Ohio Environmental Protection Agency

John R. Kasich, Governor
Mary Taylor, Lt. Governor
Craig W. Butler, Director

11/9/2016

Certified Mail

No	TOXIC REVIEW
No	SYNTHETIC MINOR TO AVOID MAJOR NSR
No	CEMS
Yes	MACT/GACT
Yes	NSPS
No	NESHAPS
No	NETTING
No	MODELING SUBMITTED
No	SYNTHETIC MINOR TO AVOID TITLE V
No	FEDERALLY ENFORCABLE PTIO (FEPTIO)
No	SYNTHETIC MINOR TO AVOID MAJOR GHG

Joe Green
JOHNSON CONTROL BATTERY GROUP INC.
10300 INDUSTRIAL RD
HOLLAND, OH 43528

RE: FINALAIR POLLUTION PERMIT-TO-INSTALL AND OPERATE
Facility ID: 0448002011
Permit Number: P0121711
Permit Type: Administrative Modification
County: Lucas

Dear Permit Holder:

Enclosed please find a final Ohio Environmental Protection Agency (EPA) Air Pollution Permit-to-Install and Operate (PTIO) which will allow you to install, modify, and/or operate the described emissions unit(s) in the manner indicated in the permit. Because this permit contains conditions and restrictions, please read it very carefully. In this letter you will find the information on the following topics:

- **How to appeal this permit**
- **How to save money, reduce pollution and reduce energy consumption**
- **How to give us feedback on your permitting experience**
- **How to get an electronic copy of your permit**
- **What should you do if you notice a spill or environmental emergency?**

How to appeal this permit

The issuance of this PTIO is a final action of the Director and may be appealed to the Environmental Review Appeals Commission pursuant to Section 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. The appeal must be filed with the Commission within thirty (30) days after notice of the Director's action. The appeal must be accompanied by a filing fee of $70.00, made payable to "Ohio Treasurer Josh Mandel," which the Commission, in its discretion, may reduce if by affidavit you demonstrate that payment of the full amount of the fee would cause extreme hardship. Notice of the filing of the appeal shall be filed with the Director within three (3) days of filing with the Commission. Ohio EPA requests that a copy of the appeal be served upon the Ohio Attorney General's Office, Environmental Enforcement Section. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission
77 South High Street, 17th Floor
Columbus, OH 43215

How to save money, reduce pollution and reduce energy consumption

The Ohio EPA is encouraging companies to investigate pollution prevention and energy conservation. Not only will this reduce pollution and energy consumption, but it can also save you money. If you would like to learn ways you can save money while protecting the environment, please contact our Office of Compliance Assistance and Pollution Prevention at (614) 644-3469. Additionally, all or a portion of the capital expenditures related to installing air pollution control equipment under this permit may be eligible for financing and State tax exemptions through the Ohio Air Quality Development Authority (OAQDA) under Ohio Revised Code Section 3706. For more information, see the OAQDA website: www.ohioairquality.org/clean_air

How to give us feedback on your permitting experience

Please complete a survey at www.epa.ohio.gov/survey.aspx and give us feedback on your permitting experience. We value your opinion.

How to get an electronic copy of your permit

This permit can be accessed electronically via the eBusiness Center: Air Services in Microsoft Word format or in Adobe PDF on the Division of Air Pollution Control (DAPC) Web page, www.epa.ohio.gov/dapc by clicking the "Search for Permits" link under the Permitting topic on the Programs tab.

What should you do if you notice a spill or environmental emergency?

Any spill or environmental emergency which may endanger human health or the environment should be reported to the Emergency Response 24-HOUR EMERGENCY SPILL HOTLINE toll-free at (800) 282-9378. Report non-emergency complaints to the appropriate district office or local air agency.

If you have any questions regarding your permit, please contact Toledo Department of Environmental Services at (419)936-3015 or the Office of Compliance Assistance and Pollution Prevention at (614) 644-3469.

Sincerely,

Michael E. Hopkins, P.E.
Assistant Chief, Permitting Section, DAPC

Cc: TDES

FINAL

Division of Air Pollution Control
Permit-to-Install and Operate
for
JOHNSON CONTROL BATTERY GROUP INC.

Facility ID:	0448002011
Permit Number:	P0121711
Permit Type:	Administrative Modification
Issued:	11/9/2016
Effective:	11/9/2016
Expiration:	3/20/2019

Ohio Environmental Protection Agency

Division of Air Pollution Control
Permit-to-Install and Operate
for
JOHNSON CONTROL BATTERY GROUP INC.

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Authorization

Facility ID:	0448002011
Application Number(s):	M0004190
Permit Number:	P0121711
Permit Description:	Agency-initiated administrative modification to permit P0117990 for emissions unit P096, P097, and P098 to include language for initial NSPS stack testing at less than 90% of maximum production
Permit Type:	Administrative Modification
Permit Fee:	$0.00
Issue Date:	11/9/2016
Effective Date:	11/9/2016
Expiration Date:	3/20/2019

Permit Evaluation Report (PER) Annual Date: Jan 1 - Dec 31, Due Feb 15

This document constitutes issuance to:

JOHNSON CONTROL BATTERY GROUP INC.
10300 INDUSTRIAL ROAD
Holland, OH 43528

of a Permit-to-Install and Operate for the emissions unit(s) identified on the following page.

Ohio Environmental Protection Agency (EPA) District Office or local air agency responsible for processing and administering your permit:

Toledo Department of Environmental Services
348 South Erie Street
Toledo, OH 43604
(419)936-3015

The above named entity is hereby granted this Permit-to-Install and Operate for the air contaminant source(s) (emissions unit(s))listed in this section pursuant to Chapter 3745-31 of the Ohio Administrative Code. Issuance of this permit does not constitute expressed or implied approval or agreement that, if constructed or modified in accordance with the plans included in the application, the described emissions unit(s) will operate in compliance with applicable State and federal laws and regulations.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Craig W. Butler
Director

Authorization (continued)

Permit Number: P0121711
Permit Description: Agency-initiated administrative modification to permit P0117990 for emissions unit P096, P097, and P098 to include language for initial NSPS stack testing at less than 90% of maximum production

Permits for the following Emissions Unit(s) or groups of Emissions Units are in this document as indicated below:

Emissions Unit ID:	**P096**
Company Equipment ID:	Sovema lead pot 2 (w/cylinder casters 4-6)
Superseded Permit Number:	P0117990
General Permit Category and Type:	Not Applicable

Group Name: EU group

Emissions Unit ID:	**P097**
Company Equipment ID:	Cylinder caster 4
Superseded Permit Number:	P0117990
General Permit Category andType:	Not Applicable
Emissions Unit ID:	**P098**
Company Equipment ID:	Cylinder caster 5
Superseded Permit Number:	P0117990
General Permit Category andType:	Not Applicable

A. Standard Terms and Conditions

1. What does this permit-to-install and operate ("PTIO") allow me to do?

This permit allows you to install and operate the emissions unit(s) identified in this PTIO. You must install and operate the unit(s) in accordance with the application you submitted and all the terms and conditions contained in this PTIO, including emission limits and those terms that ensure compliance with the emission limits (for example, operating, recordkeeping and monitoring requirements).

2. Who is responsible for complying with this permit?

The person identified on the "Authorization" page, above, is responsible for complying with this permit until the permit is revoked, terminated, or transferred. "Person" means a person, firm, corporation, association, or partnership. The words "you," "your," or "permittee" refer to the "person" identified on the "Authorization" page above.

The permit applies only to the emissions unit(s) identified in the permit. If you install or modify any other equipment that requires an air permit, you must apply for an additional PTIO(s) for these sources.

3. What records must I keep under this permit?

You must keep all records required by this permit, including monitoring data, test results, strip-chart recordings, calibration data, maintenance records, and any other record required by this permit for five years from the date the record was created. You can keep these records electronically, provided they can be made available to Ohio EPA during an inspection at the facility. Failure to make requested records available to Ohio EPA upon request is a violation of this permit requirement.

4. What are my permit fees and when do I pay them?

There are two fees associated with permitted air contaminant sources in Ohio:

PTIO fee.This one-time fee is based on a fee schedule in accordance with Ohio Revised Code (ORC) section 3745.11, or based on a time and materials charge for permit application review and permit processing if required by the Director.

You will be sent an invoice for this fee after you receive this PTIO and payment is due within 30 days of the invoice date. You are required to pay the fee for this PTIO even if you do not install or modify your operations as authorized by this permit.

Annual emissions fee.Ohio EPA will assess a separate fee based on the total annual emissions from your facility. You self-report your emissions in accordance with Ohio Administrative Code (OAC) Chapter 3745-78. This fee assessed is based on a fee schedule in ORC section 3745.11 and funds Ohio EPA's permit compliance oversight activities. For facilities that are permitted as synthetic minor sources, the fee schedule is adjusted annually for inflation. Ohio EPA will notify you when it is time to report your emissions and to pay your annual emission fees.

5. When does my PTIO expire, and when do I need to submit my renewal application?

This permit expires on the date identified at the beginning of this permit document (see "Authorization" page above) and you must submit a renewal application to renew the permit. Ohio EPA will send a renewal notice to you approximately six months prior to the expiration date of this permit. However, it is

very important that you submit a complete renewal permit application (postmarked prior to expiration of this permit) even if you do not receive the renewal notice.

If a complete renewal application is submitted before the expiration date, Ohio EPA considers this a timely application for purposes of ORC section 119.06, and you are authorized to continue operating the emissions unit(s) covered by this permit beyond the expiration date of this permit until final action is taken by Ohio EPA on the renewal application.

6. What happens to this permit if my project is delayed or I do not install or modify my source?

This PTIO expires 18 months after the issue date identified on the "Authorization" page above unless otherwise specified if you have not (1) started constructing the new or modified emission sources identified in this permit, or (2) entered into a binding contract to undertake such construction. This deadline can be extended by up to 12 months, provided you apply to Ohio EPA for this extension within a reasonable time before the 18-month period has ended and you can show good cause for any such extension.

7. What reports must I submit under this permit?

An annual permit evaluation report (PER) is required in addition to any malfunction reporting required by OAC rule 3745-15-06 or other specific rule-based reporting requirement identified in this permit. Your PER due date is identified in the Authorization section of this permit.

8. If I am required to obtain a Title V operating permit in the future, what happens to the operating provisions and PER obligations under this permit?

If you are required to obtain a Title V permit under OAC Chapter 3745-77 in the future, the permit-to-operate portion of this permit will be superseded by the issued Title V permit. From the effective date of the Title V permit forward, this PTIO will effectively become a PTI (permit-to-install) in accordance with OAC rule 3745-31-02(B). The following terms and conditions of this permit will no longer be applicable after issuance of the Title V permit: Section B, Term 1.b) and Section C, for each emissions unit, Term a)(2).

The PER requirements in this permit remain effective until the date the Title V permit is issued and is effective, and cease to apply after the effective date of the Title V permit. The final PER obligation will cover operations up to the effective date of the Title V permit and must be submitted on or before the submission deadline identified in this permit on the last day prior to the effective date of the Title V permit.

9. What are my obligations when I perform scheduled maintenance on air pollution control equipment?

You must perform scheduled maintenance of air pollution control equipment in accordance with OAC rule 3745-15-06(A). If scheduled maintenance requires shutting down or bypassing any air pollution control equipment, you must also shut down the emissions unit(s) served by the air pollution control equipment during maintenance, unless the conditions of OAC rule 3745-15-06(A)(3) are met. Any emissions that exceed permitted amount(s) under this permit (unless specifically exempted by rule) must be reported as deviations in the annual permit evaluation report (PER), including nonexempt excess emissions that occur during approved scheduled maintenance.

10. Do I have to report malfunctions of emissions units or air pollution control equipment? If so, how must I report?

If you have a reportable malfunction of any emissions unit(s) or any associated air pollution control system, you must report this to the [DO/LAA] in accordance with OAC rule 3745-15-06(B). Malfunctions that must be reported are those that result in emissions that exceed permitted emission levels. It is your responsibility to evaluate control equipment breakdowns and operational upsets to determine if a reportable malfunction has occurred.

If you have a malfunction, but determine that it is not a reportable malfunction under OAC rule 3745-15-06(B), it is recommended that you maintain records associated with control equipment breakdown or process upsets. Although it is not a requirement of this permit, Ohio EPA recommends that you maintain records for non-reportable malfunctions.

11. Can Ohio EPA or my local air agency inspect the facility where the emission unit(s) is/are located?

Yes. Under Ohio law, the Director or his authorized representative may inspect the facility, conduct tests, examine records or reports to determine compliance with air pollution laws and regulations and the terms and conditions of this permit. You must provide, within a reasonable time, any information Ohio EPA requests either verbally or in writing.

12. What happens if one or more emissions units operated under this permit is/are shut down permanently?

Ohio EPA can terminate the permit terms associated with any permanently shut down emissions unit. "Shut down" means the emissions unit has been physically removed from service or has been altered in such a way that it can no longer operate without a subsequent "modification" or "installation" as defined in OAC Chapter 3745-31.

You should notify Ohio EPA of any emissions unit that is permanently shut down by submitting a certification that identifies the date on which the emissions unit was permanently shut down. The certification must be submitted by an authorized official from the facility. You cannot continue to operate an emission unit once the certification has been submitted to Ohio EPA by the authorized official.

You must comply with all recordkeeping and reporting for any permanently shut down emissions unit in accordance with the provisions of the permit, regulations or laws that were enforceable during the period of operation, such as the requirement to submit a PER, air fee emission report, or malfunction report. You must also keep all records relating to any permanently shutdown emissions unit, generated while the emissions unit was in operation, for at least five years from the date the record was generated.

Again, you cannot resume operation of any emissions unit certified by the authorized official as beingpermanently shut down without first applying for and obtaining a permit pursuantto OAC Chapter 3745-31.

13. Can I transfer this permit to a new owner or operator?

You can transfer this permit to a new owner or operator. If you transfer the permit, you must follow the procedures in OAC Chapter 3745-31, including notifying Ohio EPA or the local air agency of the change in ownership or operator. Any transferee of this permit must assume the responsibilities of the transferor permit holder.

14. Does compliance with this permit constitute compliance with OAC rule 3745-15-07, "air pollution nuisance"?

This permit and OAC rule 3745-15-07 prohibit operation of the air contaminant source(s) regulated under this permit in a manner that causes a nuisance. Ohio EPA can require additional controls or modification of the requirements of this permit through enforcement orders or judicial enforcement action if, upon investigation, Ohio EPA determines existing operations are causing a nuisance.

15. What happens if a portion of this permit is determined to be invalid?

If a portion of this permit is determined to be invalid, the remainder of the terms and conditions remain valid and enforceable. The exception is where the enforceability of terms and conditions are dependent on the term or condition that was declared invalid.

B. Facility-Wide Terms and Conditions

1. This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

   a) For the purpose of a permit-to-install document, the facility-wide terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.

      (1) None.

   b) For the purpose of a permit-to-operate document, the facility-wide terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.

      (1) None.

2. The Ohio EPA has determined that this facility is subject to the requirements of 40 CFR Part 63 Subpart PPPPPP, National Emission Standards for Hazardous Air Pollutants for Lead Acid Battery Manufacturing Area Sources. At this time the Ohio EPA is not accepting the delegating authority to enforce NESHAP standards for area sources. The requirements of this rule, that are applicable to the area source(s) (for hazardous air pollutants) identified in this permit, shall be enforceable by U.S. EPA. Region 5. The complete requirements of this rule (including the Part 63 General Provisions) may be accessed via the Internet from the Electronic code of Federal Regulations (e-CFR) website http://www.ecfr.gov/ or by contacting the appropriate Ohio EPA District Office or Local Air Agency.

3. The following emissions units contained in this permit are subject to 40 CFR Part 60, Subparts A and KK: P096-P098. The complete NSPS requirements, including the NSPS General Provisions may be accessed via the internet from the Electronic Code of Federal Regulations (e-CFR) website http://www.ecfr.gov or by contacting the Toledo Division of Environmental Services.

C. Emissions Unit Terms and Conditions

1. P096, Sovema lead pot 2 (w/cylinder casters 4-6)

Operations, Property and/or Equipment Description:

Sovema Lead Pot 2 controlled by 10,000 acfm baghouse with HEPA filtration (S/N 322 joint with P038-P042 and P097-P099) with 2 mmBtu burner (S/N 322)

a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

(1) For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.

a. b)(1)b.

(2) For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.

a. None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
Sovema Lead Pot 2 controlled by fabric filter and HEPA filtration (S/N 322)		
a.	OAC rule 3745-31-05(A)(3) June 30, 2008	The emissions from this emissions unit shall be vented to a baghouse equipped with secondary HEPA filtration at all times the unit is in operation. See b)(2)a. and b)(2)b.
b.	OAC rule 3745-31-05(A)(3)(a)(ii) June 30, 2008	See b)(2)c.
c.	OAC rule 3745-31-05(F)	Combined particulate emissions from the stack serving P038, P039, P041, P042 and P096 through P099 shall not exceed 1.56 pounds per hour and 6.84 tons per year (S/N 322). Combined emissions of particulate matter of 10 microns or less (PM10) from the stack serving P038, P039, P041, P042

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		and P096 through P099 shall not exceed 1.56 pounds per hour and 6.84 tons per year (S/N 322). Combined emissions of lead from the stack serving P038, P039, P041, P042 and P096 through P099 shall not exceed 0.068 pound per hour and 0.30 ton per year (S/N 322). See b)(2)d.
d.	40 CFR Part 60, Subpart A (40 CFR 60.1 – 60.19)	See b)(2)e.
e.	40 CFR Part 60, Subpart KK (40 CFR 60.370 – 60.374) [In accordance with 40 CFR 60.370(b), this emissions unit is part of other lead emitting operations used in the manufacture of lead acid storage batteries at a lead acid battery manufacturing plant that has a design capacity of to produce in one day batteries containing an amount of lead equal to or greater than 6.5 tons and subject to the emissions limitations/control measures specified in this section.]	0.000437 gr/dscf of lead. [40 CFR 60.372(a)(6)] Emissions shall not exceed 0% opacity (measured according to Method 9 and rounded to the nearest whole percentage) from stack number 322. [40 CFR 60.372(a)(7)] See b)(2)f.
f.	OAC rule 3745-17-07(A)(1)	See b)(2)g.
g.	OAC rule 3745-17-11(B)(1)	See b)(2)h.

(2) Additional Terms and Conditions

a. The permittee shall install a baghouse equipped with secondary HEPA filtration with a design control efficiency of at least 99.9% control of PM and lead emissions.

b. This Best Available Technology (BAT) emission limit applies until U.S. EPA approves Ohio Administrative Code (OAC) paragraph 3745-31-05(A)(3)(a)(ii) (the less than 10 tons per year BAT exemption) into the Ohio State Implementation Plan (SIP).

c. These requirements apply once U.S. EPA approves OAC paragraph 3745-31-05(A)(3)(a)(ii) (the less than 10 tons per year BAT exemption) as part of the Ohio SIP.

The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the PM10 and lead emissions from this air contaminant source since the calculated annual emission rate for PM10 and lead is less than 10 tons/year, taking into account the filtration system required to comply with the federally enforceable rule limit of 0.000437 gr/dscf under 40 CFR 60.372(a)(3). Since lead is a subset of particulate, and lead is required to be controlled under 40 CFR 60.370, particulate is also considered to be controlled by the rule.

d. The hourly and annual emission limitations were established for PTI purposes to reflect the potential to emit while controlled by a fabric filter for this emissions unit. Therefore, provided the fabric filter is used, it is not necessary to develop monitoring, record keeping and/or reporting requirements to ensure compliance with these limitations.

e. 40 CFR Part 60 subpart A provides applicability provisions, definitions, and other general provisions that are pertinent to emissions units affected by 40 CFR Part 60.

f. The application and enforcement of the provisions of the New Source Performance Standards (NSPS), as promulgated by the United States Environmental Protection Agency, 40 CFR Part 60, are delegated to the Ohio Environmental Protection Agency. The requirements of 40 CFR Part 60 are also federally enforceable.

g. The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to 40 CFR 60, Subpart KK.

h. The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(F).

c) Operational Restrictions

(1) The permittee shall operate the dry filtration system with HEPA filtration system whenever this emissions unit (sovema lead pot 2) is in operation.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall maintain daily records that document any time periods when the dry filtration system with secondary HEPA filtration system was not in service when the emissions unit (sovema lead pot 2) was in operation.

(2) In order to maintain compliance with the applicable emission limitation(s) in this permit, the acceptable range established for pressure drop across the HEPA filter is between 0.1 to 8.0 inches of water column (WC) while the emissions unit (sovema lead pot 2) is in operation except after replacement or complete cleaning of the filters, at which time a pressure drop of less than 0.1 inch WC shall be acceptable.

(3) The permittee shall properly install, operate, and maintain equipment to continuously monitor the pressure drop, in inches of water, across the HEPA filtration system when the controlled emissions unit(s) is/are in operation, including periods of startup and

shutdown. The permittee shall record the pressure drop across the dry filtration system on a weekly basis. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s), with any modifications deemed necessary by the permittee. The acceptable pressure drop shall be based upon the manufacturer's specifications until such time as any required performance testing is conducted and the appropriate range is established to demonstrate compliance.

Whenever the monitored value for the pressure drop deviates from the limit or range established in accordance with this permit, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation:

a. the date and time the deviation began;

b. the magnitude of the deviation at that time;

c. the date the investigation was conducted;

d. the name(s) of the personnel who conducted the investigation; and

e. the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range specified in this permit, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken:

f. a description of the corrective action;

g. the date corrective action was completed;

h. the date and time the deviation ended;

i. the total period of time (in minutes) during which there was a deviation;

j. the pressure drop readings immediately after the corrective action was implemented; and

k. the name(s) of the personnel who performed the work.

Investigation and records required by this paragraph do not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

This range or limit on the pressure drop across the HEPA filtration system is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the appropriate Ohio EPA District Office or local air agency. The permittee may request revisions to the permitted limit or range for the pressure drop based upon

information obtained during future testing that demonstrate compliance with the allowable particulate emission rate for the controlled emissions unit(s). In addition, approved revisions to the range or limit will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of an administrative modification.

(4) The permittee shall maintain monthly records of the following information for the sovema lead pot 2 operations:

a. the amount of lead, in pounds, transferred in this emissions unit (sovema lead pot 2 S/N 322);

b. the total hours of operation at this emissions unit (sovema lead pot 2 S/N 322); and

c. the hourly average lead transfer rate (i.e. (a.)/(b.) in pounds of lead transferred per hour) for sovema lead pot 2 S/N 322.

e) Reporting Requirements

(1) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA District Office or Local Air Agency by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve months for each air contaminant source identified in this permit.

(2) The permittee shall identify in the annual permit evaluation report the following information concerning the operations of the baghouse with secondary HEPA filtration system during the 12-month reporting period for this/these emissions unit(s):

a. each period of time (start time and date, and end time and date) when the pressure drop across the HEPA filtration system was outside of the acceptable range;

b. any period of time (start time and date, and end time and date) when the emissions unit(s) was/were in operation and the process emissions were not vented to the baghouse with secondary HEPA filtration system;

c. each incident of deviation described in “a” (above) where a prompt investigation was not conducted;

d. each incident of deviation described in “a” where prompt corrective action, that would bring the pressure drop into compliance with the acceptable range, was determined to be necessary and was not taken; and

e. each incident of deviation described in “a” where proper records were not maintained for the investigation and/or the corrective action(s), as identified in the monitoring and record keeping requirements of this permit.

(3) The permittee shall submit Annual Permit Evaluation Reports (PER) that identify:

a. all deviations (excursions) of the following emission limitations, operational restrictions and/or control device operating parameter limitations that restrict the potential to emit (PTE) of any regulated air pollutant and have been detected by the monitoring, record keeping and/or testing requirements in this permit:

i. any period of time in which the transfer rate of lead exceeded the restriction of 5.8 tons of lead per hour in f)(3) lead for sovema lead pot 2 (S/N 322);

b. the probable cause of each deviation (excursion);

c. any corrective actions that were taken to remedy the deviations (excursions) or prevent future deviations (excursions); and

d. the magnitude and duration of each deviation (excursion).

If no deviations (excursions) occurred, the permittee shall submit a report that states that no deviations (excursions) occurred.

(4) The reports required by this permit may be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal; or they may be mailed as a hard copy to the appropriate district office or local air agency.

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

0.000437 gr/dscf of lead.

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with this emission limitation in accordance with 40 CFR Part 60, Sections 60.8, 60.372 and 60.374 using methods and procedures specified in Method 12 of 40 CFR Part 60, Appendix A.

Testing of S/N 322 performed on July 21, 2016 demonstrated a lead concentration of 0.0000009625 gr/dscf at 17,872 dscfm.

b. Emission Limitation:

Emissions shall not exceed 0% opacity (measured according to Method 9 and rounded to the nearest whole percentage) from the stack serving this emissions unit (S/N 322).

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with this emission limitation through visible emission observations performed in accordance with 40 CFR Part 60, Section 60.374 using methods and procedures specified in Method 9 of 40 CFR Part 60, Appendix A and Section 60.11.

Testing of S/N 322 on July 21, 2016 demonstrated visible emissions of 0% opacity.

c. Emission Limitation:

Combined particulate emissions from the stack serving P038, P039, P041, P042 and P096 through P099 shall not exceed 1.56 pounds per hour (S/N 322).

Applicable Compliance Method:

This emissions limitation was established to reflect the potential to emit for these emissions units by a calculation utilizing a company-supplied emission factor (0.010 gr PE/dscf) multiplied by an exhaust gas flow rate (18,206 dscfm) and by 60 minutes per hour and then divided by 7,000 grains per pound.

If required, the permittee shall demonstrate compliance with this emissions limitation through emission testing performed in accordance with Methods 1 through 5 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior written approval from the Ohio EPA.

Testing of S/N 322 performed on July 21, 2016 demonstrated a PE concentration of 0.0185877 lb/hr at 17,872 dscfm).

d. Emission Limitation:

Combined PE from the stack serving P038, P039, P041, P042 and P096 through P099 shall not exceed and 6.84 tons per year (S/N 322).

Applicable Compliance Method:

This emissions limitation was established to reflect the potential to emit for these emissions units by a calculation utilizing a company-supplied emission factor (0.010 gr PE/dscf) multiplied by an exhaust gas flow rate (18,206 dscfm) and by 60 minutes per hour and by 8,760 hours per year and then divided by 7,000 grains per pound and by 2,000 pounds per ton.

e. Emission Limitation:

Combined PM10 from the stack serving P038, P039, P041, P042 and P096 through P099 shall not exceed 1.56 pounds per hour (S/N 322).

Applicable Compliance Method:

This emissions limitation was established to reflect the potential to emit for these emissions units by a calculation utilizing a company-supplied emission factor (0.010 gr PM10/dscf) multiplied by an exhaust gas flow rate (18,206 dscfm) and by 60 minutes per hour and then divided by 7,000 grains per pound.

If required, the permittee shall demonstrate compliance with this emissions limitation through emission testing performed in accordance with Methods 201 and 202 of 40 CFR Part 51, Appendix M. Alternative U.S. EPA approved test methods may be used with prior written approval from the Ohio EPA.

f. Emission Limitation:

Combined PM10 from the stack serving P038, P039, P041, P042 and P096 through P099 shall not exceed 6.84 tons per year (S/N 322).

Applicable Compliance Method:

This emissions limitation was established to reflect the potential to emit for these emissions units by a calculation utilizing a company-supplied emission factor (0.010 gr PM10/dscf) multiplied by an exhaust gas flow rate (18,206 dscfm) and by 60 minutes per hour and by 8,760 hours per year and then divided by 7,000 grains per pound and by 2,000 pounds per ton.

g. Emission Limitation:

Combined emissions of lead from the stack serving P038, P039, P041, P042 and P096 through P099 shall not exceed 0.068 pound per hour (S/N 322).

Applicable Compliance Method:

This emissions limitation was established to reflect the potential to emit for these emissions units by a calculation of the design criteria of NSPS KK emission factor (0.000437 gr Pb/dscf) multiplied by an exhaust gas flow rate (18,206 dscfm) and by 60 minutes per hour and then divided by 7,000 grains per pound.

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with 40 CFR Part 60, Sections 60.8 and 60.374 using methods and procedures specified in Method 12 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior written approval from the Ohio EPA.

Testing of S/N 322 performed on July 21, 2016 demonstrated a lead concentration of 0.0001486 lb/hr at 17,872 dscfm).

h. Emission Limitation:

Combined emissions of lead from the stack serving P038, P039, P041, P042 and P096 through P099 shall not exceed 0.30 ton per year (S/N 322).

Applicable Compliance Method:

This emissions limitation was established to reflect the potential to emit for these emissions units by a calculation of the design criteria of the NSPS KK emission factor (0.000437 gr Pb/dscf) multiplied by an exhaust gas flow rate (18,206 dscfm) and by 60 minutes per hour and by 8,760 hours per year and then divided by 7,000 grains per pound and by 2,000 pounds per ton.

(2) The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

a. The emission testing shall be conducted within 6 months of permit expiration. Additional testing may be required consistent with Ohio EPA DAPC Engineering Guide #16 or by request of the Ohio EPA or Toledo Division of Environmental Services.

b. The emission testing shall be conducted on the cylinder caster systems (P038, P039, P041, P042, P096-P099) stack (S/N 322) to demonstrate compliance with the 0% opacity limit and the grains per dry standard cubic foot loading for lead emissions.

c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):

i. For lead, Methods 1-4 and Method 12 of 40 CFR Part 60, Appendix A and the procedures in 40 CFR Parts 60.11 and 60.374. The sampling time and sample volume for each run shall be at least 60 minutes and 30 dscf;

ii. For opacity, Method 9 of 40 CFR Part 60, Appendix A and the procedures in 40 CFR Parts 60.11 and 60.374.

Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

d. The permittee shall collect and record the static pressure drop across the control devices during testing.

e. During the emissions testing, the emissions unit shall be operated under operational conditions approved in advance by the appropriate Ohio EPA District Office or local air agency. Operational conditions that may need to be approved include, but are not limited to, the production rate, the type of material processed, material make-up (solvent content, etc.), or control equipment operational limitations (burner temperature, precipitator voltage, etc.). In general, testing shall be done under “worst case” conditions expected during the life of the permit. As part of the information provided in the “Intent to Test” notification form described below, the permittee shall provide a description of the emissions unit operational conditions they will meet during the emissions testing and describe why they believe “worst case” operating conditions will be met. Prior to conducting the test(s), the permittee shall confirm with the appropriate Ohio EPA District Office or local air agency that the proposed operating conditions

constitute "worst case". Failure to test under the approved conditions may result in Ohio EPA not accepting the test results as a demonstration of compliance.

f. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

g. Personnel from the Toledo Division of Environmental Services shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

h. A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Toledo Division of Environmental Services within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

(3) This emissions group (lead pots 1&2, plus cylinder casters 1-3 and 4-6) has a stated maximum production capacity of 14.4 tons of lead per hour. Production levels achieved during the July 21, 2016 stack testing for sovema lead pots 1&2 – (which is part of the emissions group lead pots 1&2, plus cylinder casters 1-3 and 4-6) S/N 322 was 5.24 tons of lead per hour. Ohio EPA stack testing policy requires a review of the stack test results for sources where the production rate exceeds more than 10% the production rate determined during the most recent emission test which demonstrated compliance with the allowable mass emission rate for lead. Operation at a production rate greater than the compliant level is not indicative of an emission violation, but rather serves as a trigger level for additional testing and/or further investigation to establish compliance with the emission limitations.

g) Miscellaneous Requirements

None.

2. Emissions Unit Group -EU group: P097,P098,

EU ID	Operations, Property and/or Equipment Description
P097	Cyliner Caster 4 controlled by a fabric filter followed by HEPA filtration (S/N 322 exhausting jointly with P038-P042 and P096, P098-P099)
P098	Cylinder caster 5 controlled by a fabric filter followed by HEPA filtration (S/N 322 exhausting jointly with P038-P042 and P096, P097, and P099)

a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

(1) For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.

a. b)(1)b.

(2) For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.

a. None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) June 30, 2008	The emissions from this emissions unit shall be vented to a baghouse equipped with secondary HEPA filtration at all times the unit is in operation. See b)(2)a. and b)(2)b.
b.	OAC rule 3745-31-05(A)(3)(a)(ii) June 30, 2008	See b)(2)c.
c.	OAC rule 3745-31-05(F)	Combined particulate emissions from the stack serving P038, P039, P041, P042 and P096 through P099 shall not exceed 1.56 pounds per hour and 6.84 tons per year (S/N 322). Combined emissions of particulate matter of 10 microns or less (PM10) from the

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		stack serving P038, P039, P041, P042 and P096 through P099 shall not exceed 1.56 pounds per hour and 6.84 tons per year (S/N 322). Combined emissions of lead from the stack serving P038, P039, P041, P042 and P096 through P099 shall not exceed 0.068 pound per hour and 0.30 ton per year (S/N 322). See b)(2)d.
d.	40 CFR Part 60, Subpart A (40 CFR 60.1 – 60.19)	See b)(2)e.
e.	40 CFR Part 60, Subpart KK (40 CFR 60.370 – 60.374) [In accordance with 40 CFR 60.370(b), this emissions unit is part of other lead emitting operations used in the manufacture of lead acid storage batteries at a lead acid battery manufacturing plant that has a design capacity of to produce in one day batteries containing an amount of lead equal to or greater than 6.5 tons and subject to the emissions limitations/control measures specified in this section.]	0.000437 gr/dscf of lead. [40 CFR 60.372(a)(6)] Emissions shall not exceed 0% opacity (measured according to Method 9 and rounded to the nearest whole percentage) from stack number 322. [40 CFR 60.372(a)(7)] See b)(2)f.
f.	OAC rule 3745-17-07(A)(1)	See b)(2)g.
g.	OAC rule 3745-17-11(B)(1)	See b)(2)h.

(2) Additional Terms and Conditions

a. The permittee shall install a baghouse equipped with secondary HEPA filtration with a design control efficiency of at least 99.9% control of PM and lead emissions.

b. This Best Available Technology (BAT) emission limit applies until U.S. EPA approves Ohio Administrative Code (OAC) paragraph 3745-31-05(A)(3)(a)(ii) (the less than 10 tons per year BAT exemption) into the Ohio State Implementation Plan (SIP).

c. These requirements apply once U.S. EPA approves OAC paragraph 3745-31-05(A)(3)(a)(ii) (the less than 10 tons per year BAT exemption) as part of the Ohio SIP.

The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the PM10 and lead emissions from this air contaminant source since the calculated annual emission rate for PM10 and lead is less than 10 tons/year, taking into account the filtration system required to comply with the federally enforceable rule limit of 0.000437 gr/dscf under 40 CFR 60.372(a)(3). Since lead is a subset of particulate, and lead is required to be controlled under 40 CFR 60.370, particulate is also considered to be controlled by the rule.

d. The hourly and annual emission limitations were established for PTI purposes to reflect the potential to emit while controlled by a fabric filter for this emissions unit. Therefore, provided the fabric filter is used, it is not necessary to develop monitoring, record keeping and/or reporting requirements to ensure compliance with these limitations.

e. 40 CFR Part 60 subpart A provides applicability provisions, definitions, and other general provisions that are pertinent to emissions units affected by 40 CFR Part 60.

f. The application and enforcement of the provisions of the New Source Performance Standards (NSPS), as promulgated by the United States Environmental Protection Agency, 40 CFR Part 60, are delegated to the Ohio Environmental Protection Agency. The requirements of 40 CFR Part 60 are also federally enforceable.

g. The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to 40 CFR 60, Subpart KK.

h. The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(F).

c) Operational Restrictions

(1) The permittee shall operate the baghouse with secondary HEPA filtration system whenever this emissions unit (cylinder caster 4 and 5) is in operation.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall maintain daily records that document any time periods when the dry filtration system with secondary HEPA filtration system was not in service when the emissions unit (cylinder caster 4 and 5) was in operation.

(2) In order to maintain compliance with the applicable emission limitation(s) in this permit, the acceptable range established for pressure drop across the HEPA filter is between 0.1 to 8.0 inches of water column (WC) while the emissions unit (cylinder caster 4 and 5) is in operation except after replacement or complete cleaning of the filters, at which time a pressure drop of less than 0.1 inch WC shall be acceptable.

(3) The permittee shall properly install, operate, and maintain equipment to continuously monitor the pressure drop, in inches of water, across the HEPA filtration system when the controlled emissions unit(s) is/are in operation, including periods of startup and

shutdown. The permittee shall record the pressure drop across the dry filtration system on a weekly basis. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s), with any modifications deemed necessary by the permittee. The acceptable pressure drop shall be based upon the manufacturer's specifications until such time as any required performance testing is conducted and the appropriate range is established to demonstrate compliance.

Whenever the monitored value for the pressure drop deviates from the limit or range established in accordance with this permit, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation:

a. the date and time the deviation began;

b. the magnitude of the deviation at that time;

c. the date the investigation was conducted;

d. the name(s) of the personnel who conducted the investigation; and

e. the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range specified in this permit, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken:

f. a description of the corrective action;

g. the date corrective action was completed;

h. the date and time the deviation ended;

i. the total period of time (in minutes) during which there was a deviation;

j. the pressure drop readings immediately after the corrective action was implemented; and

k. the name(s) of the personnel who performed the work.

Investigation and records required by this paragraph do not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

This range or limit on the pressure drop across the HEPA filtration system is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the appropriate Ohio EPA District Office or local air agency. The permittee may request revisions to the permitted limit or range for the pressure drop based upon

information obtained during future testing that demonstrate compliance with the allowable particulate emission rate for the controlled emissions unit(s). In addition, approved revisions to the range or limit will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of an administrative modification.

(4) The permittee shall maintain monthly records of the following information for the cylinder caster 4 and 5 operations:

a. the amount of lead, in pounds, transferred in this emissions unit (cylinder caster 4 and 5 S/N 322);

b. the total hours of operation at this emissions unit (cylinder caster 4 and 5 S/N 322); and

the hourly average lead transfer rate (i.e. (a.)/(b.) in pounds of lead transferred per hour) for cylinder caster 4 and 5 S/N 322.

e) Reporting Requirements

(1) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA District Office or Local Air Agency by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve months for each air contaminant source identified in this permit.

(2) The permittee shall identify in the annual permit evaluation report the following information concerning the operations of the baghouse with secondary HEPA filtration system during the 12-month reporting period for this/these emissions unit(s):

a. each period of time (start time and date, and end time and date) when the pressure drop across the HEPA filtration system was outside of the acceptable range;

b. any period of time (start time and date, and end time and date) when the emissions unit(s) was/were in operation and the process emissions were not vented to the baghouse with secondary HEPA filtration system;

c. each incident of deviation described in “a” (above) where a prompt investigation was not conducted;

d. each incident of deviation described in “a” where prompt corrective action, that would bring the pressure drop into compliance with the acceptable range, was determined to be necessary and was not taken; and

e. each incident of deviation described in “a” where proper records were not maintained for the investigation and/or the corrective action(s), as identified in the monitoring and record keeping requirements of this permit.

(3) The permittee shall submit Annual Permit Evaluation Reports (PER) that identify:

a. all deviations (excursions) of the following emission limitations, operational restrictions and/or control device operating parameter limitations that restrict the potential to emit (PTE) of any regulated air pollutant and have been detected by the monitoring, record keeping and/or testing requirements in this permit:

i. any period of time in which the lead transfer rate exceeded the restriction of 5.8 tons of lead per hour in f)(3) for cylinder caster 4 and 5 (S/N 322);;

b. the probable cause of each deviation (excursion);

c. any corrective actions that were taken to remedy the deviations (excursions) or prevent future deviations (excursions); and

d. the magnitude and duration of each deviation (excursion).

If no deviations (excursions) occurred, the permittee shall submit a report that states that no deviations (excursions) occurred.

(4) The reports required by this permit may be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal; or they may be mailed as a hard copy to the appropriate district office or local air agency.

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

0.000437 gr/dscf of lead.

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with this emission limitation in accordance with 40 CFR Part 60, Sections 60.8, 60.372 and 60.374 using methods and procedures specified in Method 12 of 40 CFR Part 60, Appendix A.

Testing of S/N 322 performed on July 21, 2016 demonstrated a lead concentration of 0.0000009625 gr/dscf at 17,872 dscfm.

b. Emission Limitation:

Emissions shall not exceed 0% opacity (measured according to Method 9 and rounded to the nearest whole percentage) from the stack serving this emissions unit (S/N 322).

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with this emission limitation through visible emission observations performed in accordance with 40 CFR Part 60, Section 60.374 using methods and procedures specified in Method 9 of 40 CFR Part 60, Appendix A and Section 60.11.

Testing of S/N 322 on July 21, 2016 demonstrated visible emissions of 0% opacity.

c. Emission Limitation:

Combined particulate emissions from the stack serving P038, P039, P041, P042 and P096 through P099 shall not exceed 1.56 pounds per hour (S/N 322).

Applicable Compliance Method:

This emissions limitation was established to reflect the potential to emit for these emissions units by a calculation utilizing a company-supplied emission factor (0.010 gr PE/dscf) multiplied by an exhaust gas flow rate (18,206 dscfm) and by 60 minutes per hour and then divided by 7,000 grains per pound.

If required, the permittee shall demonstrate compliance with this emissions limitation through emission testing performed in accordance with Methods 1 through 5 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior written approval from the Ohio EPA.

Testing of S/N 322 performed on July 21, 2016 demonstrated a PE concentration of 0.0185877 lb/hr at 17,872 dscfm).

d. Emission Limitation:

Combined PE from the stack serving P038, P039, P041, P042 and P096 through P099 shall not exceed and 6.84 tons per year (S/N 322).

Applicable Compliance Method:

This emissions limitation was established to reflect the potential to emit for these emissions units by a calculation utilizing a company-supplied emission factor (0.010 gr PE/dscf) multiplied by an exhaust gas flow rate (18,206 dscfm) and by 60 minutes per hour and by 8,760 hours per year and then divided by 7,000 grains per pound and by 2,000 pounds per ton.

e. Emission Limitation:

Combined PM10 from the stack serving P038, P039, P041, P042 and P096 through P099 shall not exceed 1.56 pounds per hour (S/N 322).

Applicable Compliance Method:

This emissions limitation was established to reflect the potential to emit for these emissions units by a calculation utilizing a company-supplied emission factor (0.010 gr PM10/dscf) multiplied by an exhaust gas flow rate (18,206 dscfm) and by 60 minutes per hour and then divided by 7,000 grains per pound.

If required, the permittee shall demonstrate compliance with this emissions limitation through emission testing performed in accordance with Methods 201 and 202 of 40 CFR Part 51, Appendix M. Alternative U.S. EPA approved test methods may be used with prior written approval from the Ohio EPA.

f. Emission Limitation:

Combined PM10 from the stack serving P038, P039, P041, P042 and P096 through P099 shall not exceed 6.84 tons per year (S/N 322).

Applicable Compliance Method:

This emissions limitation was established to reflect the potential to emit for these emissions units by a calculation utilizing a company-supplied emission factor (0.010 gr PM10/dscf) multiplied by an exhaust gas flow rate (18,206 dscfm) and by 60 minutes per hour and by 8,760 hours per year and then divided by 7,000 grains per pound and by 2,000 pounds per ton.

g. Emission Limitation:

Combined emissions of lead from the stack serving P038, P039, P041, P042 and P096 through P099 shall not exceed 0.068 pound per hour (S/N 322).

Applicable Compliance Method:

This emissions limitation was established to reflect the potential to emit for these emissions units by a calculation of the design criteria of NSPS KK emission factor (0.000437 gr Pb/dscf) multiplied by an exhaust gas flow rate (18,206 dscfm) and by 60 minutes per hour and then divided by 7,000 grains per pound.

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with 40 CFR Part 60, Sections 60.8 and 60.374 using methods and procedures specified in Method 12 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior written approval from the Ohio EPA.

Testing of S/N 322 performed on July 21, 2016 demonstrated a lead concentration of 0.0001486 lb/hr at 17,872 dscfm).

h. Emission Limitation:

Combined emissions of lead from the stack serving P038, P039, P041, P042 and P096 through P099 shall not exceed 0.30 ton per year (S/N 322).

Applicable Compliance Method:

This emissions limitation was established to reflect the potential to emit for these emissions units by a calculation of the design criteria of the NSPS KK emission factor (0.000437 gr Pb/dscf) multiplied by an exhaust gas flow rate (18,206 dscfm) and by 60 minutes per hour and by 8,760 hours per year and then divided by 7,000 grains per pound and by 2,000 pounds per ton.

(2) The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

a. The emission testing shall be conducted within 6 months of permit expiration. Additional testing may be required consistent with Ohio EPA DAPC Engineering Guide #16 or by request of the Ohio EPA or Toledo Division of Environmental Services.

b. The emission testing shall be conducted on the cylinder caster systems (P038, P039, P041, P042, P096-P099) stack (S/N 322) to demonstrate compliance with the allowable mass emission rate(s) for lead emissions, the 0% opacity limit, and the grains per dry standard cubic foot loading for lead emissions.

c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):

i. For lead, Methods 1-4 and Method 12 of 40 CFR Part 60, Appendix A and the procedures in 40 CFR Parts 60.11 and 60.374. The sampling time and sample volume for each run shall be at least 60 minutes and 30 dscf;

ii. For opacity, Method 9 of 40 CFR Part 60, Appendix A and the procedures in 40 CFR Parts 60.11 and 60.374.

Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

d. The permittee shall collect and record the static pressure drop across the control devices during testing.

e. During the emissions testing, the emissions unit shall be operated under operational conditions approved in advance by the appropriate Ohio EPA District Office or local air agency. Operational conditions that may need to be approved include, but are not limited to, the production rate, the type of material processed, material make-up (solvent content, etc.), or control equipment operational limitations (burner temperature, precipitator voltage, etc.). In general, testing shall be done under “worst case” conditions expected during the life of the permit. As part of the information provided in the “Intent to Test” notification form described below, the permittee shall provide a description of the emissions unit operational conditions they will meet during the emissions testing and describe why they believe “worst case” operating conditions will be met. Prior to conducting the test(s), the permittee shall confirm with the appropriate Ohio EPA District Office or local air agency that the proposed operating conditions

constitute "worst case". Failure to test under the approved conditions may result in Ohio EPA not accepting the test results as a demonstration of compliance.

f. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

g. Personnel from the Toledo Division of Environmental Services shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

h. A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Toledo Division of Environmental Services within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

(3) This emissions group (lead pots 1&2, plus cylinder casters 1-3 and 4-6) has a stated maximum production capacity of 14.4 tons of lead per hour. Production levels achieved during the July 21, 2016 stack testing for cylinder casters 4 and 5 – (which are part of the emissions group lead pots 1&2, plus cylinder casters 1-3 and 4-6) S/N 322 was 5.24 tons of lead per hour. Ohio EPA stack testing policy requires a review of the stack test results for sources where the production rate exceeds more than 10% the production rate determined during the most recent emission test which demonstrated compliance with the allowable mass emission rate for lead. Operation at a production rate greater than the compliant level is not indicative of an emission violation, but rather serves as a trigger level for additional testing and/or further investigation to establish compliance with the emission limitations.

g) Miscellaneous Requirements

None.