State of Ohio Environmental Protection Agency

**RE: FINAL PERMIT TO INSTALL MODIFICATION** **CERTIFIED MAIL**
**LUCAS COUNTY**

Street Address: 50 West Town Street, Suite 700
Lazarus Gov. Center **TELE:** (614) 644-3020 **FAX:** (614) 644-2329
Mailing Address: Lazarus Gov. Center P.O. Box 1049

**Application No: 04-01047**
**Fac ID:** 0448002011
**DATE: 11/6/2007**

Johnson Controls battery Group, Inc.
Chris Schlachter
10300 Industrial Road
Holland, OH 43528

Enclosed Please find a modification to the Ohio EPA Permit To Install referenced above which will modify the terms and conditions.

You are hereby notified that this action of the Director is final 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 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
309 South Fourth Street, Room 222
Columbus, OH 43215

Sincerely,

Michael W. Ahern

Michael W. Ahern, Manager
Permit Issuance and Data Management Section
Division of Air Pollution Control

CC: **USEPA** **TDES**

STATE OF OHIO ENVIRONMENTAL PROTECTION AGENCY

**Permit To Install** **Issue Date: 11/6/2007**
**Terms and Conditions** **Effective Date: 11/6/2007**

**FINAL ADMINISTRATIVE MODIFICATION OF PERMIT TO INSTALL 04-01047**

| | |
|---|---|
| Application Number: | 04-01047 |
| Facility ID: | 0448002011 |
| Permit Fee: | **$0** |
| Name of Facility: | Johnson Controls battery Group, Inc. |
| Person to Contact: | Chris Schlachter |
| Address: | 10300 Industrial Road<br>Holland, OH 43528 |

Location of proposed air contaminant source(s) [emissions unit(s)]:
**10300 Industrial Road**
**Holland**, **Ohio**

Description of proposed emissions unit(s):
**P041-P045: Cylinder Caster Nos. 2-4; Sovema Ball Mill Nos. 2 and 3 and 2 oxide storage tanks.**

The above named entity is hereby granted a modification to the permit to install described above pursuant to Chapter 3745-31 of the Ohio Administrative Code. Issuance of this modification does not constitute expressed or implied approval or agreement that, if constructed or modified in accordance with the plans included in the application, the above described source(s) of environmental pollutants will operate in compliance with applicable State and Federal laws and regulations, and does not constitute expressed or implied assurance that if constructed or modified in accordance with those plans included in the application, the above described source(s) of pollutants will be granted the necessary operating permits.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Chris Korleski
Director

## Part I - GENERAL TERMS AND CONDITIONS

### A. Permit to Install General Terms and Conditions

#### 1. Compliance Requirements

The emissions unit(s) identified in this Permit to Install shall remain in full compliance with all applicable State laws and regulations and the terms and conditions of this permit.

#### 2. Reporting Requirements

The permittee shall submit required reports in the following manner:

a. Reports of any required monitoring and/or recordkeeping information shall be submitted to the appropriate Ohio EPA District Office or local air agency.

b. Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (a) any deviations (excursions) from emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and recordkeeping requirements specified in this permit, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the appropriate Ohio EPA District Office or local air agency. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted (i.e., postmarked) quarterly by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

#### 3. Records Retention Requirements

Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include, but not be limited to, all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.

#### 4. Inspections and Information Requests

The Director of the Ohio EPA, or an authorized representative of the Director, may, subject to the safety requirements of the permittee and without undue delay, enter upon

the premises of this source at any reasonable time for purposes of making inspections, conducting tests, examining records or reports pertaining to any emission of air contaminants, and determining compliance with any applicable State air pollution laws and regulations and the terms and conditions of this permit. The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon verbal or written request, the permittee shall also furnish to the Director of the Ohio EPA, or an authorized representative of the Director, copies of records required to be kept by this permit.

**5. Scheduled Maintenance/Malfunction Reporting**

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction of any emissions units or any associated air pollution control system(s) shall be reported to the appropriate Ohio EPA District Office or local air agency in accordance with paragraph (B) of OAC rule 3745-15-06. Except as provided in that rule, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emissions unit(s) that is (are) served by such control system(s).

**6. Permit Transfers**

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The appropriate Ohio EPA District Office or local air agency must be notified in writing of any transfer of this permit.

**7. Air Pollution Nuisance**

The air contaminants emitted by the emissions units covered by this permit shall not cause a public nuisance, in violation of OAC rule 3745-15-07.

**8. Termination of Permit to Install**

This Permit to Install shall terminate within eighteen months of the effective date of the Permit to Install if the owner or operator has not undertaken a continuing program of installation or modification or has not entered into a binding contractual obligation to undertake and complete within a reasonable time a continuing program of installation or modification. This deadline may be extended by up to 12 months if application is made to the Director within a reasonable time before the termination date and the party shows good cause for any such extension.

**9. Construction of New Sources(s)**

The proposed emissions unit(s) shall be constructed in strict accordance with the plans and application submitted for this permit to the Director of the Ohio Environmental Protection Agency. There may be no deviation from the approved plans without the express, written approval of the Agency. Any deviations from the approved plans or the above conditions may lead to such sanctions and penalties as provided under Ohio law. Approval of these plans does not constitute an assurance that the proposed facilities will operate in compliance with all Ohio laws and regulations. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed sources cannot meet the requirements of this permit or cannot meet applicable standards.

If the construction of the proposed emissions unit(s) has already begun or has been completed prior to the date the Director of the Environmental Protection Agency approves the permit application and plans, the approval does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the approved plans. The action of beginning and/or completing construction prior to obtaining the Director's approval constitutes a violation of OAC rule 3745-31-02. Furthermore, issuance of the Permit to Install does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Approval of the plans in any case is not to be construed as an approval of the facility as constructed and/or completed. Moreover, issuance of the Permit to Install is not to be construed as a waiver of any rights that the Ohio Environmental Protection Agency (or other persons) may have against the applicant for starting construction prior to the effective date of the permit. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed facilities cannot meet the requirements of this permit or cannot meet applicable standards.

**10. Public Disclosure**

The facility is hereby notified that this permit, and all agency records concerning the operation of this permitted source, are subject to public disclosure in accordance with OAC rule 3745-49-03.

**11. Applicability**

This Permit To Install is applicable only to the emissions unit(s) identified in the Permit To Install. Separate Permit To Install for the installation or modification of any other emissions unit(s) are required for any emissions unit for which a Permit To Install is required.

**12. Best Available Technology**

As specified in OAC Rule 3745-31-05, all new sources must employ Best Available Technology (BAT). Compliance with the terms and conditions of this permit will fulfill this requirement.

**13. Source Operation and Operating Permit Requirements After Completion of Construction**

This facility is permitted to operate each source described by this Permit to Install for a period of up to one year from the date the source commenced operation. This permission to operate is granted only if the facility complies with all requirements contained in this permit and all applicable air pollution laws, regulations, and policies. Pursuant to OAC Chapter 3745-35, the permittee shall submit a complete operating permit application within ninety (90) days after commencing operation of the emissions unit(s) covered by this permit.

**14. Construction Compliance Certification**

The applicant shall provide Ohio EPA with a written certification (see enclosed form) that the facility has been constructed in accordance with the Permit to Install application and the terms and conditions of the Permit to Install. The certification shall be provided to Ohio EPA upon completion of construction but prior to startup of the source.

**15. Fees**

The permittee shall pay fees to the Director of the Ohio EPA in accordance with ORC section 3745.11 and OAC Chapter 3745-78. The permittee shall pay all applicable Permit to Install fees within 30 days after the issuance of this Permit to Install.

**B. Permit to Install Summary of Allowable Emissions**

The following information summarizes the total allowable emissions, by pollutant, based on the individual allowable emissions of each air contaminant source identified in this permit.

SUMMARY (for informational purposes only)
TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS

| Pollutant | Tons Per Year |
|---|---|
| PE | 2.33 |
| Lead | 0.127 |

Emissions Unit ID: **P041**

## PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. Applicable Emissions Limitations and/or Control Requirements

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

**Operations, Property, and/or Equipment - (P041) - Cylinder Caster No. 2 with no controls**

| Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|
| OAC rule 3745-31-05(A)(3) | Particulate emissions (PE) shall not exceed 0.04 pound per hour and 0.18 ton per year; |
| | Lead emissions shall not exceed 0.003 pound per hour and 0.013 ton per year; and |
| | See sections A.I.2.a and A.I.2.b. |
| 40 CFR Part 60, Subpart KK | Lead emissions shall not exceed 0.000437 gr/dscf; and see section A.I.2.c and A.I.2.d. |
| OAC rule 3745-17-07(A)(1) | See section A.I.2.e. |
| OAC rule 3745-17-11(B)(1) | See section A.I.2.f. |

**2. Additional Terms and Conditions**

**2.a** The requirements of this rule also include compliance with the requirements of 40 CFR 60, Subpart KK.

**2.b** The hourly and annual emission limitations were established to reflect the potential to emit for this emissions unit. Therefore, it is not necessary to develop monitoring, recordkeeping and/or reporting requirements to ensure compliance with these limitations.

**2.c** Visible particulate emissions, from the stack(s) serving this emissions unit, shall not exceed 0% opacity as a 6-minute average.

**2.d** 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.

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

**2.f** The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

## B. Operational Restrictions

None

## C. Monitoring and/or Recordkeeping Requirements

None

## D. Reporting Requirements

None

## E. Testing Requirements

1. Compliance with the emission limitations in Section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

   a. Emission Limitation:

      Lead emissions shall not exceed 0.000437 gr/dscf.

      Applicable Compliance Method:

      This emission limitation was established to reflect the potential to emit for this emissions unit. Compliance may be demonstrated based on the most recent stack test.

      If required, the permittee shall demonstrate compliance with this emission limitation 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. The sampling time and sample volume for each run shall be at least 60 minutes and 30 dscf.

   b. Emission Limitation:

0 percent opacity, as a 6-minute average.

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with this emission limitation 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.

The opacity numbers shall be rounded of to the nearest whole percentage.

c. Emission Limitation:

PE shall not exceed 0.04 pound per hour.

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with this emission limitation in accordance with the methods and procedures specified in Methods 1 through 5 of 40 CFR Part 60, Appendix A and the procedures in OAC rule 3745-17-03(B)(9).

d. Emission Limitation:

PE shall not exceed 0.18 ton per year.

Applicable Compliance Method:

The 0.18 tpy emission limitation was developed by multiplying the 0.04 lb/hour emission rate by a maximum operating schedule of 8760 hours/year and dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance shall also be shown with the annual emission limitation.

e. Emission Limitation:

Lead emissions shall not exceed 0.003 pound per hour.

Applicable Compliance Method:

This emission limitation was established to reflect the potential to emit for this emissions unit. Compliance may be demonstrated based on the most recent stack test.

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

f. Emission Limitation:

Lead emissions shall not exceed 0.013 ton per year.

Applicable Compliance Method:

The 0.013 tpy emission limitation was developed by multiplying the 0.003 lb/hour emission rate by a maximum operating schedule of 8760 hours/year and dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance shall also be shown with the annual emission limitation.

## F. Miscellaneous Requirements

None

**Modification Issued: 11/6/2007**

**PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)**

**A. Applicable Emissions Limitations and/or Control Requirements**

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

**Operations, Property, and/or Equipment -(P042) - Cylinder Caster No. 3 with no controls**

| Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|
| OAC rule 3745-31-05(A)(3) | Particulate emissions (PE) shall not exceed 0.04 pound per hour and 0.18 ton per year; |
| | Lead emissions shall not exceed 0.003 pound per hour and 0.013 ton per year; and |
| | See sections A.I.2.a and A.I.2.b. |
| 40 CFR Part 60, Subpart KK | Lead emissions shall not exceed 0.000437 gr/dscf; and see section A.I.2.c and A.I.2.d. |
| OAC rule 3745-17-07(A)(1) | See section A.I.2.e. |
| OAC rule 3745-17-11(B)(1) | See section A.I.2.f. |

**2. Additional Terms and Conditions**

**2.a** The requirements of this rule also include compliance with the requirements of 40 CFR 60, Subpart KK.

**2.b** The hourly and annual emission limitations were established to reflect the potential to emit for this emissions unit. Therefore, it is not necessary to develop monitoring, recordkeeping and/or reporting requirements to ensure compliance with these limitations.

**2.c** Visible particulate emissions, from the stack(s) serving this emissions unit, shall not exceed 0% opacity as a 6-minute average.

**2.d** 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.

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

**2.f** The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

## B. Operational Restrictions

None

## C. Monitoring and/or Recordkeeping Requirements

None

## D. Reporting Requirements

None

## E. Testing Requirements

1. Compliance with the emission limitations in Section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

   a. Emission Limitation:

   Lead emissions shall not exceed 0.000437 gr/dscf.

   Applicable Compliance Method:

   This emission limitation was established to reflect the potential to emit for this emissions unit. Compliance may be demonstrated based on the most recent stack test.

   If required, the permittee shall demonstrate compliance with this emission limitation 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. The sampling time and sample volume for each run shall be at least 60 minutes and 30 dscf.

b. Emission Limitation:

0 percent opacity, as a 6-minute average.

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with this emission limitation 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.

The opacity numbers shall be rounded of to the nearest whole percentage.

c. Emission Limitation:

PE shall not exceed 0.04 pound per hour.

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with this emission limitation in accordance with the methods and procedures specified in Methods 1 through 5 of 40 CFR Part 60, Appendix A and the procedures in OAC rule 3745-17-03(B)(9).

d. Emission Limitation:

PE shall not exceed 0.18 ton per year.

Applicable Compliance Method:

The 0.18 tpy emission limitation was developed by multiplying the 0.04 lb/hour emission rate by a maximum operating schedule of 8760 hours/year and dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance shall also be shown with the annual emission limitation.

e. Emission Limitation:

Lead emissions shall not exceed 0.003 pound per hour.

Applicable Compliance Method:

This emission limitation was established to reflect the potential to emit for this emissions unit. Compliance may be demonstrated based on the most recent stack test.

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

f. Emission Limitation:

Lead emissions shall not exceed 0.013 ton per year.

Applicable Compliance Method:

The 0.013 tpy emission limitation was developed by multiplying the 0.003 lb/hour emission rate by a maximum operating schedule of 8760 hours/year and dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance shall also be shown with the annual emission limitation.

## F. Miscellaneous Requirements

None

**Modification Issued: 11/6/2007**

**PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)**

**A. Applicable Emissions Limitations and/or Control Requirements**

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

**Operations, Property, and/or Equipment -(P044) - Sovema Ball Mill No. 2 controlled by the Sovema 2 baghouse followed by a HEPA filter and an oxide storage tank controlled by a Cyclonic baghouse followed by a HEPA filter**

| Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|
| Sovema Ball Mill #2 - controlled by a Sovema baghouse followed by a HEPA filter. | |
| OAC rule 3745-31-05(A)(3) | Particulate emissions (PE) shall not exceed 0.20 lb/hr and 0.88 ton per year; |
| | Lead emissions shall not exceed 0.01 lb/hr and 0.05 ton per year; |
| | and see Section A.2.a. |
| 40 CFR Part 60, Subpart KK | 0.01 lb lead/ton lead feed for all the emission units comprising the lead oxide manufacturing facility; and see Section A.2.b. |
| | Visible particulate emissions, from all stacks serving this emissions unit, shall not exceed 0% opacity as a 6-minute average. |
| OAC rule 3745-17-07(A)(1) | See section A.2.c. |
| OAC rule 3745-17-11(B)(1) | See section A.2.d. |
| Oxide Storage Tank - controlled by a Cyclonic baghouse followed by a HEPA filter. | |
| OAC rule 3745-31-05(A)(3) | Particulate emissions (PE) shall not exceed 0.01 lb/hr and 0.05 ton per year; |
| | Lead emissions shall not exceed 0.001 pound per hour and 0.005 ton per year; and |
| | see Section A.2.a. |

| | |
|---|---|
| 40 CFR Part 60, Subpart KK | 0.01 lb lead/ton of lead feed for all the emission units comprising the lead oxide manufacturing facility; and see Section A.2.b. |
| | Visible particulate emissions, from all stacks serving this emissions unit, shall not exceed 0% opacity as a 6-minute average. |
| OAC rule 3745-17-07(A)(1) | See section A.2.c. |
| OAC rule 3745-17-11(B)(1) | See section A.2.d. |

**2. Additional Terms and Conditions**

**2.a** The requirements of this rule also include compliance with the requirements of 40 CFR 60, Subpart KK.

**2.b** 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.

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

**2.d** The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05.

**B. Operational Restrictions**

1. The permittee shall operate and maintain a two-stage HEPA filter system. The pressure drop across the first bank of HEPA filters shall not exceed 3 inches of water column (WC) while the emissions unit is in operation. The pressure drop across the second bank of HEPA filters shall be between 1 to 3.5 inches WC [except after replacement or complete cleaning of the HEPA filters] at which time a pressure drop of less than 1 inch WC shall be acceptable.

   Operation of the HEPA filtration system at a pressure drop(s) outside the range specified above does not by itself constitute a violation of the mass emissions limitation and/or visible emission limitation, but rather serves as an indicator of the need for additional stack testing and/or further investigation to establish compliance with the emission limitations.

## C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall properly install, operate, and maintain a monitoring device capable of accurately measuring the pressure drop across this control device. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s).

2. The permittee shall check the pressure drop across this control device a minimum of once per day when the unit is in operation and maintain daily records of the pressure drop readings.

## D. Reporting Requirements

1. The permittee shall submit pressure drop deviation (excursion) reports that identify that all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above.

2. The deviation reports shall be submitted quarterly by January 31, April 30, July 31, and October 31 of each year and shall cover the previous 3 calendar months. If no deviations occurred during a three-month period, the permittee shall submit a quarterly report, which states that no deviations occurred during that period. These reports shall be submitted to the Toledo Division of Environmental Services, 348 South Erie Street, Toledo, Ohio 43604.

## E. Testing Requirements

1. Compliance with the emission limitations in Section A.1 of these terms and conditions shall be determined in accordance with the following methods:

   a. Emission Limitation:

      0.01 lb lead/ton of lead feed for all the emission units comprising the lead oxide manufacturing facility

      Applicable Compliance Method:

      If required, the permittee shall demonstrate compliance with this emission limitation thru stack testing of all affected sources (emissions units P038 thru P046, P062, Sovema day tanks 1 and 2, P063 and P064) 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.

b. Emission Limitation:

0 percent opacity, as a 6-minute average

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.

c. Emission Limitation:

PE shall not exceed 0.20 pound per hour for the Sovema Ball Mill.

Applicable Compliance Method:

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 using the methods and procedures specified in OAC rule 3745-17-03(B)(10). Alternative U.S. EPA approved test methods may be used with prior written approval from the Ohio EPA.

d. Emission Limitation:

PE shall not exceed 0.88 ton per year for the Sovema Ball Mill.

Applicable Compliance Method:

The 0.88 tpy emission limitation was developed by multiplying the 0.20 lb/hr emission rate by a maximum operating schedule of 8,760 hours/year and dividing by 2,000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance shall also be shown with the annual emission limitation.

e. Emission Limitation:

Lead emissions shall not exceed 0.01 pound per hour from the Sovema Ball Mill.

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with the 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.

f. Emission Limitation:

Lead emissions shall not exceed 0.05 ton per year from the Sovema Ball Mill.

Applicable Compliance Method:

The 0.05 tpy emission limitation was developed by multiplying the 0.01 lb/hr emission rate by a maximum operating schedule of 8,760 hours/year and dividing by 2,000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance shall also be shown with the annual emission limitation.

g. Emission Limitation:

PE shall not exceed 0.01 pound per hour for the Oxide Storage Tanks.

Applicable Compliance Method:

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 using the methods and procedures specified in OAC rule 3745-17-03(B)(10). Alternative U.S. EPA approved test methods may be used with prior written approval from the Ohio EPA.

h. Emission Limitation:

PE shall not exceed 0.05 ton per year for the Lead Oxide Storage Tanks.

Applicable Compliance Method:

The 0.05 tpy emission limitation was developed by multiplying the 0.01 lb/hr emission rate by a maximum operating schedule of 8,760 hours/year and dividing by 2,000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance shall also be shown with the annual emission limitation.

i. Emission Limitation:

Lead emissions shall not exceed 0.001 pound per hour from the Lead Oxide Storage Tank.

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with this emission

limitation through emission testing performed in accordance with the 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.

j. Emission Limitation:

Lead emissions shall not exceed 0.005 ton per year from the Lead Oxide Storage Tank.

Applicable Compliance Method:

The 0.005 tpy emission limitation was developed by multiplying the 0.001 lb/hr emission rate by a maximum operating schedule of 8,760 hours/year and dividing by 2,000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance shall also be shown with the annual emission limitation.

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 180 days prior to permit expiration.

b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate(s) for lead emissions.

c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): for lead, Method 12 of 40 CFR Part 60, Appendix A. The sampling time and sample volume for each run shall be at least 60 minutes and 30 dscf. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

d. The test(s) shall be conducted while all of the emissions units served by the stack are operating at or near their maximum capacity, unless otherwise specified or approved by the Toledo Division of Environmental Services.

e. 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).

f. 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.

g. 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.

**F. Miscellaneous Requirements**

None

**Modification Issued: 11/6/2007**

**PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)**

**A. Applicable Emissions Limitations and/or Control Requirements**

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

**Operations, Property, and/or Equipment -(P045) - Sovema Ball Mill No. 3 controlled by Sovema 3 baghouse followed by a HEPA filter and Oxide Storage Tank controlled by the a Cyclonic baghouse followed by a HEPA filter**

| Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|
| Sovema Ball Mill #3 - controlled by Sovema #3 baghouse followed by a HEPA filter. | |
| OAC rule 3745-31-05(A)(3) | Particulate emissions (PE) shall not exceed 0.20 lb/hr and 0.88 ton per year; |
| | Lead emissions shall not exceed 0.01 lb/hr and 0.05 ton per year; |
| | and see Section A.2.a. |
| 40 CFR Part 60, Subpart KK | 0.01 lb lead/ton of lead feed for all the emission units comprising the lead oxide manufacturing facility; and see Section A.2.b. |
| | Visible particulate emissions, from all stacks serving this emissions unit, shall not exceed 0% opacity as a 6-minute average. |
| OAC rule 3745-17-07(A)(1) | See section A.2.c. |
| OAC rule 3745-17-11(B)(1) | See section A.2.d. |
| Oxide Storage Tank - controlled by a Cyclonic baghouse followed by a HEPA filter. | |
| OAC rule 3745-31-05(A)(3) | Particulate emissions (PE) shall not exceed 0.01 lb/hr and 0.05 ton per year; |
| | Lead emissions shall not exceed 0.001 pound per hour and 0.005 ton per year; and |
| | see Section A.2.a. |

| | |
|---|---|
| 40 CFR Part 60, Subpart KK | 0.01 lb lead/ton of lead feed for all the emission units comprising the lead oxide manufacturing facility; and see Section A.2.b. |
| | Visible particulate emissions, from all stacks serving this emissions unit, shall not exceed 0% opacity as a 6-minute average. |
| OAC rule 3745-17-07(A)(1) | See section A.2.c. |
| OAC rule 3745-17-11(B)(1) | See section A.2.d. |

**2. Additional Terms and Conditions**

**2.a** The requirements of this rule also include compliance with the requirements of 40 CFR 60, Subpart KK.

**2.b** 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.

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

**2.d** The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05.

**B. Operational Restrictions**

1. The permittee shall operate and maintain a two-stage HEPA filter system. The pressure drop across the first bank of HEPA filters shall not exceed 3 inches of water column (WC) while the emissions unit is in operation. The pressure drop across the second bank of HEPA filters shall be between 1 to 3.5 inches WC [except after replacement or complete cleaning of the HEPA filters] at which time a pressure drop of less than 1 inch WC shall be acceptable.

   Operation of the HEPA filtration system at a pressure drop(s) outside the range specified above does not by itself constitute a violation of the mass emissions limitation and/or visible emission limitation, but rather serves as an indicator of the need for additional stack testing and/or further investigation to establish compliance with the emission limitations.

## C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall properly install, operate, and maintain a monitoring device capable of accurately measuring the pressure drop across this control device. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s).

2. The permittee shall check the pressure drop across this control device a minimum of once per day when the units are in operation and maintain daily records of the pressure drop readings.

## D. Reporting Requirements

1. The permittee shall submit pressure drop deviation (excursion) reports that identify that all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above.

2. The deviation reports shall be submitted quarterly by January 31, April 30, July 31, and October 31 of each year and shall cover the previous 3 calendar months. If no deviations occurred during a three-month period, the permittee shall submit a quarterly report, which states that no deviations occurred during that period. These reports shall be submitted to the Toledo Division of Environmental Services, 348 South Erie Street, Toledo, Ohio 43604.

## E. Testing Requirements

1. Compliance with the emission limitations in Section A.1 of these terms and conditions shall be determined in accordance with the following methods:

   a. Emission Limitation:

      0.01 lb lead/ton of lead feed for all the emission units comprising the lead oxide manufacturing facility

      Applicable Compliance Method:

      If required, the permittee shall demonstrate compliance with this emission limitation thru stack testing of all affected sources (emissions units P038 thru P046, P062, Sovema day tanks 1 and 2, P063 and P064) 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.

b. Emission Limitation:

0 percent opacity, as a 6-minute average

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.

c. Emission Limitation:

PE shall not exceed 0.20 pound per hour for the Sovema Ball Mill.

Applicable Compliance Method:

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 using the methods and procedures specified in OAC rule 3745-17-03(B)(10). Alternative U.S. EPA approved test methods may be used with prior written approval from the Ohio EPA.

d. Emission Limitation:

PE shall not exceed 0.88 ton per year for the Sovema Ball Mill.

Applicable Compliance Method:

The 0.88 tpy emission limitation was developed by multiplying the 0.20 lb/hr emission rate by a maximum operating schedule of 8,760 hours/year and dividing by 2,000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance shall also be shown with the annual emission limitation.

e. Emission Limitation:

Lead emissions shall not exceed 0.01 pound per hour from the Sovema Ball Mill.

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with the 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.

f. Emission Limitation:

Lead emissions shall not exceed 0.05 ton per year from the Sovema Ball Mill.

Applicable Compliance Method:

The 0.05 tpy emission limitation was developed by multiplying the 0.01 lb/hr emission rate by a maximum operating schedule of 8,760 hours/year and dividing by 2,000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance shall also be shown with the annual emission limitation.

g. Emission Limitation:

PE shall not exceed 0.01 pound per hour for the Oxide Storage Tanks.

Applicable Compliance Method:

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 using the methods and procedures specified in OAC rule 3745-17-03(B)(10). Alternative U.S. EPA approved test methods may be used with prior written approval from the Ohio EPA.

h. Emission Limitation:

PE shall not exceed 0.05 ton per year for the Lead Oxide Storage Tanks.

Applicable Compliance Method:

The 0.05 tpy emission limitation was developed by multiplying the 0.01 lb/hr emission rate by a maximum operating schedule of 8,760 hours/year and dividing by 2,000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance shall also be shown with the annual emission limitation.

i. Emission Limitation:

Lead emissions shall not exceed 0.001 pound per hour from the Lead Oxide Storage Tank.

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with this emission

limitation through emission testing performed in accordance with the 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.

j. Emission Limitation:

Lead emissions shall not exceed 0.005 ton per year from the Lead Oxide Storage Tank.

Applicable Compliance Method:

The 0.005 tpy emission limitation was developed by multiplying the 0.001 lb/hr emission rate by a maximum operating schedule of 8,760 hours/year and dividing by 2,000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance shall also be shown with the annual emission limitation.

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 180 days prior to permit expiration.

b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate(s) for lead emissions.

c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): for lead, Method 12 of 40 CFR Part 60, Appendix A. The sampling time and sample volume for each run shall be at least 60 minutes and 30 dscf. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

d. The test(s) shall be conducted while all of the emissions units served by the stack are operating at or near their maximum capacity, unless otherwise specified or approved by the Toledo Division of Environmental Services.

e. 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).

f. 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.

g. 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.

**F. Miscellaneous Requirements**

None