M E M O R A N D U M

DATE: July 3, 2012

TO: Richard D. Garrity, Ph.D.

FROM: Stephen Hathaway, P.E. **THRU:** Diana M. Lee, P.E.
Sterlin K. Woodard, P.E.

SUBJECT: FESOP Permit Revision/Renewal – Johnson Controls Battery Group, Inc.
Permit No.: 0570001-030-AF

Attached is Permit No. 0570001-030-AF to renew the operation permit for the facility and incorporate Permit No. 0570001-029-AC for the Cast-On-Strap (COS) line modifications. Permit No. 0570001-029-AC authorized the replacement of COS Lines 3 and 4, the decoupling of the associated stackers, the removal of COS Line 5, as well as the installation of a sixth Chemset curing chamber and associated heater. The AC Permit also included the rearrangement of the baghouses controlling the COS operations. Johnson Controls Battery Group, Inc. manufactures automotive and marine batteries and is a synthetic minor source for both PM and lead.

Lead ingots are melted and cast by a strip caster to make grids. Pasting machines force a paste of lead oxide powder, water, and sulfuric acid into the interstices of the expanded grids after which these are referred to as plates. Lead oxide powder may be made at the plant by charging lead ingots into two ball mills, which pulverizes the lead ingots and combines the lead with air to form lead oxide. Fresh made lead oxide is brought to the facility by trucks and stored on site in two storage silos.

The pasted plates are flash dried, cut, stacked, and then placed on plate trucks. The plate trucks are placed in one of six Chemset Chambers where the plates are cured in a controlled environment. The cured plates are then stacked into groups. The groups are loaded in one of the four COS machines where molten lead is poured around the plate lugs to form a strap. The group of plates joined by a strap is called an element. The elements are assembled into battery cases. The straps are welded to each other to connect the elements. A cover is then heat sealed to the battery case. The batteries are then immersed in a dilute sulfuric acid solution and connected to the corresponding pole of a direct current source. Central vacuum systems are used to cleanup workstations and attend to any lead oxide spills in the plant.

In the past five years, there were no complaints received regarding this facility. However, three warning notices were issued during the past 5-year period. The most recent Warning Notice, 2012-0137A, was issued on May 29, 2012 for the exceedance of the baghouse pressure drop range on the Central Vacuum System No. 2 baghouse during Calendar Year 2011. This case is currently being reviewed by staff.

On November 15, 2011, Warning Notice 2011-0203A was issued to Johnson Controls for operating EU 018 COS Line No. 2 without the baghouse operating properly and for not following the lead oxide unloading procedures as required by the permit. The improper baghouse operation was due to a fire that occurred in the baghouse for unknown reasons. The facility conducted subsequent dye tests, engineering stack tests, and had the baghouse refurbished by a reputed baghouse manufacturer. Finally, the baghouse was re-tested on February 9, 2012 and demonstrated compliance with the emissions standards. Furthermore, the facility installed a continuous particulate monitor on the exhaust stack for COS Line No. 2 that is capable of detecting emissions as low as 0.5 mg/m^3 (0.00022 gr/dscf). In addition, the facility revised its lead oxide unloading procedures, which are attached to this permit. After a detailed investigation, the Warning Notice was sent to Enforcement on June 4, 2012.

The last warning notice, Warning Notice 2008-0010A, was issued on January 31, 2008 to Johnson Controls for failing the annual Pb compliance test on EU 047 Trim Dry Oven and for failing to submit the test report within 45 days of completion. The facility retested on February 7, 2008 and demonstrated compliance. The facility believed that the cause of the emissions exceedance was a damper adjustment made just prior to the compliance test which dislodged some lead bearing material. The violation was resolved through Enforcement Case No. CN07-1113AR0001 which was closed on March 3, 2009.

The Pb, PM, and VE compliance testing required by Permit No. 0570001-029-AC was completed in October 2011. These tests were reviewed by Air Compliance staff and were found to be in Compliance. All of the annual tests required by the operating permit have been conducted in accordance with the permitted requirements.

The lead and particulate emissions from the facility are regulated under Rules 62-296.602 and 62-296.712, F.A.C., Reasonably Available Control Technology (RACT) for Lead and Particulate Matter, respectively, 40 CFR 60 - Subpart KK, and 40 CFR 63 – Subpart PPPPPP.

Based on our review, we recommend the issuance of this permit as drafted.

SRH: 0570001-030-AF

ENVIRONMENTAL PROTECTION COMMISSION OF
HILLSBOROUGH COUNTY, as Delegated by

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

NOTICE OF PERMIT

Ms. Tracy Breeding
Plant Manager
Johnson Controls Battery Group, Inc.
10215 North 30th Street
Tampa, FL 33612

File No.: 0570001-030-AF
County: Hillsborough

Re: Hillsborough County – Air Permitting

Dear Ms. Breeding:

Enclosed is renewal Permit Number 0570001-030-AF to operate a primary lead acid battery manufacturing plant, issued pursuant to Section 403.087, Florida Statutes. This permit also incorporates Permit No. 0570001-029-AC for the COS modifications and sixth Chemset curing chamber. Please read this new permit thoroughly as there are changes from the previous permit.

The EPC will issue the final permit with the attached conditions unless a timely petition for an administrative hearing is filed pursuant to Section 120.569 and 120.57 F.S. before the deadline for filing a petition. The procedures for petitioning for a hearing are set forth below.

A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative proceeding (hearing) under Sections 120.569 and 120.57, F.S. The petition must contain the information set forth below and must be filed (received) in the Legal Department of the EPC at 3629 Queen Palm Dr., Tampa, Florida 33619, Phone 813-627-2600, Fax 813-627-2602. Petitions filed by the permit applicant or any of the parties listed below must be filed within 14 (fourteen) days of receipt of this notice of intent. Petitions filed by any persons other than those entitled to written notice under Section 120.60(3), F.S. must be filed within 14 (fourteen) days of receipt of this permit. Under Section 120.60(3), however, any person who asked the EPC for notice of agency action may file a petition within 14 (fourteen) days of receipt of that notice, regardless of the date of publication.

A petitioner shall mail a copy of the petition to the applicant at the address indicated above, at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57, F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205 of the F.A.C.

A petition that disputes the material facts on which the EPC's action is based is required to contain the following information:

(a) The name and address of each agency affected and each agency's file or identification number if known;
(b) The name, address, and telephone number of the petitioner and the name, address, and telephone number of each petitioner's representative, if any, which shall be the address for service purposes during the course of the proceedings; and an explanation of how the petitioner's substantial interests will be affected by the EPC's determination;
(c) A statement of how and when the petitioner received notice of the EPC action;
(d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate;
(e) A concise statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the EPC's proposed action;
(f) A statement of specific rules or statutes that the petitioner contends requires reversal or modification of the EPC's proposed action, including an explanation of how the alleged facts relate to the specific rules or statutes; and
(g) A statement of the relief sought by the petitioner, stating precisely the action petitioner wishes the EPC to take with respect to the EPC's proposed action.

A petition that does not dispute the material facts upon which the EPC's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above as required by Rule 28-106.301.

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the EPC's final action may be different from the position taken by it in this notice. Persons whose substantial interests will be affected by any such final decision of the EPC on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

Mediation under section 120.573, F.S. is not available in this proceeding.

This action is final and effective on the date filed with the Clerk of the EPC unless a petition is filed in accordance with above. Upon the timely filing of a petition, this order will not be effective until further order of the EPC.

Any person listed below may request to obtain additional information, a copy of the application

(except for information entitled to confidential treatment pursuant to Section 403.111,

F.S.), all relevant supporting materials, and all other materials available to the EPC that are relevant to the permit decision. Interested persons may contact Diana M. Lee, P.E., at the above address or call (813) 627-2600, for additional information.

Any party to this order has the right to seek judicial review of it under Section 120.68 of the Florida Statues, by filing a notice of appeal under rule 9.110 of the Florida rules of Appellate Procedure with the EPC's Legal Office at 3629 Queen Palm Dr., Tampa, Florida 33619 and with the clerk of the Department of Environmental Protection in the Office of General Counsel, Mail Station 35, 3900 Commonwealth Boulevard, Tallahassee, Florida 32399-3000, and by filing a copy of the notice of appeal accompanied by the applicable filing fees with the appropriate district court of appeal. The notice must be filed within thirty days after this order is filed with the clerk of the Department.

Executed in Tampa, Florida

Sincerely,

_____

Richard D. Garrity, Ph.D.
Executive Director

RDG/SRH/srh

cc: Florida Department of Environmental Protection, Southwest District - via email
Mr. Donald Wilhelmsen – Johnson Controls Battery Group, Inc.

CERTIFICATE OF SERVICE

This is to certify that this NOTICE OF PERMIT and all copies were mailed before the close of business on _____ to the listed persons.

Clerk Stamp
FILED, on this date, pursuant to Section 120.52(11), Florida Statutes, with the designated clerk, receipt of which is hereby acknowledged.

_____ _____
Clerk Date

PERMITTEE:	PERMIT/CERTIFICATION
Ms. Tracy Breeding	Permit No.: 0570001-030-AF
Plant Manager	County: Hillsborough
Johnson Controls Battery Group, Inc.	Expiration Date: July 3, 2017
10215 N. 30th St.	Project: Lead Acid Battery Manufacturing Plant
Tampa, FL 33612	(COS Modifications, Chemset No. 6)

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Rules 62-204, 62-210, 62-212, 62-296, 62-297, and 62-4. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans, and other documents, attached hereto or on file with the EPC and made a part hereof and specifically described as follows:

For the operation of a primary marine and automotive lead acid battery manufacturing plant.

The facility receives lead ingots (pigs or hogs) by truck, which are then transferred to the lead storage area to await processing in the two lead oxide mills. To make lead oxide powder, lead ingots are melted and cast into lead pellets in the Sovema lead pot. The pellets are then conveyed to an indoor, 40 ton storage silo. From the storage silo, the pellets are pneumatically conveyed to a Sovema ball mill where the pellets are crushed to make lead oxide powder. A second type of ball mill, the Hardinge Ball Mill, crushes lead ingots into lead oxide powder. The powder from both mills is pneumatically conveyed and stored in two day tanks or in two storage silos designated as North and South PbO silos. The day tanks store the lead oxide powder that will be used in production that day and the storage silos store the excess lead oxide powder. Lead oxide powder is also shipped in by truck and pneumatically conveyed into the two storage silos.

To make a coil of negative grids, lead is melted in the strip caster and then rolled. The coil then goes to a die cutter where the grid is stretched and a pattern is punched into it. Positive grids are manufactured off-site and shipped to the facility. Once stretched and punched, a paste of lead oxide powder, water, sulfuric acid, an expander, and other additives are forced into the interstices of the negative grids after which these are referred to as plates. A paste of lead oxide powder, water, and sulfuric acid is forced into the interstices of the positive grids after which these are also referred to as plates. The pastes are mixed in two mixers above the pasting lines, gravity fed into a hopper, and then applied to the plates. One mixer makes the paste exclusively for the positive plates and one makes the paste exclusively for the negative plates.

The pasted plates are flash dried, cut, stacked, and then placed on plate trucks. The plate trucks are placed in one of six Chemset Chambers where the plates are cured in a controlled environment. Chamber Nos. 1-4 have two heaters each. Chamber No. 5 and 6 each have one heater. The heaters run on natural gas with no back up fuel.

In the assembly area, cured plates are stacked into groups and sent to one of four Cast-On-Strap (COS) lines. At the COS lines, the plates are assembled in the correct configuration and lead is melted and cast (strapped) on the lugs of the plates to connect the plates to each other. The group of plates joined by a strap is called an element. The elements are then placed in a battery casing. The battery is then sent to a welding station where the plates are welded together. A heat seal seals the top onto the battery casing and the battery is sent to a station where it is filled with a mixture of sulfuric acid and water. The batteries are connected to the corresponding pole of a direct current source.

Central vacuum systems are used to clean up workstations and attend to any lead oxide spills in the plant.

The pollutants from the plant emission units are identified along with their respective control device and stack designations in the table below. Pasting Line No.1 and the Hardinge Ball Mill Bearings Vent share the same baghouse and exhaust stack. The Hardinge Ball Mill Process Vent is controlled by two baghouses operating in series; however, the majority of the exhaust from the first baghouse is recirculated back to the ball mill so the exhaust flow to the stack is reduced.

Source	**EU No.**	**Pollutant**	**Control Device**	**Stack No.**
Casting Facility				
One (1) Strip Caster	035	PM, Pb, Opacity	Doral AR Mist Collector, 3,500 dscfm	232
One (1) Strip Caster Heater	036	NO_x, PM, VOC, CO, SOx, Opacity	None	233
Paste Mixing Facility				
PbO Bulk Storage and Handling	014	PM, Pb, Opacity	(2) parallel 1300 DSCFM Flex Kleen BV Model 58 baghouses, each followed by Scientific MP-4 HEPA filters and a combined discharge (1,600 acfm)	338
Pasting Line No. 1	034	PM, Pb, Opacity	14,312 DSCFM Ruemelin 7200 Baghouse followed by nine HEPA filters in series	134*
Pasting Line No. 3	022	PM, Pb, Opacity,	11,957 DSCFM Ruemelin 4120 Baghouse	134B
Dry/Wet Mixing Process for Pasting Lines No. 1 and No. 3 (includes 2 ovens)	017	PM, Pb, Opacity, NO_x	11,134 DSCFM American Air Filter Model No. 12-168-2694 Baghouse	234
Chemset/Plate Curing Chambers 1-5	033	PM, Pb, Opacity	None (7,700 dscfm from stacks)	216, 266
Nine (9) Chemset Heaters for Chambers 1-5	038			

2 Heaters for Chamber 1		NO_x PM, VOC, CO, SOx, Opacity	None	278, 279
2 Heaters for Chamber 2		NO_x, PM, VOC, CO, SOx, Opacity	None	275, 276
2 Heaters for Chamber 3		NO_x, PM, VOC, CO, SOx, Opacity	None	272, 273
2 Heaters for Chamber 4		NO_x, PM, VOC, CO, SOx, Opacity	None	343, 344
1 Heater for Chamber 5		NO_x, PM, VOC, CO, SOx, Opacity	None	267
Chemset/Curing Chamber No. 6	047	PM, Pb, Opacity	None	367
Heater for Chemset/Curing Chamber No. 6	048	PM, VOC, NOx, SO_2, CO, Pb, Opacity	None	368
Lead Oxide Manufacturing Facility				
Hardinge Ball Mill Bearings Vent	034	PM, Pb, Opacity	14,312 DSCFM Ruemelin 7200 Baghouse followed by nine HEPA filters in series	134*
Hardinge Ball Mill Process Vent	015	PM, Pb, Opacity	4,500 ACFM Mikro Pulsaire Model 121-S-10-20 Baghouse followed by 2,400 ACFM Mikro Pulsaire Model 36-S-8-30 Baghouse (Due to partially recirculated flow, final discharge estimated at 2,737 DSCFM)	194
Sovema Ball Mill No. 1	042	PM, Pb, Opacity	3,600 DSCFM Sovema Model NF 8000 Baghouse with HEPA filter	348
Three-Process Operation Facility				
Cast-On-Strap Line No. 1	002	PM, Pb, Opacity	13,747 DSCFM Ruemelin 4120	134A
COS Line No. 1 Heat Seal Vent	039		None	248
Cast-On-Strap Line No. 2	018	PM, Pb, Opacity	15,056 DSCFM American Air Filter Model No. 12-216-3464 Baghouse	198
COS Line No. 2 Heat Seal Vent	039		None	249
Cast-On-Strap Line No. 3 (Mark 7B)	050	PM, Pb, Opacity	23,946 DSCFM American Air Filter Model 312-288-4618 Baghouse	204*
COS Line No. 3 Heat Seal Vent	039		None	347

Cast-On-Strap Line No. 4 (Mark 7B) w/ Decoupled Stacker	052	PM, Pb, Opacity	23,946 DSCFM American Air Filter Model 312-288-4618 Baghouse	204*
COS Line No. 4 Heat Seal Vent	039		None	364
Stackers (2)	051	PM, Pb, Opacity	14,420 DSCFM Seneca Model 195-FMTHS-12Baghouse	351
Other Lead Emitting Processes				
Central Vacuum System	005	PM, Pb, Opacity	2 Wheelabrator Model No. 1036PA108 Baghouses each followed by Scientific Dust Collector and 3,400 DSCFM combined discharge	340
Trim Dry Oven	041	PM, Pb, Opacity, NO_x	None - (120 dscfm from stack)	346
Sovema Lead Pot	043	PM, Pb, Opacity	None – (1,685 dscfm from stack)	349
Sovema Lead Pot Heater	044	PM, opacity	None	350

* Common stack

The lead and particulate emissions from the various processes comprising this operation are regulated under Rules 62-296.602 and 62-296.712, F.A.C., Reasonably Available Control Technology (RACT) for Lead and Particulate Matter, respectively, 40 CFR 60 - Subpart KK, and 40 CFR 63 – Subpart PPPPPP.

Location: 10215 30th Street, Tampa, Hillsborough County, FL 33612

UTM: 17-359.90 E and 3102.60 N NEDS NO: 0570001

Emission Unit Nos.:

002	COS Line No. 1
005	Central Vacuum System
014	PbO Bulk Storage and Handling
015	Hardinge Ball Mill Process Vent (SN 194)
017	Wet/Dry Mix Process for Pasting Lines No. 1 and No. 3 (including 2 ovens)
018	COS Line No. 2
022	Pasting Line No. 3
033	Chemset / Plate Curing Chambers 1-5
034	Pasting Line No. 1 and Hardinge Ball Mill Bearing Vent
035	One Strip Caster / Expander
036	One Strip Caster Heater
038	Nine (9) Chemset Heaters for Chemset Chambers 1-5

039	Four (4) Heat Seal Vents on COS Lines
041	Trim Dry Oven
042	Sovema Ball Mill No. 1
043	Sovema Lead Pot
044	Sovema Lead Pot Heater
047	Chemset / Plate Curing Chamber No. 6
048	Heater No. 10 for Chemset / Plate Curing Chamber No. 6
050	COS Line No. 3 (Mark 7B)
051	Stackers (2)
052	COS Line No. 4 (Mark 7B) with Decoupled Stacker

References Permit Nos.: 0570001-009, 0570001-010-AC, 0570001-011-AC, 0570001-015-AC, 0570001-016-AC, 0570001-019-AC, 0570001-022-AC, 0570001-023-AC, 0570001-027-AC/026-AF, 0570001-029-AC

Replaces Permit No.: 0570001-027-AC/026-AF

SPECIFIC CONDITIONS:

1. A part of this permit is the attached General Conditions. [Rule 62-4.160, F.A.C.]

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

3. Issuance of this permit does not relieve the permittee from complying with applicable emission limiting standards or other requirements of Chapters 62-204, 62-210, 62-212, 62-296 and 62-297, F.A.C., or any other requirements under federal, state, or local law. [Rule 62-210.300, F.A.C.]

4. In order to limit the potential to emit, the total emissions from the lead acid battery manufacturing plant shall not exceed 81.1 tons per year of particulate matter and 2.2 tons per year of lead. [Permit No. 0570001-029-AC; Rule 62-4.070(3), F.A.C.; and Permit Application Received April 26, 2012]

5. The permittee shall not cause, suffer, allow or permit the discharge of air pollutants which cause or contribute to an objectionable odor. [Rule 62-296.320(2), F.A.C.]

6. To comply with the emissions limits in Specific Condition No. 4, the following restrictions and terms shall apply: [Permit Nos.: 0570001-009, 010, 011-AC, -022-AC, -027-AC/-026-AF, and -029-AC; Rules 62-210.650 and 62-4.070(3), F.A.C.]

A) All emissions units at the plant, except for the lead oxide (PbO) silos, are allowed to operate continuously (8,760 hrs/yr). The total combined hours of operation for the silos shall not exceed 8,760 hours per consecutive twelve month period.
B) All dust laden air from the emissions units listed on pages 2, 3, and 4 shall be vented through the corresponding control device as stated on the same pages.
C) Only one of the lead oxide (PbO) storage silos shall be filled at a time and only one lead oxide storage silo may discharge material into the mixers at a time.

7. The permittee shall adhere to the attached Operation and Maintenance Plan for the control of particulate matter and lead emissions. The Operation and Maintenance Plan is an enforceable component of this permit. [Rules 62-296.700(6), 62-296.600(4) and 62-4.070(3), F.A.C., Permit Nos. 0570001-016-AC,-022-AC, 023-AC, -027-AC/-026-AF, and 029-AC; and 40 CFR 63.11423]

SPECIFIC CONDITIONS:

Casting Facility: One strip caster (EU035) and one strip caster heater (EU036). Note: the heater is not considered a source of lead emissions.

8. The permittee shall not allow lead emissions to exceed the following:

A) 0.40 mg/dscm (0.000175 gr/dscf) and 0% opacity for each and every vent associated with the casting facility.
B) 0.000175 gr/dscf and 0% opacity for the casting sources.
C)

	Emissions Limitations		
Source	(gr/dscf)	lbs/hr	tpy
One (1) Strip Caster	0.000175	0.005	0.023

[40 CFR 60.372(a)(1) and (7), 40 CFR 63.11423, Rules 62-204.800 and 62-296.602(1)(a), F.A.C.; and Permit Nos. 0570001-019-AC and -022-AC]

9. The permittee shall not allow particulate matter emissions to exceed the following:

	Emissions Limitations		
Source	(gr/dscf)	lbs/hr	tpy
One (1) Strip Caster	0.0043	0.13	0.57
One (1) Strip Caster Heater	N/A	0.01	0.05

[Rule 62-4.070(3), F.A.C. and Permit Nos. 0570001-019-AC and -022-AC]

10. The strip caster heater shall be fired only on natural gas at a maximum heat input rate of 1.6 MMBtu/hr. [Permit No. 0570001-015-AC and Rule 62-4.070(3), F.A.C.]

11. In order to ensure compliance with Specific Condition Nos. 8 and 9, the Strip Caster production is limited to no more than 21,900 tons of lead strip during any consecutive twelve (12) month period. [Permit Nos. 0570001-019-AC and -022-AC and Rule 62-4.070(3), F.A.C.]

Paste Mixing Facility: PbO Bulk Handling and Storage (EU014), Pasting Line No. 1 (EU034), Pasting Line No. 3 (EU022), Wet/Dry Mix Process for Line Nos. 1 and No. 3 (including Ovens 1 and 3) (EU017), Six Chemset/Plate Curing Chambers (EU033 and 047) and Ten Associated Chemset Heaters (EU038 and 048). Note: the heaters are not considered sources of lead emissions.

12. The permittee shall not allow lead emissions to exceed the following:

SPECIFIC CONDITIONS:

A) 1.0 mg/dscm (0.000437 gr/dscf) and 0% opacity for each and every vent associated with the paste mixing facility.
B) 0.000437 gr/dscf and 0% opacity for the paste mixing sources.
C)

Source	Emission Limitations gr/dscf	lb/hr	tpy
PbO Bulk Storage and Handling (Trucks/Pneumatic Lines/North and South PbO Silos)	0.000437	0.005	0.021
Pasting Line No. 1	0.000437	0.054	0.235
Wet/Dry Mixer Process for Pasting Line Nos. 1 and 3 (Oven 1 and 3)	0.000437	0.042	0.183
Pasting Line No. 3	0.000437	0.045	0.196
Six Chemset/Curing Chambers	0.000437	0.049	0.216

[40 CFR 60.372(a)(2) and (7), 40 CFR 63.11423, Rules 62-204.800 and 62-296.602(1)(b), F.A.C. and Permit Nos. 0570001-015, 016, 017, 019-AC, -022-AC, -027-AC/-026-AF, and -029-AC]

13. The permittee shall not allow particulate matter emissions to exceed the following:

Source	Emission Limitations gr./dscf	lb./hr.	tpy
PbO Bulk Storage and Handling (Trucks/Pneumatic Lines/North and South PbO Silos)	0.03	0.33	1.46
Pasting Line No. 1	0.015	1.84	8.06
Wet/Dry Mixer Process for Pasting Line Nos. 1 and 3 (Oven 1 and 3)	0.015	1.43	6.27
Pasting Line No. 3	0.015	1.54	6.73
Six Chemset/Curing Chambers	0.015	1.67	7.31
Ten Chemset Heaters	N/A	0.03	0.18

[Permit Nos. 0570001-015, 016, 017, 019, -022-AC, -027-AC/-026-AF, and 029-AC; and Rules 62-296.712 and 62-4.070(3), F.A.C.]

14. The two ovens for Pasting Lines 1 and 3 shall be fired only on natural gas at a maximum heat input rate of 1.2 MMBtu/hr per oven. [Permit No. 0570001-022-AC and Rule 62-4.070(3), F.A.C.]

15. The eight heaters for Chemset/Curing Chambers 1, 2, 3, and 4 shall be fired only on natural gas at a maximum combined heat input rate of 3.2 MMBtu/hr. [Permit No. 0570001-022-AC and Rule 62-4.070(3), F.A.C.]

16. The heater for Chemset/Curing Chamber No. 5 shall be fired only on natural gas at a

SPECIFIC CONDITIONS:

maximum heat input rate of 1.0 MMBtu/hr. The heater for Chemset/Curing Chamber No. 6 shall be fired only on natural gas at a maximum heat input rate of 1.3 MMBtu/hr [Permit No. 0570001-022-AC and 029-AC; and Rule 62-4.070(3), F.A.C.]

Lead Oxide Manufacturing Facility: Hardinge Ball Mill Process Vent (EU015) and Bearings Vent (EU034), and Sovema Ball Mill No. 1 (EU042). Note: The Hardinge Ball Mill Bearing Vent discharges into the Ruemelin 7200 Baghouse followed by nine HEPA filters in series, which has more stringent limits.

17. The permittee shall not allow lead emissions to exceed the following:

A) 5.0 milligrams of lead per kilogram of lead feed (0.010 lb/ton) for any gas discharged into the atmosphere from the lead oxide manufacturing facility. [40 CFR 60.372(a)(4), and 40 CFR 63.11423]
B) 0.0005 gr/dscf and 0% opacity for each and every lead oxide manufacturing source. [Rule 62-296.602(1)(d), F.A.C.]
C) 0.012 lbs/hr and 0% opacity for any given instant for the Hardinge ball mill process vent (Stack #194). [Permit Nos. 0570001-015-AC, -022-AC, -027-AC/-026-AF, and Rule 62-4.070(3), F.A.C.]
D) 0.015 lbs/hr and 0% opacity for any given instant for the Sovema Ball Mill No. 1 stack (Stack #348). [Permit No. 0570001-015-AC, -022-AC, -027-AC/-026-AF, and Rule 62-4.070(3), F.A.C.]
E) Emissions from the Hardinge ball mill bearings vent shall be exhausted through Pasting Line No. 1 and is accounted for under Specific Condition No. 12.
F)

	Emission Limitations		
Source	gr/dscf	lbs/hr	tpy
Hardinge Ball Mill Bearings Vent (S/N 134) *See Specific Condition No. 17.E) above.			
Hardinge Ball Mill Process Vent (S/N 194)	0.0005	0.012	0.051
Sovema Ball Mill No.1 (S/N 348)	0.0005	0.015	0.068

[Rule 62-296.602(1)(d), F.A.C.; Permit Nos. 0570001-015, 020-AC, -022-AC, -027-AC/-026-AF]

18. The permittee shall not allow particulate matter emissions to exceed the following:

	Emission Limitations		
Source	gr/dscf	lbs/hr	tpy
Hardinge Ball Mill Bearings Vent (S/N 134)*	*	*	*
Hardinge Ball Mill Process Vent (S/N 194)	0.03	0.70	3.08
Sovema Ball Mill No.1 (S/N 348)	0.015	0.46	2.03

SPECIFIC CONDITIONS:

* Emissions for this source are already accounted for in Pasting Line No. 1 (Specific Condition No. 13) because both emissions units share the same emissions point (Ruemelin 7200 Baghouse).

[Rule 62-4-070(3) and 62-296.711(2), F.A.C.; Permit Nos. 0570001-015, 020-AC, -022-AC, -027-AC/-026-AF]

19. The permittee shall determine compliance with the lead standard in Specific Condition No. 17A) as follows: [40 CFR 60.374(c)]

A) The emission rate (E) from lead oxide manufacturing facility shall be computed for each run using the following equation:

$$E = \left(\sum_{i=1}^{M} C_{Pbi} Q_{sdi} \right) / (PK)$$

Where: E = Emission rate of lead, mg/kg (lb/ton) of lead charged.
C_{Pbi} = Concentration of lead from emission point "i," mg/dscm (gr/dscf).
Q_{sdi} = Volumetric flow rate of effluent gas from emission point "i," dscm/hr (sdcf/hr).
M = Number of emission points in the affected facility.
P = Lead feed rate to the facility, kg/hr (ton/hr).
K = Conversion factor, 1.0 mg/mg (7000 gr/lb).

B) Method 12 shall be used to determine the lead concentration (C_{Pb}) and the volumetric flow rate (Q_{sd}) of the effluent gas. The sampling time and sample volume for each run shall be at least 60 minutes and 0.85 dscm (30 dscf).

C) The average lead feed rate (P) shall be determined for each run using the following equation:

$$P = N*W/\theta$$

Where: N = Number of lead pigs (ingots) charged.
W = Average mass of a pig, kg (ton).
θ = Duration of run, hrs.

SPECIFIC CONDITIONS:

Three-Process Operation Facility: Four Cast-On-Strap Lines, designated as COS Line Nos. 1, 2, 3, and 4 (EU 002, EU 018, EU 050, EU 052), two independent stackers (EU 051), and four heat seal vents (EU039). Note: The heat seal vents are not considered sources of lead emissions.

20. The permittee shall not allow lead emissions to exceed the following:

Source	Emission Limitations		
	gr/dscf	lb/hr	TPY
Cast-On-Strap Line No. 1	0.000437	0.05	0.23
Cast-On-Strap Line No. 2	0.000437	0.06	0.25
Cast-On-Strap Line No. 3* Cast-On-Strap Line No. 4*	0.000437	0.09	0.39
Stackers (2)	0.000437	0.05	0.24

*COS Line Nos. 3 and 4 share a common baghouse and stack.

A) 1.00 mg/dscm (0.000437 gr/dscf) and 0% opacity for the Three-Process Operation facility where the mass emission standard can be met by a weighted average of all the vents associated with the three process operation.
B) 0.000437 gr/dscf and 0% opacity for the Three-Process Operation sources.
C) Combined lead emissions from COS Line Nos. 1, 2, 3, and 4 and the Stackers shall not exceed 1.1 tons/yr.

[40 CFR 60.372(a)(2), (3), and (7), 40 CFR 63.11423(a); and Rules 62-204.800, 62-296.602(1)(b) and (c), 62-4.070(3), F.A.C., Permit No. 0570001-029-AC, and Permit Application Received April 26, 2012]

21. The permittee shall not allow particulate matter emissions to exceed the following:

	Emission Limitations		
	gr/dscf	lb/hr	TPY
Cast-On-Strap Line No. 1	0.015	1.77	7.7
Cast-On-Strap Line No. 2	0.015	1.94	8.5
Cast-On-Strap Line No. 3* Cast-On-Strap Line No. 4*	0.02	4.11	18.0
Stackers (2)	0.015	1.85	8.1

*COS Line Nos. 3 and 4 share a common baghouse and stack.

[Rule 62-4.070(3), F.A.C., Permit No. 0570001-029-AC, and Permit Application Received April 26, 2012]

22. Compliance with Specific Condition No. 20.A) shall be demonstrated using the following

SPECIFIC CONDITIONS:

equation: [40 CFR 60.374(b)(2) and Permit No. 0570001-029-AC]

$$Lead(gr/dscf) = \frac{(C_1 \times dscfm_1) + (C_2 \times dscfm_2) + (C_{3,4} \times dscfm_{3,4}) + (C_S \times dscfm_S)}{(dscfm_1 + dscfm_2 + dscfm_{3,4} + dscfm_S)}$$

Where,

C_x = Stack exhaust concentration for COS Line Nos. 1, 2, 3, 4, and Stackers (gr/dscf)

Other Lead Emitting Operations: Central Vacuum System (EU005), the Sovema Lead Pot (EU043) and Lead Pot Heater (EU044), and the Trim Dry Oven (EU041). Note: the heater is not considered a source of lead emissions.

23. The permittee shall not allow lead emissions to exceed the following:

A) 1.0 mg/dscm (0.000437 gr/dscf) and 0% opacity for the central vacuum system, the Sovema lead pot, and the trim dry oven operations.

B)

	Emissions Limitations		
Source	gr/dscf	lbs/hr	tpy
Central Vacuum System (System 1 and 2)	0.000437	0.013	0.056
Trim Dry Oven	0.000437	0.0004	0.002
Sovema Lead Pot	0.000437	0.006	0.028

[40 CFR 60.372(a)(6) and (7), 40 CFR 63.11423, Rules 62-204.800 and 62-296.602(1)(f), F.A.C.; and Permit Nos. 0570001-022-AC and -027-AC/026-AF]

24. The permittee shall not allow particulate matter emissions to exceed the following:

	Emissions Limitations		
Source	gr/dscf	lbs/hr	tpy
Central Vacuum System (System 1 and 2)	0.015	0.44	1.91
Trim Dry Oven*	0.03	0.03	0.14
Sovema Lead Pot	0.015	0.22	0.95

*Exempt from Particulate RACT as requested by the permittee pursuant to Rule 62-296.700(2)(c), F.A.C.

[Rules 62-296.700(2)(c) and 62-4.070(3), F.A.C.; and Permit Nos. 0570001-015-AC, -022-AC, -

SPECIFIC CONDITIONS:

027-AC/026-AF]

25. The heaters associated with the Trim Dry Oven and the Sovema Lead Pot shall be fired exclusively on natural gas at a combined heat input rate not to exceed 1.9 MMBtu/hr. [Permit Nos. 0570001-015-AC, -022-AC, -027-AC/026-AF, and Rule 62-4.070(3), F.A.C.]

Facility Wide:

26. Process rates for each specified operation shall not exceed the following: [Rule 62-4.070(3), F.A.C. and Permit Nos. 0570001-015, 016, 019, 022, 023, 027-AC/026-AF, and 029-AC]

Source	**E.U. ID #/ Stack#**	**Process Rate**
Casting Facility		
Strip Caster	035/232	5,000 lbs/hr of lead strip produced and 21,900 tpy of lead strip produced
Strip Caster Heater	036/233	1.6 MMBtu/Hr.
Paste Mixing Facility		
PbO Bulk Handling with Two Storage Silos	014/338	15,000 lbs/hr (7.5 tph) unloading into the mixers and 20,000 lbs/hr (10 tph) loading into the silos, not to exceed 87,600 tpy loading into the silos
Pasting Line No. 1	034/134	10,000 lbs/hr pasted plates
Wet/Dry Mixer Process for Line Nos. 1 and 3 (and 2 ovens)	017/234	15,000 lbs lead oxide paste/hr for Line Nos. 1 and 3 Paste Mixers combined
Five (5) Chemset / Plate Curing Chambers	033/216 and 266	N/A
Nine Chemset Heaters for Chemset / Plate Curing Chambers 1-5	038/None	Combined 3.2 MMBtu/hr for Chemset Chamber Nos. 1-4 Heaters and 1.0 MMBtu/hr for Chemset Chamber No. 5 Heater
Pasting Line No. 3	022/134B	10,000 lbs/hr pasted plates
Chemset/Curing Chamber No. 6	047/367	66 tons/batch, 11,936 tons/yr
Heater No. 10 for Chemset/Curing Chamber No. 6	048/368	1.3 MMBtu/hr, 11 MMSCF/yr
Lead Oxide Manufacturing Facility		
Hardinge Ball Mill Process Vent	015/194	2,900 lbs/hr PbO

SPECIFIC CONDITIONS:

Source	**E.U. ID #/ Stack#**	**Process Rate**
Hardinge Ball Mill Bearings Vent*	034/134	2,900 lbs/hr
Sovema Ball Mill No.1	042/348	2,400 lbs/hr PbO
Three Process Operation Facility		
Cast-On-Strap Line No. 1	002/134A	190 batteries/hr
Cast-On-Strap Line No. 2	018/198	190 batteries/hr
Cast-On-Strap Line No. 3	050/204	260 batteries/hr
Cast-On-Strap Line No. 4	052/204	260 batteries/hr
Stackers (2)	051/351	24,000 plates/hr/stacker 48,000 plates/hr total
Heat Seal Vents for COS Lines	039/248 249 347 364	N/A
Other Lead Emitting Operations		
Central Vacuum System	005/340	Normal or Maximum Plant Operation
Trim Dry Oven	041/346	2,000 lbs/hr lead trim
Sovema Lead Pot	043/349	4,000 lbs/hr lead
Sovema Lead Pot Heater	044/350	1.5 MMBtu/hr

* Emissions are vented to the Ruemelin 7200 Baghouse also serving Pasting Line No. 1 (034/134).

Test Methods and Procedures

27. Test the emissions for the following pollutant(s) as specified in Specific Condition No. 30 once per federal fiscal year (October 1 through September 30) with a target date of November 30th and submit two copies of test data to the Air Management Division of the Environmental Protection Commission of Hillsborough County within forty-five days of such testing. Testing procedures shall be consistent with the requirements of Rule 62-297.310, F.A.C. and 40 CFR 60.8(a).

Emission Unit	**E.U. ID #/ Stack #**	**Particulate**	**Lead**	**Opacity**
Cast-On-Strap Line No. 1	002 / 134A	X	X	X
Central Vacuum System	005 / 340	X	X	X
PbO Bulk Storage and Handling	014 / 338	X	X	X
Ball Mill Process Vent	015 / 194	X	X	X
Wet/Dry Mixing Process for Line Nos. 1 and 3	017 / 234	X	X	X

SPECIFIC CONDITIONS:

Cast-On-Strap Line No. 2	018 / 198	X	X	X
Paste Line 3	022 / 134B	X	X	X
Five (5) Chemset/Plate Curing Chambers	033 / 216,266	X	X	X
Paste Line No. 1 and Ball Mill Bearings Vent	034 / 134	X	X	X
One (1) Strip Caster	035 / 232	X	X	X
Strip Caster Heater	036 / 233	NA	NA	NA
Nine Chemset Heaters	038/Multiple	NA	NA	NA
Heat Seal Vents for COS Lines	039/Multiple	NA	NA	NA
Trim Dry Oven	041 / 346	X	X	X
Sovema Ball Mill No.1	042 / 348	X	X	X
Sovema Lead Pot	043 / 349	X	X	X
Sovema Lead Pot Heater	044 / 350	NA	NA	NA
Chemset/Plate Curing Chamber No. 6	047 / 367	X	X	X
Heater No. 10 for Chemset Chamber No. 6	048 / 368	NA	NA	NA
Cast-On-Strap Line No. 3	050 / 204	X	X	X
Stackers (2)	051 / 351	X	X	X
Cast-On-Strap Line No. 4	052 / 204	X	X	X

[Section 403.161(1)(c) Florida Statutes; Rules 62-4.070(3) and 62-297, F.A.C.; and 40 CFR 60.8(a)]

28. Compliance with the emission limitations of Specific Condition Nos. 4, 8, 9, 12, 13, 17, 18, 20, 21, 23 and 24 shall be determined using EPA Methods 1, 2, 4, 5, 9, and 12 contained in 40 CFR 60, Appendix A and adopted by reference in Rule 62-297, F.A.C. Particulate emission information may be obtained from lead emission tests pursuant to 40 CFR 60, Appendix A, Method 12, Section 8.1. The EPA Method 9 visible emission test shall be a minimum of 30 minutes in duration and conducted concurrent with one of the lead test runs. The minimum requirements for stack sampling facilities, source sampling, and reporting, shall be in accordance with Rule 62-297, F.A.C. and 40 CFR 60, Appendix A. [40 CFR 60.11 and Rule 62-4.070(3), F.A.C.]

29. The permittee shall provide at least the minimum requirements for stack sampling facilities as specified in 40 CFR 60.8(e)(1), (2), (3) and (4) and Rule 62-297.310(6), F.A.C. Source sampling platforms, platform access, and other associated work areas, whether permanent or temporary, shall be in accordance with Occupational Safety and Health Administration standards per 29 CFR 1910, Subparts D and E.

30. Testing of emissions must be conducted at 90-100% of the maximum permitted process rates as stated in Specific Condition No. 26. If it is impracticable to test at capacity, then the source may be tested at less than capacity; in this case subsequent source operation is limited to 110% of the test load until a new test is conducted. Once the unit is so limited, then operation at

SPECIFIC CONDITIONS:

higher capacities is allowed for no more than fifteen days for purposes of additional compliance testing to regain the rated capacity in the permit, with prior notification to the EPC. Failure to submit the input rates and actual operating conditions may invalidate the test. The following conditions must be adhered to during compliance testing:

A) During testing of Pasting Line No. 1 (EU034), the Hardinge Ball Mill Bearings Vent must also be in operation.
B) Only one PbO silo is used at a time while filling or while discharging lead oxide into the mixers.
C) Each chemset chamber must contain one day's production of wet pasted plates and be at some stage of the curing cycle. The compliance test report should contain the amount of plates in the chambers during testing.

[Rule 62-297.310(2)(b) and 62-4-070(3), F.A.C.]

31. The permittee shall notify the Environmental Protection Commission of Hillsborough County at least 30 days prior to the date on which each formal compliance test is to begin of the date, time, and place of each such test, and the contact person who will be responsible for coordinating and having such test conducted. [Rule 62-4.070(3), F.A.C.; 40 CFR 60.7(a)6; and 40 CFR 63.9(f)]

Recordkeeping and Reporting Requirements

32. The permittee shall comply with the following requirements: [Rule 62-204.800, F.A.C.]

A) The permittee shall furnish the EPC written notification as follows: [40 CFR 60.7(a)]
   1. A notification of any physical or operational change to an existing facility which may increase the emission rate of any air pollutant to which a standard applies, unless that change is specifically exempted under an applicable subpart or in 40 CFR 60.14(e). This notice shall be postmarked 60 days or as soon as practicable before the change is commenced and shall include information describing the precise nature of the change, present and proposed emission control systems, productive capacity of the facility before and after the change, and the expected completion date of the change. The EPC may request additional relevant information subsequent to this notice. [40 CFR 60.7(a)(4)]
   2. Written notifications are to be made to the Air Management Division of the Environmental Protection Commission of Hillsborough County
B) The permittee shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative. [40 CFR 60.7(b)]
C) The permittee shall maintain a file of all measurements, including performance testing measurements and all other information required by this part recorded in a permanent form suitable for inspection. The file shall be retained for at least two years following the date of

SPECIFIC CONDITIONS:

such measurements, maintenance, reports, and records. [40 CFR 60.7(f)]

D) Compliance with opacity standards in this part shall be determined by conducting observations in accordance with Reference Method 9 in Appendix A (40 CFR 60). [40 CFR 60.11(b)]

E) The opacity standards set forth in this permit shall apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided in the applicable standard. [40 CFR 60.11(c) and 40 CFR 63.6(g)]

F) At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the EPC which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. [40 CFR 60.11(d) and 40 CFR 63.6(e)]

G) No owner or operator subject to the provisions of this part shall build, erect, install, or use any article, machine, equipment, or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere. [40 CFR 60.12 and 40 CFR 63.4]

33. The permittee shall maintain records of all process control operating parameters and process upsets. The records shall include the nature and duration of upsets and emission control equipment malfunction, a detailed description of the nature and duration of the upset or malfunction, the expected effects on emissions and corrective actions taken or planned to avoid recurrences. Such records shall be available at the plant site for inspections by the Region IV Administrator of EPA or its authorized agent for a period of at least two years. [40 CFR 60.7(b) and Rule 62-4.070(3), F.A.C.]

34. The permittee shall keep the following records for a minimum of three years and make them available to any representative of the Department or the Environmental Protection Commission of Hillsborough County upon request: [Rules 62-4.160(14), 62-296.600(5) and 62-296.700(6), F.A.C.; and 40 CFR 60.7(f)]

A) Records of control equipment operating parameters as detailed in the Operation and Maintenance Plan (O&M) in Attachment A of this permit and monitoring device calibration checks.

B) Maintenance records on the control equipment, including black light tests, bag replacements, structural repairs, motor replacements and any adjustments that are made to monitoring devices.

SPECIFIC CONDITIONS:

C) Records of control system and malfunctions or failures and corrective actions taken.

35. In order to demonstrate compliance with Specific Condition Nos. 4, 6, and 26, the permittee shall maintain records of operations for the most recent three year period. The records shall be made available to the Environmental Protection Commission of Hillsborough County, state or federal air pollution agency upon request. The records shall include, but not limited to, the following: [Rule 62-4.070(3) and 62-4.160(14), F.A.C.]

Casting Operation

(A) Monthly total of lead strip produced by the strip caster (lbs).
(B) Hours of operation for the strip caster (hrs/month).
(C) Average hourly production on a monthly basis for the strip caster (lbs/hr).
(D) Rolling twelve month total of lead strip produced by the strip caster (tons).

Paste Mixing

(E) Monthly total of pasted plates produced by Pasting Line No. 1 (lbs).
(F) Monthly total of pasted plates produced by Pasting Line No. 3 (lbs).
(G) Hours of operation for each Pasting Line (hrs/month).
(H) Average hourly production on a monthly basis of Pasting Lines 1 and 3 (lbs/hr).

Lead Oxide Manufacturing

(I) Monthly total of lead processed in each ball mill (lbs)
(J) Hours of operation for each ball mill (hrs/month).
(K) Average hourly production on a monthly basis for each ball mill (lbs/hr).
(L) Rolling twelve month total of lead oxide produced (tons).

Silo Operations

(M) Monthly and rolling twelve month totals of lead oxide loaded into the lead oxide silos (tons).
(N) Monthly and rolling twelve month totals of the hours of operation for the PbO silos (hrs).
(O) Monthly total of lead oxide transferred to the paste mixers (lbs).
(P) Monthly hours of operation for the paste mixers (hrs).
(Q) Average hourly transfer rate of lead oxide to the paste mixers (lbs/hr).

Three Process Operation

(R) Monthly total of batteries produced on each COS line.
(S) Hours of operation for each COS line (hrs/month).
(T) Average hourly battery production on a monthly basis for each COS line (batteries/hr).
(U) Average hourly process rate on a monthly basis for the independent stackers (plates/hr).

SPECIFIC CONDITIONS:

Other Lead Emitting Processes

(V) Monthly total of lead processed through the Trim Dry Oven (lbs)
(W) Monthly total of lead processed through the Sovema Lead Pot (lbs)
(X) Monthly total of the hours of operation for the Trim Dry Oven (hrs/month).
(Y) Monthly total of the hours of operation for the Sovema Lead Pot (hrs/month).
(Z) Average hourly production on a monthly basis of the Trim Dry Oven (lbs/hr).
(AA) Average hourly production on a monthly basis of the Sovema Lead Pot (lbs/hr).

Miscellaneous

(BB) Monthly total of gallons of lubricating oil used.
(CC) Rolling twelve month total of lubricating oil used.

36. The permittee shall comply with the following requirements: [Rule 62-204.800, F.A.C.]

A) [Reserved]

B) For any emissions point controlled by a fabric filter, the permittee must meet the requirements of paragraph (1) and either paragraph (2) or (3) below. Fabric filters equipped with a high efficiency particulate air (HEPA) filter or other secondary filter are allowed to monitor less frequently (i.e. weekly), as specified in paragraph (b)(2)(iv) of 40 CFR 63.11423: [40 CFR 63.11423]

(1) The permittee must perform and record semiannual inspections and maintenance to ensure proper performance of each fabric filter. This includes inspection of structural and filter integrity.

(2) The permittee must install, maintain, and operate a pressure drop monitoring device to measure the differential pressure drop across the fabric filter during all times when the process is operating. The pressure drop shall be recorded at least once per day. If a pressure drop is observed outside of the normal operational ranges, the permittee must record the incident and take immediate corrective actions. The permittee must also record the corrective actions taken. The permittee must submit a monitoring system performance report in accordance with §63.10(e)(3).

(3) The permittee must conduct a visible emissions observation at least once per day to verify that no visible emissions are occurring at the discharge point to the atmosphere from any emissions unit. If visible emissions are detected, the permittee must record the incident and conduct an opacity measurement in accordance with 40 CFR 60.374(b)(3). The permittee must record the results of each opacity measurement. If the measurement exceeds the applicable opacity standard in 40 CFR 60.372(a)(7) or (8), the permittee must submit this information in an excess emissions report required under 40 CFR 63.10(e)(3).

C) The non-opacity standards set forth in this permit shall apply at all times except during

periods of startup, shutdown, malfunction, and as otherwise provided in the applicable standard. [40 CFR 63.6(f)]

D) The permittee shall submit an excess emissions and continuous monitoring system performance report and/or a summary report semiannually. [40 CFR 63.10(e)(3) and 40 CFR 63.11423(b)(2)]

E) All excess emissions and monitoring system performance reports and all summary reports, if required, shall be delivered or postmarked by the 30th day following the end of each calendar half. Written reports of excess emissions or exceedances of process or control system parameters shall include all the information required in 40 CFR 63.10(c)(5) through (c)(13), in 40 CFR 63.8(c)(7) and (c)(8), and in the relevant standard, and they shall contain the name, title, and signature of the responsible official who is certifying the accuracy of the report. When no excess emissions or exceedances of a parameter have occurred, or a CMS has not been inoperative, out of control, repaired, or adjusted, such information shall be stated in the report. [40 CFR 63.10(e)(3) and 40 CFR 63.11423(b)(2)]

F) The permittee shall maintain files of all information (including all reports and notifications) required by 40 CFR 63 recorded in a form suitable and readily available for expeditious inspection and review. The files shall be retained for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. At a minimum, the most recent 2 years of data shall be retained on site. [40 CFR 63.10(b)]

37. Submit to the Environmental Protection Commission of Hillsborough County each calendar year on or before April 1, completed DEP Form 62-210.900(5), "Annual Operating Report for Air Pollutant Emitting Facility", for the preceding calendar year. [Rule 62-210.370(3), F.A.C.]

Reasonable Precautions

38. All reasonable precautions shall be taken to prevent and control generation of unconfined emissions of particulate matter in accordance with the provision in Rule 62-296.320, F.A.C. These provisions are applicable to any source, including, but not limited to, vehicular movement, transportation of materials, construction, alterations, demolition or wrecking, or industrial related activities such as loading, unloading, storing, and handling. Reasonable precautions shall include, but not be limited to, the following: [Rules 62-296.320(4)(c)1. and 62-4.070(3), F.A.C.]

Lead Oxide Manufacturing Facility

A) Careful service and replacement of the filter media to prevent adhered dust from becoming airborne.

B) Careful setting up and removal of containers for the collected dust. These containers shall be sealed while in operation and during transport to the disposal site.

SPECIFIC CONDITIONS:

C) Daily cleaning of the area around the baghouses located either inside or outside the main building. Cleaning may be by HEPA vacuuming, mopping or sweeping with a dust-absorbing compound. Cleaning by means of dry sweeping or through the use of blowers is not permitted.
D) Periodic inspection of the access hatch on the ball mill to ensure hatch bolts are secure and hatch remains closed during operation.
E) The continuous particle sensor installed near the Sovema Ball Mill No. 1 shall be operative. The sensor shall automatically shut down the mill, shut off the ventilation fans, close the louvers and sound the alarm system in the event a malfunction of the mill results in the release of lead oxide to the room.
F) Cooling of the Sovema Ball Mill baghouse hopper enclosure shall be accomplished by the in-line fan rated at 1,250 ACFM and exhausted through the roof. The duct equipped with a particle sensor shall automatically shut down the mill and shut off the fan in the event that lead oxide is drawn through the duct.
G) The differential pressure monitor installed on the HEPA filter near the Process Vent Baghouse shall be operative. This monitor shall alarm in the event of a malfunction in the Process Vent Baghouse.
H) The differential pressure monitor installed between the Hardinge Ball Mill grinding compartment and the atmosphere just outside of this mill's inlet shall be operative. This monitor shall continuously monitor and record differential pressure and shall alarm whenever it falls below the minimum differential pressure required to maintain adequate negative pressure in the Hardinge Ball Mill System.

<u>Casting Facility</u>

I) Daily cleaning of work area. Cleaning may be by HEPA vacuuming, mopping or sweeping with a dust-absorbing compound. Cleaning by means of dry sweeping or through the use of blowers is not permitted.
J) Exercise good housekeeping at all times.

<u>Other Lead Emitting Process</u>

Central Vacuum System

K) Complete enclosure of the baghouse, hoppers, and fines handling area, or cleaning any operation area twice daily. Cleaning may be by HEPA vacuuming, mopping or sweeping with a dust-absorbing compound. Cleaning by means of dry sweeping or through the use of blowers is not permitted.
L) Attend to any accidental spills or upsets promptly and effectively. Stop operation, if necessary.
M) Make plant personnel aware of the environmental requirements under this permit.
N) Exercise good housekeeping practices at all times.
O) Service and replacement of fabric bags and filter media.

SPECIFIC CONDITIONS:

Three Process Operation Facility

COS Lines

P) Keep covers on process equipment.
Q) Keep an air tight seal on each baghouse's dust disposal containers.
R) Maintain cleanliness of the enclosures of the baghouse fines handling area and clean on a daily basis. Cleaning may be by HEPA vacuuming, mopping or sweeping with a dust-absorbing compound. Cleaning by means of dry sweeping or through the use of blowers is not permitted.
S) Prompt cleanup of spills.
T) Routine cleaning of areas used by vehicles and machines. Cleaning may be by HEPA vacuuming, mopping, sweeping with a dust-absorbing compound, or through use of a floor scrubber. Cleaning by means of dry sweeping or through the use of blowers is not permitted.
U) Make plant personnel aware of the environmental requirements in this permit.
V) Exercise good housekeeping at all times.
W) Ensure proper disposal of any lead waste.

Paste Mixing Facility

X) Service and replacement of fabric bags and filter media.
Y) Set up and remove the containers for the collected dust from baghouses and HEPA filters. These containers shall be hermetically sealed while in operation and during transport to the disposal site.
Z) All paved areas on the south side of the plant where the baghouses are located and where the trucks deliver lead oxide shall be totally enclosed or HEPA vacuum swept on a daily basis. Cleaning by means of dry sweeping or through the use of blowers is not permitted.

39. No owner or operator of a lead processing operation shall cause, allow, or permit the emissions of lead, including emissions of lead from vehicular movement, transportation of materials, construction, alteration, demolition or wrecking, or industrial-related activities such as loading, unloading, charging, melting, tapping, casting, storing or handling, unless reasonably available control technology (RACT) is employed to control such lead emissions. RACT measures shall include, but not be limited to, the following: [Rule 62-296.601(2)(a), F.A.C. and Permit Nos. 0570001-015-AC, -022-AC, -027-AC/026-AF, and Permit Application Received April 26, 2012]

A) All control measures listed in Specific Condition No. 38 of this permit.
B) The permittee shall optimize the lead oxide delivery system. The optimization process shall include, but not be limited to, the following:
    1) Following the delivery truck inspection procedures for weld defects testing, checking the integrity of the flexible joints connecting hoppers, monitoring of the truck unloading process, and checking hose parameters.
    2) Using a dedicated location for the trucks during unloading.
    3) Utilize a dedicated plant transfer blower in lieu of the truck blower.

SPECIFIC CONDITIONS:

4) Follow the lead oxide unloading procedures in Attachment B of this permit.

C) Vacuuming the roads and other paved areas under the control of the owner or operator of the facility to prevent lead from becoming airborne.

D) Landscaping or planting of vegetation on unpaved roads, parking areas and yards.

E) Using hoods, fans, filters, and similar equipment to capture, contain, and control lead emissions.

F) Enclosing or covering conveyor systems.

40. When the Environmental Protection Commission of Hillsborough County (EPC) after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in Rules 62-204, 62-210, 62-212, 62-296, or 62-297, F.A.C., or in a permit issued pursuant to those rules is being violated, it may require the owner or operator of the source to conduct compliance tests which identify the nature and quantity of pollutant emissions from the source and to provide a report on the results of said tests to the EPC. [Rule 62-297.310(7)(b), F.A.C.]

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

42. The permittee shall provide timely notification to the Environmental Protection Commission of Hillsborough County prior to implementing any changes that may result in a modification to this permit pursuant to Rule 62-210.200(204)(Modification), F.A.C. The changes do not include normal maintenance, but may include, and are not limited to, the following, and may also require prior authorization before implementation: [Rules 62-210.300 and 62-4.070(3), F.A.C. and 40 CFR 60.15]

A) Alteration or replacement of any equipment* or major component of such equipment listed.

B) Installation or addition of any equipment* which is a source of air pollution.

C) Increased production rate(s).

* Not applicable to routine maintenance, repair, or replacement of component parts.

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

44. Prior to sixty days before the expiration of this operating permit, the permittee shall apply for a renewal of the permit using the current version of the permit renewal application form. A renewal application shall be timely and sufficient. If the application is submitted prior to sixty days

SPECIFIC CONDITIONS:

before the expiration of the permit, it will be considered timely and sufficient. If the renewal application is submitted at a later date, it will not be considered timely and sufficient unless it is submitted and made complete prior to the expiration of the operation permit. When the application for renewal is timely and sufficient, the existing permit shall remain in effect until the renewal application has been finally acted upon by the EPC or, if there is court review of the final agency action, until a later date is required by Section 120.60, Florida Statutes. [Rule 62-4.090, F.A.C.]

ENVIRONMENTAL PROTECTION COMMISSION
OF HILLSBOROUGH COUNTY

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Richard D. Garrity, Ph.D.
Executive Director