.003
								PM/PM10 <sup>a</sup>	N/A				N/A	0.01	N/A	0.03
EP 25	Pasting Process	EP 25	Pasting Process	BH25/HP25	BH25/HP25	BH25/HP25	9.6 tons/hr	Lead	N/A	40 CFR 63.11423(a)(2) Table 1	100.00%		N/A	0.023	N/A	0.101
								PM/PM10 <sup>a</sup>	N/A				N/A	0.23	N/A	1.01
EP 35	Casting/Oxide Mills	EP 35	Casting/Oxide Mills	BH35	BH35	BH35	4.29 tons/hr**	Lead	N/A	401 KAR 53.010***	100.00%		N/A	0.0311	N/A	0.136
								PM/PM10 <sup>a</sup>	N/A				N/A	0.311	N/A	1.36
EP 36	Cable Flux Pot	EP 36	Cable Flux Pot	HP36	HP36	HP36	0.0015 tons/hr	Lead	N/A	40 CFR 63.11423(a)(2) Table 1	100.00%		N/A	0.0001	N/A	0.001
								PM/PM10 <sup>a</sup>	N/A				N/A	0.0015	N/A	0.01
EP 38	Ironclad Filling	EP 38	Ironclad Filling	BH38	BH38	BH38	4.16 tons/hr	Lead	N/A	40 CFR 63.11423(a)(2) Table 1	100.00%		N/A	0.014	N/A	0.063
								PM/PM10 <sup>a</sup>	N/A				N/A	0.14	N/A	0.63
EP 45	Oxide Roof Vent HV- 1	EP 45	Oxide Roof Vent HV- 1	HP45	HP45	HP45	N/A	Lead	N/A	40 CFR 63.11423(a)(2) Table 1	100.00%		N/A	0.0018	N/A	0.008
								PM/PM10 <sup>a</sup>	N/A				N/A	0.018	N/A	0.08
EP 46	Oxide Roof Vent HV- 2	EP 46	Oxide Roof Vent HV- 2	HP46	HP46	HP46	N/A	Lead	N/A	40 CFR 63.11423(a)(2) Table 1	100.00%		N/A	0.0018	N/A	0.008
								PM/PM10 <sup>a</sup>	N/A				N/A	0.018	N/A	0.08
EP 47	Oxide Roof Vent HV- 3	EP 47	Oxide Roof Vent HV- 3	HP47	HP47	HP47	N/A	Lead	N/A	40 CFR 63.11423(a)(2) Table 1	100.00%		N/A	0.0018	N/A	0.008
								PM/PM10 <sup>a</sup>	N/A				N/A	0.018	N/A	0.08
EP 48	Oxide Roof Vent HV- 4	EP 48	Oxide Roof Vent HV- 4	HP48	HP48	HP48	N/A	Lead	N/A	40 CFR 63.11423(a)(2) Table 1	100.00%		N/A	0.0018	N/A	0.008
								PM/PM10 <sup>a</sup>	N/A				N/A	0.018	N/A	0.08
EP 49	Oxide Roof Vent HV- 5	EP 49	Oxide Roof Vent HV- 5	HP49	HP49	HP49	N/A	Lead	N/A	40 CFR 63.11423(a)(2) Table 1	100.00%		N/A	0.0018	N/A	0.008
								PM/PM10 <sup>a</sup>	N/A				N/A	0.018	N/A	0.08

\*Like the prior applications in 2013 and 2018, the requested revision to the throughput rates do not reflect any physical changes or changes to method of operation. The variability of air flow coupled with the NESHAP limit in gr/dscf does not allow the facility to correlate capacity (ton/hr) to potential or actual emissions.

\*\* The throughput for EP 35 is 4.29 tons/hr (Casting = 0.84 lb/hr and each of the three mills can process 1.15 tons/hr).

\*\*\*For EP 35 EnerSys will keep the current 53.010 lb/hr limit to determine the potential to emit, as the equivalent lead standard (Summation of the lb/hr) is less stringent than the 401 KAR 53.010 limit in the permit. See December 2018 application for how equivalent standard was determined.

EP 35 Casting potential hourly emissions = 0.000035 (grain/dscf)/27652 (dscf/min)\*60 (min/hr)/7000 (grains/lb) = 0.0083

EP 35 Three Oxide Mills potential hourly emissions = 1.15 (tons/hr)\*0.010 (lb/ton)\*3 = 0.0345 lb/hr

EP 35 Total potential hourly emissions = 0.0083+0.0345 = 0.0428 lb/hr

<sup>a</sup>PM/PM10 = are equivalent to ten times the maximum allowable lead emission rate (in terms of exhaust concentration from the associated control device) under NESHAP Subpart P P P P P P or 53.010.

N/A = Emission must be controlled to meet the NESHAP limits.



**Section N.2: Stack Information****UTM Zone:**

Stack ID	Identify all Emission Units (with Process ID) and Control Devices that Feed to Stack	Stack Physical Data			Stack UTM Coordinates		Stack Gas Stream Data		
		Equivalent Diameter (ft)	Height (ft)	Base Elevation (ft)	Northing (m)	Easting (m)	Flowrate (acfm) *	Temperature (° F)	Exit Velocity (ft/sec)
BH01/HP01	EP 01	4.4	60	~995			55304	115	60.62
BH25/HP25	EP 25	5	60	~995			61368	110	52.09
							*Flowrate in DSCFM		

Division for Air Quality  300 Sower Boulevard Frankfort, KY 40601 (502) 564-3999	<b>DEP7007V</b>  <b>Applicable Requirements and Compliance Activities</b>  <input type="checkbox"/> Section V.1: Emission and Operating Limitation(s) <input checked="" type="checkbox"/> Section V.2: Monitoring Requirements <input checked="" type="checkbox"/> Section V.3: Recordkeeping Requirements <input checked="" type="checkbox"/> Section V.4: Reporting Requirements <input checked="" type="checkbox"/> Section V.5: Testing Requirements <input type="checkbox"/> Section V.6: Notes, Comments, and Explanations	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: center; padding: 2px;">Additional Documentation</th> </tr> <tr> <td style="padding: 5px;"> <input checked="" type="checkbox"/> Complete DEP7007AI           </td> </tr> </table>	Additional Documentation	<input checked="" type="checkbox"/> Complete DEP7007AI			
Additional Documentation							
<input checked="" type="checkbox"/> Complete DEP7007AI							
<b>Source Name:</b> <u>EnerSys Delaware Inc.</u>							
<b>KY EIS (AFS) #:</b> <u>21- 151-00032</u>							
<b>Permit #:</b> <u>F-18-045 R2 (Draft Permit F-25-005)</u>							
<b>Agency Interest (AI) ID:</b> <u>2864</u>							
<b>Date:</b> <u>5/12/2025</u>							
<b>Section V.1: Emission and Operating Limitation(s)</b>							
Emission Unit #	Emission Unit Description	Applicable Regulation or Requirement	Pollutant	Emission Limit (if applicable)	Voluntary Emission Limit or Exemption (if applicable)	Operating Requirement or Limitation (if applicable)	Method of Determining Compliance with the Emission and Operating Requirement(s)
EP 01 & 25	EP 01 Lead Casting EP 25 Pasting Process	401 KAR 52:030	PM/PM10/ PM2.5			To preclude applicability of 401 KAR 51.017 and 401 KAR 52.020 for particulate matter (PM/PM10/PM2.5) emissions, the associated control device(s) shall be operational at all times that the emission unit is in operation	The permittee shall install, calibrate, maintain, and operate monitoring devices that measure and record the pressure drop across all baghouses that emit directly to the atmosphere and the HEPA filters that secondarily control the process baghouses at least once every 15 minutes. The monitoring devices shall have an accuracy of +/-5 percent over its operating range. Monitoring every 15 minutes shall begin upon installation of the required equipment on each control device. If a pressure drop is observed outside of the normal operating ranges, the permittee must record the incident and take immediate corrective actions. For emission rate calculations 0% control must be assumed for any 60-minute monitoring period where a control device is operating outside of its operating parameters.
		40 CFR 63.11423(a)(4)	PM & Lead			At all times, the permittee must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions.	
		401 KAR 59:010, Section 3(2)	PM	Process Rate: (1) 2.34 lbs/hour for process weight rate up to 1,000 lbs/hr; (2) 3.59(P) <sup>0.62</sup> lbs/hr for process weight rates up to 60,000 lbs/hr			
EP 01	Lead Casting	40 CFR 63 Subpart P P P P P P, Table 1 40 CFR 63 Subpart P P P P P P, Table 2 40 CFR 60.372(a)(1) 40 CFR 60.372(a)(7)	Lead	After February 23, 2026 Casting < 0.000035 gr/dscf Opacity = 0% Before February 23, 2026 Casting < 0.000175 gr/dscf Opacity = 0%			Complete weekly opacity observations
EP 25	Pasting Process	40 CFR 63 Subpart P P P P P P, Table 1 40 CFR 63 Subpart P P P P P P, Table 2 40 CFR 60.372(a)(2) 40 CFR 60.372(a)(7)	Lead	After February 23, 2026 Pasting 0.0000437 gr/dscf Opacity = 0% Before February 23, 2026 Pasting 0.000437 gr/dscf Opacity = 0%			

Emission Unit #	Emission Unit Description	Applicable Regulation or Requirement	Pollutant	Emission Limit (if applicable)	Voluntary Emission Limit or Exemption (if applicable)	Operating Requirement or Limitation (if applicable)	Method of Determining Compliance with the Emission and Operating Requirement(s)
EP 01 & 25	EP 01 Lead Casting EP 25 Pasting Process	401 KAR 59:010, Section 3(1)		Opacity must be less than 20%			Complies with the opacity limits under 40 CFR 63 Subpart P P P P P Table 2 & 40 CFR 60.372(a)(7).
EP 01	Lead Casting	401 KAR 53:010	Lead		< 0.083 lb/hr		Monitor and maintain records of hours of operations and complete stack testing requirements.
EP 25	Pasting Process	401 KAR 53:010	Lead		< 0.127 lb/hr		
EP 01 & 25	EP 01 Lead Casting EP 25 Pasting Process	401 KAR 52:030	PM/PM10/ PM2.5		PM/PM10/PM2.5 emissions shall not exceed 90 tons during any consecutive twelve (12) month period		Monthly recordkeeping of PM/PM10/PM2.5 emissions in tons as well as the summation of 12 consecutive months of PM/PM10/PM2.5 emissions in tons.

## Section V.2: Monitoring Requirements

Emission Unit #	Emission Unit Description	Pollutant	Applicable Regulation or Requirement	Parameter Monitored	Description of Monitoring
EP 01 & 25	EP 01 Lead Casting EP 25 Pasting Process	PM/PM10/PM2.5 & Lead	40 CFR 63.11423(b)(2)(i)	Inspections	Perform semiannual inspections and maintenance to ensure proper performance of each <b>fabric filter</b> . This includes inspection of structural and filter integrity. The permittee shall record the results of these inspections
EP 01 & 25	EP 01 Lead Casting EP 25 Pasting Process	PM/PM10/PM2.5 & Lead	40 CFR 63.11423(b)(2)(ii)	Pressure Drop	Install, maintain, and operate a pressure drop monitoring device to measure the differential pressure drop across the <b>fabric filter</b> during all times when the process is operating. The pressure drop must be recorded at least once per day. If a pressure drop is observed outside of the normal operational ranges as specified by the manufacturer, the permittee shall record the incident and take immediate corrective actions. The permittee shall also record the corrective actions taken. The permittee shall submit a monitoring system performance report in accordance with 40 CFR 63.10(e)(3).
EP 01 & 25	EP 01 Lead Casting EP 25 Pasting Process	PM/PM10/PM2.5 & Lead	40 CFR 63.11423(b)(2)(iv)(A)	Pressure Drop	<b>Fabric filters</b> equipped with a HEPA filter or other secondary filter are allowed to monitor less frequently. If the permittee is using a pressure drop monitoring device to measure the differential pressure drop across the fabric filter in accordance with 40 CFR 63.11423(b)(2)(ii), the permittee shall record the pressure drop at least once per week. If a pressure drop is observed outside of the normal operational ranges as specified by the manufacturer, the permittee shall record the incident and take immediate corrective actions. The permittee shall also record the corrective actions taken. The permittee shall submit a monitoring system performance report in accordance with 40 CFR 63.10(e)(3),
EP 01 & 25	EP 01 Lead Casting EP 25 Pasting Process	PM/PM10/PM2.5 & Lead	40 CFR 63.11423(b)(2)(iv)(B)	Opacity	<b>Fabric filters equipped with a HEPA filter</b> or other secondary filter are allowed to monitor less frequently. The permittee shall conduct such observations at least once per week.
EP 01 & 25	EP 01 Lead Casting EP 25 Pasting Process	PM/PM10/PM2.5 & Lead	401 KAR 52:030, Section 10 March 19, 2013 Agreed Order (CASE NO. DAQ 120202)	Pressure Drop	The permittee shall monitor the pressure drop across the <b>HEPA filters</b> that secondarily control the process baghouses at least once every 15 minutes. The monitoring devices shall have an accuracy of +/-5 percent over its operating range. Monitoring every 15 minutes shall begin upon installation of the required equipment on each control device.
EP 01 & 25	EP 01 Lead Casting EP 25 Pasting Process	PM/PM10/PM2.5	401 KAR 52:030	Material Usage	The permittee shall monitor monthly the usage for materials containing PM.

### Section V.3: Recordkeeping Requirements

Emission Unit #	Emission Unit Description	Pollutant	Applicable Regulation or Requirement	Parameter Recorded	Description of Recordkeeping
EP 01 & 25	EP 01 Lead Casting EP 25 Pasting Process	PM/PM10/PM2.5 & Lead	401 KAR 52:030, Section 10 March 19, 2013 Agreed Order (CASE NO. DAQ 120202)	Pressure Drop	The permittee shall install a recording (data logging) system equipment necessary to record pressure drops every 15 minutes.
EP 01 & 25	EP 01 Lead Casting EP 25 Pasting Process	PM/PM10/PM2.5 & Lead	40 CFR 63.11424(a)(5)	Failure to meet an applicable standard	In the event that an affected unit fails to meet an applicable standard in this part, record the number of failures. For each failure record the date, time, cause, and duration of each failure. For each failure to meet an applicable standard in this part, record and retain a list of the affected sources or equipment, an estimate of the quantity of each regulated pollutant emitted over any emission limit and a description of the method used to estimate the emissions. Record actions taken to minimize emissions and any corrective actions taken to return the affected unit to its normal or usual manner of operation.
EP 01 & 25	EP 01 Lead Casting EP 25 Pasting Process	Lead	401 KAR 52:030, Section 10	Spilled or overflows material that contacts a burner or flame.	The permittee shall maintain written record of any incident when lead containing material is spilled or overflows the container and contacts a burner, or flame. The record should include the date and time of the incident and any corrective action taken to minimize the emissions and their effect on air quality resulting from the occurrence.
EP 01 & 25	EP 01 Lead Casting EP 25 Pasting Process	PM/PM10/PM2.5 & Lead	401 KAR 59:005, Section 3(2)	Start-up, shutdown, or malfunction	The permittee shall maintain records of the occurrence and duration of any start-up, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative.
EP 01 & 25	EP 01 Lead Casting EP 25 Pasting Process		40 CFR 63.11424(d)	Failure to meet an applicable standard	Records required to be maintained by this 40 CFR 63 subpart P that are submitted electronically via the EPA's CEDRI may be maintained in electronic format. This ability to maintain electronic copies does not affect the requirement for facilities to make records, data, and reports available upon request to a delegated air agency or the EPA as part of an on-site compliance evaluation.
EP 01 & 25	EP 01 Lead Casting EP 25 Pasting Process	PM/PM10/PM2.5	401 KAR 52:030	Material Usage	The permittee shall retain monthly records of the usage for materials containing PM.

## Section V.4: Reporting Requirements

Emission Unit #	Emission Unit Description	Pollutant	Applicable Regulation or Requirement	Parameter Reported	Description of Reporting
EP 01 & 25	EP 01 Lead Casting EP 25 Pasting Process	Lead	40 CFR 63.11423(b)(2)(iv)(A)&(B)	Excess opacity standard	The permittee shall report if the pressure drop is observed outside the normal operation range and the immediate corrective action taken and if there are any excess opacity standards an excess emissions report required under 40 CFR 63.10(e)(3).
EP 01 & 25	EP 01 Lead Casting EP 25 Pasting Process	Lead	40 CFR 63.11424(b)	Performance test or demonstration of compliance	Submit the results of the performance test to the EPA via the Compliance and Emissions Data Reporting Interface (CEDRI). The results of the performance test must be included as an attachment in the ERT or an alternate electronic file consistent with the XML schema listed on the EPA's ERT website
EP 01 & 25	EP 01 Lead Casting EP 25 Pasting Process	Lead	40 CFR 63.11424(c)]	excess emissions monitoring systems performance report summary report	The permittee must submit a report of excess emissions and monitoring systems performance report and summary report according to 40 CFR 63.9(k) and 40 CFR 63.10(e)(3) to the Administrator semiannually.
EP 01 & 25	EP 01 Lead Casting EP 25 Pasting Process	PM/PM10/PM2.5	401 KAR 52:030	PM/PM10/PM2.5	The following information shall be reported semiannually: (i) The PM/PM10/PM2.5 emissions calculated for each month. (ii) The rolling 12-month total of PM/PM10 emissions.

## Section V.5: Testing Requirements

Emission Unit #	Emission Unit Description	Pollutant	Applicable Regulation or Requirement	Parameter Tested	Description of Testing
EP 01 & 25	EP 01 Lead Casting EP 25 Pasting Process	Lead	40 CFR 63.11423(c)(4)	Lead emissions	After the initial performance test described in 40 CFR 63.11423(c)(1) through (3), the permittee must conduct subsequent performance tests every 5 years to demonstrate compliance with each applicable emissions limitations and opacity standards. Within three years of February 23, 2023, performance testing must be conducted for each affected source subject to an applicable emissions limitation in tables 1 and 2 of 40 CFR 63 Subpart P P P P P P that has not had a performance test within the last 5 years, except as described in 40 CFR 63.11423(c)(6). Thereafter, subsequent performance tests for each affected source must be completed no less frequently than every 5 years from the date the emissions source was last tested
EP 01 & 25	EP 01 Lead Casting EP 25 Pasting Process	Lead	401 KAR 52:030, Section 10	Lead emissions	The permittee shall conduct subsequent performance tests to determine the lead emission rate (lb/hr) for each emission point no less frequent than every 5 years. The facility shall perform additional performance testing upon request by the Division.

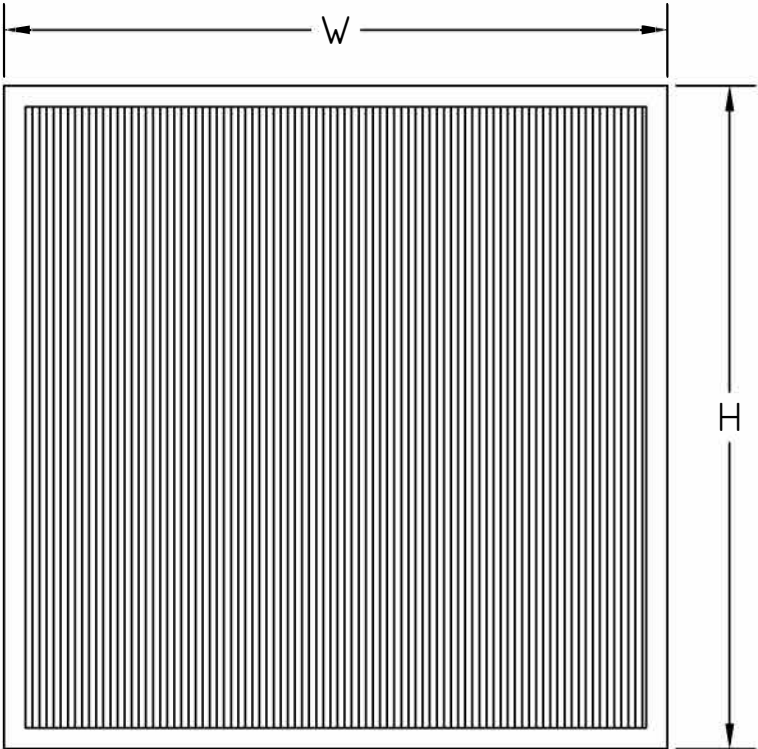
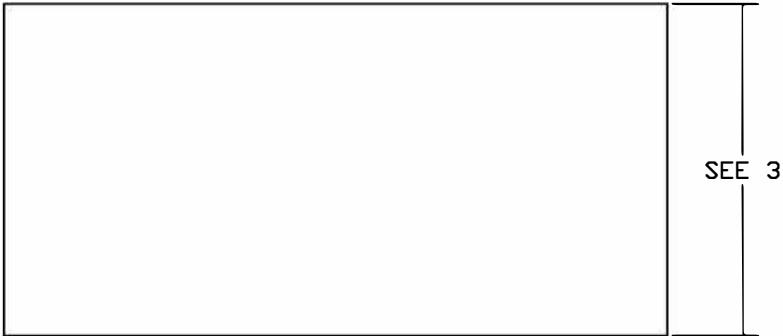
## APPENDIX B

### Filter Specifications



NOMINAL SIZE	ACTUAL SIZE		MEDIA sq. ft.		
	H	W	STD	HC	SHC
8 x 8 x 6	8	8	9.72	-	-
12 x 12 x 6	12	12	23.92	-	-
18 x 18 x 6	18	18	56.38	-	-
24 x 12 x 6	24	12	75.17	-	-
24 x 18 x 6	24	18	47.83	-	-
24 x 24 x 6	24	24	102.50	-	-
24 x 30 x 6	24	30	129.73	-	-
24 x 36 x 6	24	36	155.35	-	-
24 x 48 x 6	24	48	206.60	-	-
24 x 60 x 6	24	60	259.45	-	-
24 x 72 x 6	24	72	310.70	-	-
*30 x 30 x 6	30	30	164.32	-	-
*30 x 48 x 6	30	48	261.70	-	-
*30 x 60 x 6	30	60	328.64	-	-
*30 x 72 x 6	30	72	393.56	-	-
*36 x 30 x 6	36	30	198.91	-	-
*36 x 36 x 6	36	36	228.38	-	-
*36 x 48 x 6	36	48	316.79	-	-
*36 x 60 x 6	36	60	397.83	-	-
*36 x 72 x 6	36	72	476.41	-	-
12 x 12 x 12	12	12	56.00	66.50	73.50
24 x 12 x 12	23.375	11.375	104.51	122.76	137.68
24 x 12 x 12	24	12	112.00	133.00	148.75
24 x 18 x 12	24	18	168.00	199.00	223.13
24 x 24 x 12	23.375	23.375	214.76	252.26	282.93
24 x 24 x 12	24	24	224.00	266.00	297.50
24 x 30 x 12	24	30	283.05	336.00	371.00

**HEPA Filter**



**NOTES:**

- FILTER CONSTRUCTION
  - PLEATED GLASS MICROFIBER MEDIA
  - ROLLED EDGE ALUMINUM SEPARATORS
  - 18 ga.GALVANIZED METAL FRAME
  - TWO-PART POLYURETHANE SEALANT
  - CLOSED CELL NEOPRENE GASKET - OPTIONAL

- TOLERANCES +/- 1/16" H&W, +/- 1/6"D

- FILTER THICKNESS:
  - 6" NOMINAL = 5.875" ACTUAL
  - 12" NOMINAL = 11.50" ACTUAL

- FILTERS LISTED AS CLASSIFIED BY U.L.

**PERFORMANCE NOTES:**

- EFFICIENCY VALUES BASED ON A 0.30 MICRON SIZE PARTICLE
  - 1000 SERIES = 99.97%
  - 1100 SERIES = 99.99%

- INITIAL RESISTANCE
  - 6"= 0.75" @ 175 FPM
  - 12" STD = 0.75" @ 275 FPM
  - 12" HC = 1.25" @ 500 FPM
  - 12" SHC = 1.15" @ 500 FPM

- MAX. TEMPERATURE OF F
  - 180 DEGREES

B	3D ROTATION	02/20/16	H.Y.	
A	FIRST ISSUE NEW LAYOUT	06/15/14	T.M.	
REVISION	DESCRIPTION	DATE	DRAWN	NUM
<b>Glasfloss Industries, Inc.</b> Excellence in Air Filtration Since 1936 <a href="http://www.glasfloss.co">www.glasfloss.co</a>				
TITLE: <b>MAGNA 1000 1100 METAL FLUSH BOX</b>				
DRAWING NUMBER: <b>MAGHEPAMB001</b>				

## APPENDIX C

### Comments Previously Submitted

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Permit number	Permit type	Activity#	Complete Date	Issuance Date	Summary of Action
F-25-005	Renewal	APE20230002	11/28/23		Renewal Permit

The blue text is for insertion into the draft.

~~The red text that is strikethrough is for removal.~~

The highlighted text is for comments.

## **SECTION A - PERMIT AUTHORIZATION**

Pursuant to a duly submitted application the Kentucky Energy and Environment Cabinet (Cabinet) hereby authorizes the operation of the equipment described herein in accordance with the terms and conditions of this permit. This permit was issued under the provisions of Kentucky Revised Statutes (KRS) Chapter 224 and regulations promulgated pursuant thereto.

The permittee shall not construct, reconstruct, or modify any affected facilities without first submitting a complete application and receiving a permit for the planned activity from the permitting authority, except as provided in this permit or in 401 KAR 52:030, Federally-enforceable permits for non-major sources.

Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by the Cabinet or any other federal, state, or local agency.

## SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

The flowrate that is currently listed in the pre-draft (**See red text**) is from the most recent performance test that occurred before the issuance of the 2018 permit F-18-045 and is not the manufacturer rated flowrate. EnerSys is requesting that the rated flow is changed to the flow rate that the potential to emit is calculated on from the 2018 application (**See blue text**).

Table 1: Lead Acid Battery Manufacturing Plant Equipment					
Emission Point	Process	Process Equipment	40 CFR 60, Subpart KK and 40 CFR 63 Subpart P P P P P P Affected Facility type	Max. Hourly Capac. (ton/hr)	Control Device ID and <del>Manufacturer-</del> Rated Flowrate that PTE is based on
EP01	<b>Lead Casting</b> Const. date: 1976, Modified 2017	13 casters; 13 melt pots heated by 13 electric heaters; associated dross drums; 1 vacuum system; 1 reclaim furnace heated by 1 electric heater, 1 associated dross drum; dip tank inlet conveyors; 4 lead oxide silos. Oxide Dept-1 melt pot heated by electric, 1 dross drum. <b>There is a HEPA filter (HP01) after BH01.</b>	Grid casting facility, Lead reclamation, & Other lead-emitting operation <sup>1</sup>	13.36	Baghouse BH01 and <b>HEPA filter (HP01)</b> Flowrate: <del>67,349 acfm</del> <b>55,304 dscfm</b>
EP02	<b>Assembly</b> Const. date: 1976	Assembly – 4 sleeve stations; 1 battery burn line; 5 button burn lines; 2 assembly lines; 2 wrap stations. Small part casting – 13 casters; 9 melt pots heated by 9 electric heaters; tinning pot; 1 trimming station; 1 electric melt pot in Cable Making Area. Lab equipment ventilation	Three-process operation facility	10.31	Baghouse BH02 Flowrate: <del>67,142 acfm</del> <b>65,887 dscfm</b>
EP03	<b>Plate Finishing</b> Const. date: 1977	3 assembly lines; 2 plate brushing stations.	Three-process operation facility	11.01	Baghouse BH03 Flowrate: <del>67,178 acfm</del> <b>72,362 dscfm</b>
EP 24	<b>Assembly</b> Const. date: 1997 Modified 2017	1 cut saw; 1 vacuum system.	Three-process operation facility	3.75	Baghouse BH24 Flowrate: <del>31,204 acfm</del> <b>31,407 dscfm</b>
EP 24V	<b>Central Vacuum</b> Const. date: 1997	Central vacuum	Other lead-emitting operation	1.1	HEPA filter HP24V Flowrate: <del>1,076 acfm</del> <b>1,981 dscfm</b>

## SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Table 1: Lead Acid Battery Manufacturing Plant Equipment					
Emission Point	Process	Process Equipment	40 CFR 60, Subpart KK and 40 CFR 63 Subpart P P P P P P Affected Facility type	Max. Hourly Capac. (ton/hr)	Control Device ID and <del>Manufacturer-</del> Rated Flowrate that PTE is based on
EP 25	<b>Pasting Process</b> Const. date: 1998	2 paste mixing units; 2 pasting units; 2 brushing stations; 2 flash dryers heated by 2 natural gas burners: NG-25A and NG-25B, 0.25 MMBtu/hr each (See Section C); oxide silo bldg. fugitives. Oxide Dept- 2 lead pots heated by 2 electric heaters, 2 dross drums There is a HEPA filter (HP25) after BH25.	Paste mixing facility	9.6	Baghouse BH25 and HEPA filter (HP25) Flowrate: <del>60,343 acfm</del> 61,368 dscfm
EP 35	<b>Casting</b> Const. date: 2013	3 casters; 4 melt pots heated by 4 electric heaters; associated dross drums	Grid casting facility	0.84	Baghouse BH35 Flowrate: <del>30,226 acfm</del> 27,652 dscfm
	<b>Oxide Mill B</b> Const. date: 1977	1 oxide mill reactor; Baghouse (BH11) for product collection and HEPA filter (HP11) prior to BH35.	Lead oxide manufacturing facility	1.15	
	<b>Oxide Mill A</b> Const. date: 1994	1 oxide mill reactor; Baghouse (BH21) for product collection and HEPA filter (HP21) prior to BH35.	Lead oxide manufacturing facility	1.15	
	<b>Oxide Mill C</b> Const. date: 2000	1 oxide mill reactor; Baghouse (BH31) for product collection and HEPA filter (HP31) prior to BH35.	Lead oxide manufacturing facility	1.15	
EP 36	<b>Cable Flux Pot</b> Const. date: 2007	1 tin alloying pot heated by 1 electric heater	Other lead-emitting operation	0.0015	HEPA filter HP36 Flowrate: <del>370 acfm</del> 393 dscfm
EP 38	<b>Ironclad Filling</b> Const. date: 2013	Ironclad filling machines (3); 1 vacuum system.	Other lead-emitting operation	4.16	Baghouse BH38 Flowrate: <del>33,359 acfm</del> 38,137 dscfm

## SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Table 1: Lead Acid Battery Manufacturing Plant Equipment					
Emission Point	Process	Process Equipment	40 CFR 60, Subpart KK and 40 CFR 63 Subpart P P P P P P Affected Facility type	Max. Hourly Capac. (ton/hr)	Control Device ID and <del>Manufacturer</del> Rated Flowrate that PTE is based on
EP 45	<b>Oxide Roof Vent HV-1</b> Const. date: 2005	Oxide Roof Vent HV-1	Other lead-emitting operation	NA	HEPA filter HP45 Flowrate: <del>4,841 acfm</del> 4,907 dscfm
EP 46	<b>Oxide Roof Vent HV-2</b> Const. date: 2005	Oxide Roof Vent HV-2	Other lead-emitting operation	NA	HEPA filter HP46 Flowrate: <del>4,458 acfm</del> 4,907 dscfm
EP 47	<b>Oxide Roof Vent HV-3</b> Const. date: 2007	Oxide Roof Vent HV-3	Other lead-emitting operation	NA	HEPA filter HP47 Flowrate: <del>4,632 acfm</del> 4,907 dscfm
EP 48	<b>Oxide Roof Vent HV-4</b> Const. date: 2007	Oxide Roof Vent HV-4	Other lead-emitting operation	NA	HEPA filter HP48 Flowrate: <del>3,884 acfm</del> 4,907 dscfm
EP 49	<b>Oxide Roof Vent HV-5</b> Const. date: 2007	Oxide Roof Vent HV-5	Other lead-emitting operation	NA	HEPA filter HP49 Flowrate: <del>4,234 acfm</del> 4,907 dscfm

<sup>1</sup>See 40 CFR 60.372(b) or 40 CFR 63.11423(a)(5)

## SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

### **APPLICABLE REGULATIONS:**

**401 KAR 59:010**, *New process operations*

**401 KAR 60:005**, Section 2(2)(rr), 40 C.F.R. 60.370 through 60.374 (**Subpart KK**), *Standards of Performance for Lead-Acid Battery Manufacturing Plants for Which Construction, Reconstruction, or Modification Commenced After January 14, 1980, and On or Before February 23, 2022*

**401 KAR 63:002**, Section 2(4)(ooooo), 40 C.F.R. 63.11421 through 63.11427, Table 1 (**Subpart P P P P P**), *National Emission Standards for Hazardous Air Pollutants for Lead Acid Battery Manufacturing Area Sources*

### **PRECLUDED REGULATIONS:**

**401 KAR 52:020**, *Title V permits*

**401 KAR 51:070**, *Prevention of significant deterioration of air quality*

**The non-applicable regulations are missing from this section. Should these regulations be listed here?**

#### **1. Operating Limitations:**

- a. To preclude applicability of 401 KAR 51:017 and 401 KAR 52:020 for particulate matter (PM/PM<sub>10</sub>/PM<sub>2.5</sub>) emissions, the associated control device(s) shall be operational at all times that the emission unit is in operation. [401 KAR 52:030, Section 10]
- b. At all times, the permittee must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require the permittee to make any further efforts to reduce emissions if levels required by the applicable standard in this part have been achieved. Determination of whether a source is operating in compliance with operation and maintenance requirements will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. [40 CFR 63.11423(a)(4)]

#### **Compliance Demonstration Method:**

See 4. **Specific Monitoring Requirements**

- c. See Section D, **Source Emission Limitations and Testing Requirements**, Condition 3.

#### **2. Emission Limitations:**

- a. For emissions from a control device or stack no person shall cause, suffer, allow or permit the emission into the open air of particulate matter from any affected facility which is in excess of the quantity specified in Appendix A to 401 KAR 59:010 and summarized below: [401 KAR 59:010, Section 3(2)]
  - (1) For process weight rates of 0.50 ton/hour or less:  $E = 2.34$
  - (2) For process weight rates  $> 0.5$  ton/hr up to 30 tons/hr:  $E = 3.59 \times P^{0.62}$

Where: E = rate of particulate emissions in lb/hr, and



## SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

P = process weight rate in tons/hr.

### Compliance Demonstration Method:

The permittee is assumed in compliance with the particulate matter emissions limitation when in compliance with **1. Operating Limitations**, a.

- b. No person shall cause, suffer, allow, or permit any continuous emission into the open air from a control device or stack associated with any affected facility which is equal to or greater than twenty (20) percent opacity. [401 KAR 59:010, Section 3(1)]

### Compliance Demonstration Method:

The permittee shall demonstrate compliance with the 401 KAR 59:010 opacity limitation under by complying with the opacity limits under 40 CFR 63 Subpart PPPPPP Table 2, 40 CFR 60.372(a)(7), or 40 CFR 60.372(a)(8). See **2. Emission Limitations**, Conditions j., k., s., and t.

- c. The permittee must meet all the standards for lead and opacity specified in 40 CFR 63.11423(a)(1) and (2) as follows: [40 CFR 63.11423(a)]
  - a. Until February 23, 2026 lead acid battery manufacturing plant affected sources must comply with 40 CFR 63.11423(a)(1)(i) or (ii), as follows: [40 CFR 63.11423(a)(1)]
    - i. The permittee meets all the standards for lead and opacity in 40 CFR 60.372, see **2. Emission Limitations**, m. through t., and the requirements of 40 CFR 63.11423(a)(4) and (5), (b), and (c)(1) through (3). [40 CFR 63.11423(a)(1)(i)]
    - ii. The permittee complies with 40 CFR 63.11423(a)(2). [40 CFR 63.11423(a)(1)(ii)]
  - b. Beginning no later than February 23, 2026, the permittee must meet each emission limit in table 1 of 40 CFR 63 Subpart PPPPPP and each opacity standard in table 2 of 40 CFR 63 Subpart PPPPPP that applies. See **2. Emission Limitations**, d. through l.. The permittee must meet the requirements of 40 CFR 63.11423(a)(4) and (5), (c), and (d); and the permittee must also comply with the recordkeeping and electronic reporting requirements in 40 CFR 63.11424(a)(6) and (7) and (b). [40 CFR 63.11423(a)(2)]

No later than February 23, 2026 the following emissions limitations from 40 CFR 63 Subpart PPPPPP will apply to the lead acid battery manufacturing plant:

- d. For each new or existing grid casting facility, the permittee must emit no more than 0.08 milligram of lead per dry standard cubic meter of exhaust (0.000035 gr/dscf). [40 CFR 63 Subpart PPPPPP, Table 1]
- e. For each new or existing paste mixing facility, the permittee must no more than 0.1 milligram of lead per dry standard cubic meter of exhaust (0.0000437 gr/dscf); or emit no more than 0.9 gram of lead per hour (0.002 lbs/hr) total from all paste mixing operations. [40 CFR 63 Subpart PPPPPP, Table 1]
- f. For each new or existing three-process operation facility, the permittee must no more

## SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

than 0.1 milligram of lead per dry standard cubic meter of exhaust (0.0000437 gr/dscf). [40 CFR 63 Subpart P, Table 1]

- g. For each new or existing lead oxide operation facility, the permittee must no more than 5.0 milligram of lead per dry standard cubic meter of exhaust (0.010 lb/ton). [40 CFR 63 Subpart P, Table 1]
- h. For each new or existing lead reclamation facility, the permittee must no more than 0.45 milligram of lead per dry standard cubic meter of exhaust (0.000197 gr/dscf). [40 CFR 63 Subpart P, Table 1]
- i. For each new or existing other lead-emitting operation facility, the permittee must no more than 1.0 milligram of lead per dry standard cubic meter of exhaust (0.000437 gr/dscf). [40 CFR 63 Subpart P, Table 1]
- j. For each new or existing facility other than a lead reclamation facility, any gasses emitted must not exceed 0 percent opacity (measured according to EPA Method 9 of appendix A to 40 CFR part 60 and rounded to the nearest whole percentage or measured according to EPA Method 22 of appendix A to 40 CFR part 60). [40 CFR 63 Subpart P, Table 2]
- k. For each new or existing lead reclamation facility, any gasses emitted must not exceed 5 percent opacity (measured according to EPA Method 9 and rounded to the nearest whole percentage). [40 CFR 63 Subpart P, Table 2]
- l. When two or more facilities at the same plant (except the lead oxide manufacturing facility) are ducted to a common control device, an equivalent standard for the total exhaust from the commonly controlled facilities shall be determined as follows: [40 CFR 63.11423(a)(5)]

$$S_e = \sum_{a=1}^N S_a \left( \frac{Q_{sda}}{Q_{sdT}} \right) \quad \text{Where:}$$

$S_e$  = is the equivalent standard for the total exhaust stream, mg/dscm (gr/dscf).

$S_a$  = is the actual standard for each exhaust stream ducted to the control device, mg/dscm (gr/dscf).

N = is the total number of exhaust streams ducted to the control device.

$Q_{sda}$  = is the dry standard volumetric flow rate of the effluent gas stream from each facility ducted to the control device, mg/dscm (gr/dscf).

$Q_{sdT}$  = is the total dry standard volumetric flow rate of all effluent gas streams ducted to the control device, mg/dscm (gr/dscf).

The following emissions limitations from 40 CFR 60 Subpart KK apply to the lead acid battery manufacturing plant:

## SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- m. From any grid casting facility, no owner or operator shall discharge into the atmosphere any gases that contain in excess of 0.40 milligram of lead per dry standard cubic meter of exhaust (0.000175 gr/dscf). [40 CFR 60.372(a)(1)]
- n. From any paste mixing facility, no owner or operator shall discharge into the atmosphere any gases that contain in excess of 1.00 milligram of lead per dry standard cubic meter of exhaust (0.000437 gr/dscf). [40 CFR 60.372(a)(2)]
- o. From any three-process operation facility, no owner or operator shall discharge into the atmosphere any gases that contain in excess of 1.00 milligram of lead per dry standard cubic meter of exhaust (0.000437 gr/dscf). [40 CFR 60.372(a)(3)]
- p. From any lead oxide manufacturing facility, no owner or operator shall discharge into the atmosphere any gases that contain in excess of 5.0 milligrams of lead per kilogram of lead feed (0.010 lb/ton). [40 CFR 60.372(a)(4)]
- q. From any lead reclamation facility, no owner or operator shall discharge into the atmosphere any gases that contain in excess of 4.50 milligrams of lead per dry standard cubic meter of exhaust (0.00197 gr/dscf). [40 CFR 60.372(a)(5)]
- r. From any other lead-emitting operation, no owner or operator shall discharge into the atmosphere any gases that contain in excess of 1.00 milligram of lead per dry standard cubic meter of exhaust (0.000437 gr/dscf). [40 CFR 60.372(a)(6)]
- s. No owner or operator shall cause to be discharged into the atmosphere from any affected facility other than a lead reclamation facility any gases with greater than 0 percent opacity (measured according to Method 9 and rounded to the nearest whole percentage). [40 CFR 60.372(a)(7)]
- t. No owner or operator shall cause to be discharged into the atmosphere from any lead reclamation facility any gases with greater than 5 percent opacity (measured according to Method 9 and rounded to the nearest whole percentage). [40 CFR 60.372(a)(8)]
- u. When two or more facilities at the same plant (except the lead oxide manufacturing facility) are ducted to a common control device, an equivalent standard for the total exhaust from the commonly controlled facilities shall be determined as follows: [40 CFR 60.372(b)]

$$S_e = \sum_{a=1}^N S_a \left( \frac{Q_{sd_a}}{Q_{sd_T}} \right) \text{ Where:}$$

$S_e$  = is the equivalent standard for the total exhaust stream.

$S_a$  = is the actual standard for each exhaust stream ducted to the control device.

N = is the total number of exhaust streams ducted to the control device.

$Q_{sd_a}$  = is the dry standard volumetric flow rate of the effluent gas stream from each facility ducted to the control device.

## SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

$Q_{sdT}$  = is the total dry standard volumetric flow rate of all effluent gas streams ducted to the control device.

### **Compliance Demonstration Methods:**

- a. See 4. **Specific Monitoring Requirements.**
- b. For 2. **Emission Limitations**, c. through k., see 3. **Testing Requirements.**
- v. The lead emissions from each emission point shall not exceed the emission limits presented in the following table: [401 KAR 53:010]

Table 2: 401 KAR 53:010 Lead Emission Limits		
Emission Point	Emission Unit Description	Lead Emission Limit (lb/hr)
EP 01	Lead Casting	0.083
EP 02	Assembly	0.095
EP 03	Plate Finishing	0.095
EP 24	Assembly	0.028
EP 24V	Central Vacuum	0.002
EP 25	Pasting Process	0.127
EP 35	Casting and Oxide Mills A, B and C	0.0311
EP 36	Cable Flux Pot	0.0002
EP 38	Ironclad Filling	0.02
EP 45	Oxide Roof Vent HV-1	0.0022
EP 46	Oxide Roof Vent HV-2	0.0022
EP 47	Oxide Roof Vent HV-3	0.0022
EP 48	Oxide Roof Vent HV-4	0.0022
EP 49	Oxide Roof Vent HV-5	0.0022

### **Compliance Demonstration Method:**

- a. The permittee shall monitor and maintain records of the hours of operation on a monthly basis.
  - b. See 3. **Testing Requirements.**
  - w. Refer to **Section D, Source Emission Limitations and Testing Requirements, Condition 3.**
- 3. Testing Requirements:**
- a. The permittee must meet the performance testing requirements in 40 CFR 63.11423(c)(1) through (6): [40 CFR 63.11423(c)]
    - (1) Existing sources are not required to conduct a an initial performance test if a prior performance test was conducted using the same methods specified in 40 CFR

## SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- 63.11423(c)(2)(i) through (iv) and either no process changes have been made since the test, or the permittee can demonstrate that the results of the performance test, with or without adjustments, reliably demonstrate compliance with this subpart despite process changes. [40 CFR 63.11423(c)(1)]
- (2) Sources without a prior performance test, as described in 40 CFR 63.11423(c)(1), must conduct an initial performance test using the methods specified in 63.11423(c)(2)(i) through (iv). [40 CFR 63.11423(c)(2)]
  - (3) In conducting the initial performance tests required in 40 CFR 63.7, the permittee must use as reference methods and procedures the test methods in appendix A to 40 CFR part 60 or other methods and procedures as specified 40 CFR 63.11423(c), except as provided in 40 CFR 63.7(f). [40 CFR 63.11423(c)(3)]
  - (4) After the initial performance test described in 40 CFR 63.11423(c)(1) through (3), the permittee must conduct subsequent performance tests every 5 years to demonstrate compliance with each applicable emissions limitations and opacity standards. Within three years of February 23, 2023, performance testing must be conducted for each affected source subject to an applicable emissions limitation in tables 1 and 2 of 40 CFR 63 Subpart PPPPPP that has not had a performance test within the last 5 years, except as described in 40 CFR 63.11423(c)(6). Thereafter, subsequent performance tests for each affected source must be completed no less frequently than every 5 years from the date the emissions source was last tested. [40 CFR 63.11423(c)(4)]
  - (5) The permittee may not conduct performance tests during periods of malfunction. The permittee must record the process information that is necessary to document operating conditions during the test and include in such record an explanation to support that such conditions represent normal operation. The permittee must make available to the Administrator in the test report, records as may be necessary to determine the conditions of performance tests. [40 CFR 63.11423(c)(6)]
- b. The permittee shall conduct subsequent performance tests to determine the lead emission rate (lb/hr) for each emission point no less frequent than every 5 years. The facility shall perform additional performance testing upon request by the Division. [401 KAR 52:030, Section 10]
- c. Refer to **Section G.4** and **G.5**.  
For the purposes of determining the representativeness of the equipment operating load during performance tests, as required by **Section G General Provisions**, Condition 5.b, the production rates of the primary lead-emitting operations associated with each emission point shown in Table 1, above, shall be used.

Table 3: Target Production Rates for Stack Testing Purposes			
Emission Point	Process	Hourly Production Rate	Units
EP 01	Grid Casting	3700	Grids
	Spine Casting	2200	Spines
	Dip Tank Inlet Conveyers	2130	Plates
	Silo Bin Exhaust	8400	Pounds

## SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Table 3: Target Production Rates for Stack Testing Purposes			
Emission Point	Process	Hourly Production Rate	Units
	Reclaim Furnace	2500	Pounds
EP 02	Sleeve Stations	3415	Plates
	SBS and Button Burn Lines (Line 6 and 7), Button Burn Lines (1, 2, and 3)	448	Equivalent Cells
	Burn Lines	280	Equivalent Cells
	Parts Casting	2474	Parts
	Cable Mfg – Casting	30	Cable Ends
	SBS (Lines 1, 2, and 3)	208	Equivalent Cells
EP 03	Plate Brush Stations	2540	Plates
	COS Assembly Line	112	Equivalent Cells
EP 24	Pasting	6100	Plates
EP 25	Grid Casting	1800	Grids
EP 35	Lead Oxide Mill B	2800	Pounds
	Lead Oxide Mill A	2800	Pounds
	Lead Oxide Mill C	2800	Pounds
EP 36	Cable Mfg- Tinning	2	Pounds
EP 38	Ironclad Filling	2130	Plates

### 4. **Specific Monitoring Requirements:**

For any emissions point controlled by a fabric filter (baghouse), the permittee shall:

- a. Perform semiannual inspections and maintenance to ensure proper performance of each fabric filter. This includes inspection of structural and filter integrity. The permittee shall record the results of these inspections. [40 CFR 63.11423(b)(2)(i)]
- b. Install, maintain, and operate a pressure drop monitoring device to measure the differential pressure drop across the fabric filter during all times when the process is operating. The pressure drop must be recorded at least once per day. If a pressure drop is observed outside of the normal operational ranges as specified by the manufacturer, the permittee shall record the incident and take immediate corrective actions. The permittee shall also record the corrective actions taken. The permittee shall submit a monitoring system performance report in accordance with 40 CFR 63.10(e)(3). [40 CFR 63.11423(b)(2)(ii)]
- c. Conduct a visible emissions observation at least once per day to verify that no visible

**SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

emissions are occurring at the discharge point to the atmosphere from any emissions source subject to the requirements of paragraph (a) of 40 CFR 63.11423. If visible emissions are detected, the permittee shall record the incident and conduct an opacity measurement in accordance with 40 CFR 60.374(b)(3). The permittee shall record the results of each opacity measurement. If the measurement exceeds the applicable opacity standard in 40 CFR 60.372(a)(7) or (8), the permittee shall submit this information in an excess emissions report required under 40 CFR 63.10(e)(3). [40 CFR 63.11423(b)(2)(iii)]

- d. Fabric filters equipped with a HEPA filter or other secondary filter are allowed to monitor less frequently, as specified as follows: [40 CFR 63.11423(b)(2)(iv)]
  - (1) If the permittee is using a pressure drop monitoring device to measure the differential pressure drop across the fabric filter in accordance with 40 CFR 63.11423(b)(2)(ii), the permittee shall record the pressure drop at least once per week. If a pressure drop is observed outside of the normal operational ranges as specified by the manufacturer, the permittee shall record the incident and take immediate corrective actions. The permittee shall also record the corrective actions taken. The permittee shall submit a monitoring system performance report in accordance with 40 CFR 63.10(e)(3), or [40 CFR 63.11423(b)(2)(iv)(A)]
  - (2) If the permittee is conducting visible emissions observations in accordance with 40 CFR 63.11423(b)(2)(iii), the permittee shall conduct such observations at least once per week and record the results in accordance with 40 CFR 63.11423(b)(2)(iii). If visible emissions are detected, the permittee shall record the incident and conduct an opacity measurement in accordance with 40 CFR 60.374(b)(3). The permittee shall record the results of each opacity measurement. If the measurement exceeds the applicable opacity standard in 40 CFR 60.372(a)(7) or (8), the permittee shall submit this information in an excess emissions report required under 40 CFR 63.10(e)(3). [40 CFR 63.11423(b)(2)(iv)(B)]

Note: Pressure drop monitoring is required at least once every 15 minutes by the March 19, 2013 Agreed Order (CASE NO. DAQ 120202). See **4. Specific Monitoring Requirements** h. and i.

Emissions points controlled by a fabric filter (baghouse) without a secondary filter must meet the requirements of 40 CFR 63.11423(e)(2)(i) and (ii) and 40 CFR 63.11423 (e)(2)(iii), as follows: [40 CFR 63.11423(e)(2)]

- e. The permittee must perform quarterly inspections and maintenance to ensure proper performance of each fabric filter. This includes inspection of structural and filter integrity. [40 CFR 63.11423(e)(2)(i)]
- f. If it is not possible for the permittee to take the corrective actions specified in 40 CFR 63.11423(e)(2)(iii)(C) or (D) for a process or fabric filter control device, the permittee must keep at least one replacement fabric filter onsite at all times for that process or fabric filter control device. The characteristics of the replacement filters must be the same as the current fabric filters in use or have characteristics that would achieve equal or greater emission reductions. [40 CFR 63.11423(e)(2)(ii)]
- g. Install, maintain, and operate a pressure drop monitoring device to measure the differential pressure drop across the fabric filter during all times when the process is operating. The pressure drop must be recorded at least twice per day (at least 8 hours

**SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

apart) if the results of the most recent performance test indicate that emissions are greater than 50 percent of the lead emissions limit in table 1 to 40 CFR 63 Subpart P. The pressure drop must be recorded at least once per day if the results of the most recent performance test indicate that emissions are less than or equal to 50 percent of the lead emissions limit in table 1. If a pressure drop is observed outside of the normal operational ranges, you must record the incident and take immediate corrective actions. The permittee must submit an excess emissions and continuous monitoring system performance report and summary report required under 40 CFR 63.11424(c). The permittee must also record the corrective actions taken and verify pressure drop is within normal operational range. These corrective actions may include but are not limited to those provided in 40 CFR 63.11423(e)(2)(iii)(A) through (D) of this section. [40 CFR 63.11423(e)(2)(iii)]

- (1) Inspecting the filter and filter housing for air leaks and torn or broken filters. [40 CFR 63.11423(e)(2)(iii)(A)]
- (2) Replacing defective filter media, or otherwise repairing the control device. [40 CFR 63.11423(e)(2)(iii)(B)]
- (3) Sealing off a defective control device by routing air to other control devices. [40 CFR 63.11423(e)(2)(iii)(C)]
- (4) Shutting down the process producing the lead emissions. [40 CFR 63.11423(e)(2)(iii)(D)]

- h. The permittee shall install, calibrate, maintain, and operate monitoring devices that measure and record the pressure drop across all baghouses that emit directly to the atmosphere and the HEPA filters that secondarily control the process baghouses at least once every 15 minutes. The monitoring devices shall have an accuracy of +/-5 percent over its operating range. Monitoring every 15 minutes shall begin upon installation of the required equipment on each control device. If a pressure drop is observed outside of the normal operating ranges, the permittee must record the incident and take immediate corrective actions. The permittee must also record the corrective actions taken. The data shall be available for inspection by the Division upon request. [401 KAR 52:030, Section 10 and the March 19, 2013 Agreed Order (CASE NO. DAQ 120202)]
- i. The installation of the recording (data logging) system equipment necessary to record pressure drops every 15 minutes shall be completed and the system shall begin recording data by one hundred and eighty (180) days after the issuance of Permit F-13-025. [401 KAR 52:030, Section 10 and the March 19, 2013 Agreed Order (CASE NO. DAQ 120202)]
- j. The permittee shall develop and submit to the Division a written monitoring plan which establishes the normal operating ranges for pressure drop for all operational cycles of each baghouse. The monitoring plan shall include manufacturer's specifications for pressure drop and any information used to determine or support the established pressure drop for each baghouse. [401 KAR 52:030, Section 10]

**5. Specific Recordkeeping Requirements:**

- a. See **4. Specific Monitoring Requirements.**



**SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

- b. The permittee must keep the records of failures to meet an applicable standard in this part as specified in 40 CFR 63.11424(a)(5)(i) through (iii), as follows: [40 CFR 63.11424(a)(5)]
  - (1) In the event that an affected unit fails to meet an applicable standard in this part, record the number of failures. For each failure record the date, time, cause, and duration of each failure. [40 CFR 63.11424(a)(5)(i)]
  - (2) For each failure to meet an applicable standard in this part, record and retain a list of the affected sources or equipment, an estimate of the quantity of each regulated pollutant emitted over any emission limit and a description of the method used to estimate the emissions. [40 CFR 63.11424(a)(5)(i)]
  - (3) Record actions taken to minimize emissions and any corrective actions taken to return the affected unit to its normal or usual manner of operation. [40 CFR 63.11424(a)(5)(i)]
- c. The permittee shall maintain written record of any incident when lead containing material is spilled or overflows the container and contacts a burner, or flame. The record should include the date and time of the incident and any corrective action taken to minimize the emissions and their effect on air quality resulting from the occurrence. [401 KAR 52:030, Section 10]
- d. The permittee shall maintain records of the occurrence and duration of any start-up, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative. [401 KAR 59:005, Section 3(2)]
- e. Any records required to be maintained by this subpart that are submitted electronically via the EPA's CEDRI may be maintained in electronic format. This ability to maintain electronic copies does not affect the requirement for facilities to make records, data, and reports available upon request to a delegated air agency or the EPA as part of an on-site compliance evaluation. [40 CFR 63.11424(d)]

**6. Specific Reporting Requirements:**

- a. See **4. Specific Monitoring Requirements.**
- b. Refer to **Section F, Monitoring, Recordkeeping, and Reporting Requirements.**
- c. Within 60 days after the date of completing each performance test or demonstration of compliance required by this subpart, the permittee must submit the results of the performance test following the procedures specified in 40 CFR 63.9(k) and 40 CFR 63.11424(b)(1) through (3), as follows: [40 CFR 63.11424(b)]
  - (1) **Data collected using test methods supported by the EPA's Electronic Reporting Tool (ERT) as listed on the EPA's ERT website (<https://www.epa.gov/electronic-reporting-air-emissions/electronic-reporting-tool-ert>) at the time of the test.** Submit the results of the performance test to the EPA via the Compliance and Emissions Data Reporting Interface (CEDRI), which can be accessed through the EPA's Central Data Exchange (CDX) (<https://cdx.epa.gov/>). The data must be submitted in a file format generated using the EPA's ERT. Alternatively, you may

## SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- submit an electronic file consistent with the extensible markup language (XML) schema listed on the EPA's ERT website. [40 CFR 63.11424(b)(1)]
- (2) **Data collected using test methods that are not supported by the EPA's ERT as listed on the EPA's ERT website at the time of the test.** The results of the performance test must be included as an attachment in the ERT or an alternate electronic file consistent with the XML schema listed on the EPA's ERT website. Submit the ERT generated package or alternative file to the EPA via CEDRI. If a performance test consists only of opacity measurements, reporting using the ERT and CEDRI is not required. [40 CFR 63.11424(b)(2)]
- (3) **Data collected containing confidential business information (CBI).** All CBI claims must be asserted at the time of submission. Do not use CEDRI to submit information claimed as CBI. Anything submitted using CEDRI cannot later be claimed CBI. [40 CFR 63.11424(b)(3)]
- d. Beginning on February 23, 2024, or once the report template for this subpart has been available on the CEDRI website for one year, whichever date is later, the permittee must submit a report of excess emissions and monitoring systems performance report and summary report according to 40 CFR 63.9(k) and 40 CFR 63.10(e)(3) to the Administrator semiannually. Report the number of failures to meet an applicable standard in this part. For each instance, report the date, time, cause, and duration of each failure. For each failure, the report must include a list of the affected sources or equipment, an estimate of the quantity of each regulated pollutant emitted over any emission limit, and a description of the method used to estimate the emissions. The permittee must use the appropriate electronic report template on the CEDRI website (<https://www.epa.gov/electronic-reporting-air-emissions/cedri>) or an alternate electronic file consistent with the XML schema listed on the CEDRI website for this subpart. The date report templates become available will be listed on the CEDRI website. Unless the Administrator or delegated state agency or other authority has approved a different schedule for submission of reports, the report must be submitted by the deadline specified in this subpart, regardless of the method in which the report is submitted. Submit all reports to the EPA via CEDRI, which can be accessed through the EPA's CDX (<https://cdx.epa.gov/>). The EPA will make all the information submitted through CEDRI available to the public without further notice. Do not use CEDRI to submit information you claim as CBI.[40 CFR 63.11424(c)]

### 7. Specific Control Equipment Operating Conditions:

Emission Point	Control Equipment	Monitoring and Operating Parameters	Comments
EP 01, EP 02, EP 03, EP 24, EP 25, EP 35, and EP 38	Baghouse	Pressure Drop	a) Refer to <b>Section E</b> b) Exceedance of operating parameters shall be reported and/or repaired in accordance with <b>Section F</b> , Condition 8

**SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

- a. Baghouses shall be operated in accordance with design parameters and operating parameters, as established during testing, at all times the emission point is in operation. Operating parameters shall be established during the time frame of compliance testing. [401 KAR 52:030, Section 10]
- b. Each baghouse shall be inspected on a semi-annual basis. Preventive maintenance shall be performed in accordance with manufacturer's specifications. Each baghouse shall be inspected on a semi-annual basis for proper operation of the following: [401 KAR 52:030, Section 10]
  - (1) Shaker or vibrator device to release dust cake from bags;
  - (2) Airflow source and equipment; and
  - (3) Pressure drop measuring system.

**SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****Emission Point 18 (EP 18) Water Heater**

Description:

Model: RBI HW2400

Heat Input Capacity: 2.01 MMBtu/hr

Fuel: Natural Gas

Construction Commenced: 2007

**Emission Point 22 (EP 22) Process Boiler**

Description:

Model: Cleaver Brooks CBE 700-100

Heat Input Capacity: 4.20 MMBtu/hr

Fuel: Natural Gas

Construction Commenced: 1995

**Emission Point 23 (EP 23) Process Boiler**

Description:

Model: Cleaver Brooks CBE 700-100

Heat Input Capacity: 4.20 MMBtu/hr

Fuel: Natural Gas

Construction Commenced: 1995

**APPLICABLE REGULATIONS:****401 KAR 59:015**, *New indirect heat exchangers***STATE-ORIGIN REQUIREMENT:****401 KAR 63:020**, *Potentially hazardous matter or toxic substances***PRECLUDED REGULATIONS:****401 KAR 52:020**, *Title V permits***401 KAR 51:070**, *Prevention of significant deterioration of air quality***The non-applicable regulations are missing from this section. Should these regulations be listed here?****1. Operating Limitations:**

During a startup period or shutdown period, the permittee shall comply with the work practice standards established in 401 KAR 59:015, Section 7. [401 KAR 59:015, Section 7]

- a. The permittee shall comply with 401 KAR 50:055, Section 2(5); [401 KAR 59:015, Section 7(1)(a)]
- b. The frequency and duration of startup periods or shutdown periods shall be minimized by the affected facility; [401 KAR 59:015, Section 7(1)(b)]
- c. All reasonable steps shall be taken by the permittee to minimize the impact of emissions on ambient air quality from the affected facility during startup periods and shutdown periods; [401 KAR 59:015, Section 7(1)(c)]

**SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

- d. The actions, including duration of the startup period, of the permittee of each affected facility during startup periods and shutdown periods, shall be documented by signed, contemporaneous logs or other relevant evidence; [401 KAR 59:015, Section 7(1)(d)]
- e. Startups and shutdowns shall be conducted according to either: [401 KAR 59:015, Section 7(1)(e)]
  - (1) The manufacturer's recommended procedures; or [401 KAR 59:015, Section 7(e)(1)1.]
  - (2) Recommended procedures for a unit of similar design, for which manufacturer's recommended procedures are available, as approved by the cabinet based on documentation provided by the permittee. [401 KAR 59:015, Section 7(e)(2)2.]

**Compliance Demonstration Method:**

Compliance shall be demonstrated according to 5. **Specific Recordkeeping Requirements.**  
b.

**2. Emission Limitations:**

- a. For EP 22 and 23, the permittee shall not cause emissions of particulate matter in excess of 0.56 lb/MMBtu actual heat input. [401 KAR 59:015, Section 4(1)(a)]
- b. For EP 18, the permittee shall not cause emissions of particulate matter in excess of 0.49 lb/MMBtu actual heat input. [401 KAR 59:015, Section 4(1)(c)]
- c. The permittee shall not cause emissions of particulate matter in excess of 20 percent opacity, except: [401 KAR 59:015, Section 4(2)]
  - (1) The permittee shall not cause emissions of particulate matter in excess of 20 percent opacity, except: [401 KAR 59:015, Section 4(2)]
  - (2) For emissions from an affected facility caused by building a new fire, emissions during the period required to bring the boiler up to operating conditions shall be allowed, if the method used is recommended by the manufacturer and the time does not exceed the manufacturer's recommendations. [401 KAR 59:015, Section 4(2)(c)]
- d. For EP 22 and 23, the permittee shall not cause emissions of gases that contain sulfur dioxide in excess of 3.0 lb/MMBtu actual heat input. [401 KAR 59:015, Section 5(1)(a)]
- e. For EP 18, the permittee shall not cause emissions of gases that contain sulfur dioxide in excess of 2.35 lb/MMBtu actual heat input. [401 KAR 59:015, Section 5(1)(c)]

**Compliance Demonstration Method:**

Compliance with the 401 KAR 59:015 emission standards is assumed. [401 KAR 50:045, Section 4(3)(c)1.]

- f. Persons responsible for a source from which hazardous matter or toxic substances may be emitted shall provide the utmost care and consideration, in the handling of these materials, to the potentially harmful effects of the emissions resulting from such activities. No owner or operator shall allow any affected facility to emit potentially hazardous matter or toxic substances in such quantities or duration as to be harmful to the health and welfare of humans, animals and plants. Evaluation of such facilities as to

**SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

adequacy of controls and/or procedures and emission potential will be made on an individual basis by the cabinet. [401 KAR 63:020, Section 3]

**Compliance Demonstration Method:**

Based upon the emission rates of toxics and hazardous air pollutants determined by the Cabinet using information provided in the application and supplemental information submitted by the source, the Cabinet determines the affected facility to be in compliance with 401 KAR 63:020.

g. Refer to **Section D, Source Emissions Limitations and Testing Requirements**

**3. Testing Requirements:**

Performance testing using the reference methods specified in 401 KAR 50:015 shall be conducted if required by the Cabinet. [401 KAR 50:045, Section 1, and 401 KAR 59:005, Section 2(2)]

**4. Specific Monitoring Requirements:**

The permittee shall monitor the amount of natural gas combusted, in MMscf, on a monthly basis. [401 KAR 52:030, Section 10]

**5. Specific Recordkeeping Requirements:**

- a. The permittee shall maintain records of the amount of natural gas combusted, in MMscf, on a monthly basis. [401 KAR 52:030, Section 10]
- b. The permittee shall keep records of the manufacturer's recommended procedures for startup and shutdown, any instance in which the recommended procedures were not followed, and any corrective action taken. [401 KAR 52:030, Section 10]

**6. Specific Reporting Requirements:**

Refer to **Section F, Monitoring, Recordkeeping and Reporting Requirements.**

## SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

The following listed activities have been determined to be insignificant activities for this source pursuant to 401 KAR 52:030, Section 6. Although these activities are designated as insignificant the permittee must comply with the applicable regulation. Process and emission control equipment at each insignificant activity subject to an opacity standard shall be inspected monthly and a qualitative visible emissions evaluation made. Results of the inspection, evaluation, and any corrective action shall be recorded in a log.

<u>Description</u>	<u>Generally Applicable Regulation</u>
1. EP 07 – Acid Dip and scrubber (4,100 lb/hr)	401 KAR 59:010, 401 KAR 63:020
2. EP 20 – Battery Tray Painting (0.14 lb/hr)	401 KAR 63:020
3. EP 32 – Boiler (0.68 MMBtu/hr)*	401 KAR 59:010, 401 KAR 63:020
4. EP 33 – Battery Formation	401 KAR 59:010, 401 KAR 63:020
5. OSI-1 – Natural Gas Vent (0.1 MMBtu/hr)*	401 KAR 59:010, 401 KAR 63:020
6. OSI-2 – Natural Gas Vent (0.1 MMBtu/hr)*	401 KAR 59:010, 401 KAR 63:020
7. OSI-3 – Natural Gas Vent (0.5 MMBtu/hr)*	401 KAR 59:010, 401 KAR 63:020
8. OSI-4 – Natural Gas Vent (0.8 MMBtu/hr)*	401 KAR 59:010, 401 KAR 63:020
9. NG-25A- Gas Vent 1 Flash (0.25 MMBtu/hr)*	401 KAR 59:010, 401 KAR 63:020
10. NG-25B- Gas Vent 2 Flash (0.25 MMBtu/hr)*	401 KAR 59:010, 401 KAR 63:020
11. NG-41 Three (3) Natural Gas Comfort Heaters (0.2 MMBtu/hr each)*	401 KAR 63:020

\* = These units are in compliance with the monthly opacity requirements while burning natural gas.

## SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS

1. As required by Section 1b of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030, Section 26; compliance with annual emissions and processing limitations contained in this permit, shall be based on emissions and processing rates for any twelve (12) consecutive months.
2. Lead and particulate matter emissions, measured by applicable reference methods, or an equivalent or alternative method specified in 40 C.F.R. Chapter I, or by a test method specified in the state implementation plan shall not exceed the respective limitations specified herein.
3. No person shall violate, or interfere with the attainment or maintenance of, ambient air quality standards as specified in 401 KAR 53:010. [401 KAR 53:005, Section 1(3)]

To preclude the applicability of 401 KAR 52:020, *Title V permits*, and 401 KAR 51:017, *Prevention of significant deterioration of air quality*, the total annual source-wide particulate matter (PM/PM<sub>10</sub>/PM<sub>2.5</sub>) emissions (from all units in Section B and C of the permit) shall not exceed 90 tons per year on a twelve (12) consecutive month basis [401 KAR 52:030, Section 10]

### **Compliance Demonstration Method:**

To show compliance with the source-wide limits to preclude the applicability of 401 KAR 52:020 and 50:017, the permittee shall sum the monthly emission rates from each of the emission points in Section B and in Section C during each twelve (12) consecutive month period for which source-wide particulate matter (PM/PM<sub>10</sub>/PM<sub>2.5</sub>) is emitted. For emission rate calculations 0% control must be assumed for any ~~15~~ 60-minute monitoring period where a control device is operating outside of its operating parameters. Refer to **Section B**, Lead Acid Battery Manufacturing Plant Equipment, **4. Specific Monitoring Requirements. j.**

Pressure drop, unlike temperature and other control device monitoring parameters, is variable depending on what equipment is operating for each baghouse/filter unit. For the facility to react to a change and be compliant with the lead emission limits, they would need to react at the same time the pressure drop was identified as being out of range. Enersys believes 15-minutes is too restrictive. The facility would like to propose 60 minutes to begin reporting 0% control.



**SECTION E - SOURCE CONTROL EQUIPMENT REQUIREMENTS**

At all times, including periods of startup, shutdown and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Division which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. [401 KAR 50:055, Section 2(5)]

## SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS

1. Pursuant to Section 1b-IV-1 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 26, when continuing compliance is demonstrated by periodic testing or instrumental monitoring, the permittee shall compile records of required monitoring information that include:
  - a. Date, place (as defined in this permit), and time of sampling or measurements;
  - b. Analyses performance dates;
  - c. Company or entity that performed analyses;
  - d. Analytical techniques or methods used;
  - e. Analyses results; and
  - f. Operating conditions during time of sampling or measurement.
2. Records of all required monitoring data and support information, including calibrations, maintenance records, and original strip chart recordings, and copies of all reports required by the Division for Air Quality, shall be retained by the permittee for a period of five (5) years and shall be made available for inspection upon request by any duly authorized representative of the Division for Air Quality [401 KAR 52:030, Section 3(1)(f)1a, and Section 1a-7 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030, Section 26].
3. In accordance with the requirements of 401 KAR 52:030, Section 3(1)f, the permittee shall allow authorized representatives of the Cabinet to perform the following during reasonable times:
  - a. Enter upon the premises to inspect any facility, equipment (including air pollution control equipment), practice, or operation;
  - b. To access and copy any records required by the permit;
  - c. Sample or monitor, at reasonable times, substances or parameters to assure compliance with the permit or any applicable requirements.Reasonable times are defined as during all hours of operation, during normal office hours; or during an emergency.
4. No person shall obstruct, hamper, or interfere with any Cabinet employee or authorized representative while in the process of carrying out official duties. Refusal of entry or access may constitute grounds for permit revocation and assessment of civil penalties.
5. Summary reports of any monitoring required by this permit shall be submitted to the Regional Office listed on the front of this permit at least every six (6) months during the life of this permit, unless otherwise stated in this permit. For emission units that were still under construction or which had not commenced operation at the end of the 6-month period covered by the report and are subject to monitoring requirements in this permit, the report shall indicate that no monitoring was performed during the previous six months because the emission unit was not in operation [Sections 1b-V-1 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030, Section 26] 6. The semi-annual reports are due by January 30th and July 30th of each year. All reports shall be certified by a responsible official pursuant to 401 KAR 52:030, Section 22. If continuous emission and opacity monitors are required by regulation or this permit, data shall be reported in accordance with the requirements of 401 KAR 59:005, General

## **SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS (CONTINUED)**

Provisions, Section 3(3). All deviations from permit requirements shall be clearly identified in the reports.

7. In accordance with the provisions of 401 KAR 50:055, Section 1, the owner or operator shall notify the Regional Office listed on the front of this permit concerning startups, shutdowns, or malfunctions as follows:
  - a. When emissions during any planned shutdowns and ensuing startups will exceed the standards, notification shall be made no later than three (3) days before the planned shutdown, or immediately following the decision to shut down, if the shutdown is due to events which could not have been foreseen three (3) days before the shutdown.
  - b. When emissions due to malfunctions, unplanned shutdowns and ensuing startups are or may be in excess of the standards, notification shall be made as promptly as possible by telephone (or other electronic media) and shall be submitted in writing upon request.
8. The permittee shall promptly report deviations from permit requirements, including those attributable to upset conditions as defined in the permit, the probable cause of such deviations, and any corrective actions or preventive measures taken shall be submitted to the Regional Office listed on the front of this permit. Where the underlying applicable requirement contains a definition of prompt or otherwise specifies a time frame for reporting deviations, that definition or time frame shall govern. Where the underlying applicable requirement does not identify a specific time frame for reporting deviations, prompt reporting, as required by Sections 1b-V, 3 and 4 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030, Section 26 shall be defined as follows:
  - a. For emissions of a hazardous air pollutant or a toxic air pollutant (as identified in an applicable regulation) that continue for more than an hour in excess of permit requirements, the report must be made within 24 hours of the occurrence.
  - b. For emissions of any regulated air pollutant, excluding those listed in F.8.a., that continue for more than two hours in excess of permit requirements, the report must be made within 48 hours.
  - c. All deviations from permit requirements, including those previously reported, shall be included in the semiannual report required by F.6.
9. Pursuant to 401 KAR 52:030, Section 21, the permittee shall annually certify compliance with the terms and conditions contained in this permit by completing and returning a Compliance Certification Form (DEP 7007CC) (or an alternative approved by the regional office) to the Regional Office listed on the front of this permit in accordance with the following requirements:
  - a. Identification of each term or condition;
  - b. Compliance status of each term or condition of the permit;
  - c. Whether compliance was continuous or intermittent;
  - d. The method used for determining the compliance status for the source, currently and over the reporting period.

**SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS (CONTINUED)**

- e. For an emissions unit that was still under construction or which has not commenced operation at the end of the 12-month period covered by the annual compliance certification, the permittee shall indicate that the unit is under construction and that compliance with any applicable requirements will be demonstrated within the timeframes specified in the permit.
  - f. The certification shall be submitted by January 30th of each year. Annual compliance certifications shall be sent to the Division for Air Quality, Frankfort Regional Office, 300 Sower Boulevard, 1<sup>st</sup> Floor, Frankfort, KY 40601.
10. In accordance with 401 KAR 52:030, Section 3(1)(d), the permittee shall provide the Division with all information necessary to determine its subject emissions within 30 days of the date the Kentucky Emissions Inventory System (KYEIS) emissions survey is mailed to the permittee. If a KYEIS emissions survey is not mailed to the permittee, then the permittee shall comply with all other emissions reporting requirements in this permit.
11. The Cabinet may authorize the temporary use of an emission unit to replace a similar unit that is taken off-line for maintenance, if the following conditions are met:
- a. The owner or operator shall submit to the Cabinet, at least ten (10) days in advance of replacing a unit, the appropriate Forms DEP7007AI to DD that show:
    - (1) The size and location of both the original and replacement units; and
    - (2) Any resulting change in emissions;
  - b. The potential to emit (PTE) of the replacement unit shall not exceed that of the original unit by more than twenty-five (25) percent of a major source threshold, and the emissions from the unit shall not cause the source to exceed the emissions allowable under the permit;
  - c. The PTE of the replacement unit or the resulting PTE of the source shall not subject the source to a new applicable requirement;
  - d. The replacement unit shall comply with all applicable requirements; and
  - e. The source shall notify Regional office of all shutdowns and start-ups.
  - f. Within six (6) months after installing the replacement unit, the owner or operator shall:
    - (1) Re-install the original unit and remove or dismantle the replacement unit; or
    - (2) Submit an application to permit the replacement unit as a permanent change.

## SECTION G - GENERAL PROVISIONS

### 1. General Compliance Requirements

- a. The permittee shall comply with all conditions of this permit. A noncompliance shall be a violation of 401 KAR 52:030, Section 3(1)(b), and a violation of Federal Statute 42 USC 7401 through 7671q (the Clean Air Act). Noncompliance with this permit is grounds for enforcement action including but not limited to the termination, revocation and reissuance, revision, or denial of a permit [Section 1a-2 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030, Section 26].
- b. The filing of a request by the permittee for any permit revision, revocation, reissuance, or termination, or of a notification of a planned change or anticipated noncompliance, shall not stay any permit condition [Section 1a-5 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030, Section 26].
- c. This permit may be revised, revoked, reopened and reissued, or terminated for cause in accordance with 401 KAR 52:030, Section 18. The permit will be reopened for cause and revised accordingly under the following circumstances:
  - (1) If additional applicable requirements become applicable to the source and the remaining permit term is three (3) years or longer. In this case, the reopening shall be completed no later than eighteen (18) months after promulgation of the applicable requirement. A reopening shall not be required if compliance with the applicable requirement is not required until after the date on which the permit is due to expire, unless this permit or any of its terms and conditions have been extended pursuant to 401 KAR 52:030, Section 12;
  - (2) The Cabinet or the United States Environmental Protection Agency (U. S. EPA) determines that the permit must be revised or revoked to assure compliance with the applicable requirements;
  - (3) The Cabinet or the U. S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.

Proceedings to reopen and reissue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of the permit for which cause to reopen exists. Reopenings shall be made as expeditiously as practicable. Reopenings shall not be initiated before a notice of intent to reopen is provided to the source by the Division, at least thirty (30) days in advance of the date the permit is to be reopened, except that the Division may provide a shorter time period in the case of an emergency.
- d. The permittee shall furnish information upon request of the Cabinet to determine if cause exists for modifying, revoking and reissuing, or terminating the permit; or to determine compliance with the conditions of this permit [Sections 1a- 6 and 7 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030, Section 26].
- e. Emission units described in this permit shall demonstrate compliance with applicable requirements if requested by the Division [401 KAR 52:030, Section 3(1)(c)].

**SECTION G - GENERAL PROVISIONS (CONTINUED)**

- f. The permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to the permitting authority [401 KAR 52:030, Section 7(1)].
- g. Any condition or portion of this permit which becomes suspended or is ruled invalid as a result of any legal or other action shall not invalidate any other portion or condition of this permit [Section 1a-11 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030, Section 26].
- h. The permittee shall not use as a defense in an enforcement action the contention that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance [Section 1a-3 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030, Section 26].
- i. All emission limitations and standards contained in this permit shall be enforceable as a practical matter. All emission limitations and standards contained in this permit are enforceable by the U.S. EPA and citizens except for those specifically identified in this permit as state-origin requirements. [Section 1a-12 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030, Section 26].
- j. This permit shall be subject to suspension if the permittee fails to pay all emissions fees within 90 days after the date of notice as specified in 401 KAR 50:038, Section 3(6) [Section 1a-9 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030, Section 26].
- k. Nothing in this permit shall alter or affect the liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance [401 KAR 52:030, Section 11(3)].
- l. This permit does not convey property rights or exclusive privileges [Section 1a-8 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030, Section 26].
- m. Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by the Cabinet or any other federal, state, or local agency.
- n. Nothing in this permit shall alter or affect the authority of U.S. EPA to obtain information pursuant to Federal Statute 42 USC 7414, Inspections, monitoring, and entry.
- o. Nothing in this permit shall alter or affect the authority of U.S. EPA to impose emergency orders pursuant to Federal Statute 42 USC 7603, Emergency orders.

**SECTION G - GENERAL PROVISIONS (CONTINUED)**

- p. This permit consolidates the authority of any previously issued PSD, NSR, or Synthetic Minor source preconstruction permit terms and conditions for various emission units and incorporates all requirements of those existing permits into one single permit for this source.
- q. Pursuant to 401 KAR 52:030, Section 11, a permit shield shall not protect the owner or operator from enforcement actions for violating an applicable requirement prior to or at the time of permit issuance. Compliance with the conditions of this permit shall be considered compliance with:
  - (1) Applicable requirements that are included and specifically identified in this permit; and
  - (2) Non-applicable requirements expressly identified in this permit.

**2. Permit Expiration and Reapplication Requirements**

- a. This permit shall remain in effect for a fixed term of five (5) years following the original date of issue. Permit expiration shall terminate the source's right to operate unless a timely and complete renewal application has been submitted to the Division at least six (6) months prior to the expiration date of the permit. Upon a timely and complete submittal, the authorization to operate within the terms and conditions of this permit, including any permit shield, shall remain in effect beyond the expiration date, until the renewal permit is issued or denied by the Division [401 KAR 52:030, Section 12].
- b. The authority to operate granted through this permit shall cease to apply if the source fails to submit additional information requested by the Division after the completeness determination has been made on any application, by whatever deadline the Division sets [401 KAR 52:030, Section 8(2)].

**3. Permit Revisions**

- a. Minor permit revision procedures specified in 401 KAR 52:030, Section 14(3), may be used for permit revisions involving the use of economic incentive, marketable permit, emission trading, and other similar approaches, to the extent that these minor permit revision procedures are explicitly provided for in the State Implementation Plan (SIP) or in applicable requirements and meet the relevant requirements of 401 KAR 52:030, Section 14(2).
- b. This permit is not transferable by the permittee. Future owners and operators shall obtain a new permit from the Division for Air Quality. The new permit may be processed as an administrative amendment if no other change in this permit is necessary, and provided that a written agreement containing a specific date for transfer of permit responsibility coverage and liability between the current and new permittee has been submitted to the permitting authority within ten (10) days following the transfer.

**SECTION G - GENERAL PROVISIONS (CONTINUED)****4. Construction, Start-Up, and Initial Compliance Demonstration Requirements**

No construction authorized by permit F-25-005.

**5. Testing Requirements**

- a. Pursuant to 401 KAR 50:045, Section 2, a source required to conduct a performance test shall submit a completed Compliance Test Protocol form, DEP form 6028, or a test protocol a source has developed for submission to other regulatory agencies, in a format approved by the cabinet, to the Division's Frankfort Central Office a minimum of sixty (60) days prior to the scheduled test date. Pursuant to 401 KAR 50:045, Section 7, the Division shall be notified of the actual test date at least thirty (30) days prior to the test.
- b. Pursuant to 401 KAR 50:045, Section 5, in order to demonstrate that a source is capable of complying with a standard at all times, any required performance test shall be conducted under normal conditions that are representative of the source's operations and create the highest rate of emissions. If [When] the maximum production rate represents a source's highest emissions rate and a performance test is conducted at less than the maximum production rate, a source shall be limited to a production rate of no greater than 110 percent of the average production rate during the performance tests. If and when the facility is capable of operation at the rate specified in the application, the source may retest to demonstrate compliance at the new production rate. The Division for Air Quality may waive these requirements on a case-by-case basis if the source demonstrates to the Division's satisfaction that the source is in compliance with all applicable requirements.
- c. Results of performance test(s) required by the permit shall be submitted to the Division by the source or its representative within forty-five days or sooner if required by an applicable standard, after the completion of the fieldwork.

**6. Acid Rain Program Requirements**

- a. If an applicable requirement of Federal Statute 42 USC 7401 through 7671q (the Clean Air Act) is more stringent than an applicable requirement promulgated pursuant to Federal Statute 42 USC 7651 through 7651o (Title IV of the Act), both provisions shall apply, and both shall be state and federally enforceable.

**7. Emergency Provisions**

- a. Pursuant to 401 KAR 52:030, Section 23(1), an emergency shall constitute an affirmative defense to an action brought for noncompliance with the technology-based emission limitations if the permittee demonstrates through properly signed contemporaneous operating logs or other relevant evidence that:
  - (1) An emergency occurred and the permittee can identify the cause of the emergency;
  - (2) The permitted facility was at the time being properly operated;
  - (3) During an emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit; and,
  - (4) The permittee notified the Division as promptly as possible and submitted written notice of the emergency to the Division within two (2) working days of the time when



**SECTION G - GENERAL PROVISIONS (CONTINUED)**

emission limitations were exceeded due to an emergency. The notice shall include a description of the emergency, steps taken to mitigate emissions, and the corrective actions taken.

(5) Notification of the Division does not relieve the source of any other local, state or federal notification requirements.

b. Emergency conditions listed in General Provision G.7.a above are in addition to any emergency or upset provision(s) contained in an applicable requirement [401 KAR 52:030, Section 23(3)].

c. In an enforcement proceeding, the permittee seeking to establish the occurrence of an emergency shall have the burden of proof [401 KAR 52:030, Section 23(2)].

8. Ozone depleting substances

a. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR 82, Subpart F, except as provided for Motor Vehicle AirConditioners (MVACs) in Subpart B:

(1) Persons opening appliances for maintenance, service, repair, or disposal shall comply with the required practices contained in 40 CFR 82.156.

(2) Equipment used during the maintenance, service, repair, or disposal of appliances shall comply with the standards for recycling and recovery equipment contained in 40 CFR 82.158.

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

(4) Persons disposing of small appliances, MVACs, and MVAC-like appliances (as defined at 40 CFR 82.152) shall comply with the recordkeeping requirements pursuant to 40 CFR 82.166.

(5) Persons owning commercial or industrial process refrigeration equipment shall comply with the leak repair requirements pursuant to 40 CFR 82.156.

(6) Owners/operators of appliances normally containing 50 or more pounds of refrigerant shall keep records of refrigerant purchased and added to such appliances pursuant to 40 CFR 82.166.

b. If the permittee performs service on motor (fleet) vehicle air conditioners containing ozone-depleting substances, the source shall comply with all applicable requirements as specified in 40 CFR 82, Subpart B, *Servicing of Motor Vehicle Air Conditioners*.

9. Risk Management Provisions

a. The permittee shall comply with all applicable requirements of 401 KAR Chapter 68, Chemical Accident Prevention, which incorporates by reference 40 CFR Part 68, Risk Management Plan provisions. If required, the permittee shall comply with the Risk Management Program and submit a Risk Management Plan to U.S. EPA using the RMP\* eSubmit software.

b. If requested, submit additional relevant information to the Division or the U.S. EPA.

## **SECTION H – ALTERNATE OPERATING SCENARIOS**

None

## **SECTION I – COMPLIANCE SCHEDULE**

None