ADEQ
MINOR SOURCE
AIR PERMIT

Permit #: 288-AR-13

IS ISSUED TO:

Exide Corporation
(dba GNB Industrial Power- A Division of Exide Technologies)
4115 South Zero Street
Fort Smith, AR 72903
Sebastian County
AFIN: 66-0212

THIS PERMIT IS YOUR AUTHORITY TO CONSTRUCT, MODIFY, OPERATE, AND/OR MAINTAIN THE EQUIPMENT AND/OR FACILITY IN THE MANNER AS SET FORTH IN THE DEPARTMENT'S MINOR SOURCE AIR PERMIT AND YOUR APPLICATION. THIS PERMIT IS ISSUED PURSUANT TO THE PROVISIONS OF THE ARKANSAS WATER AND AIR POLLUTION CONTROL ACT (ARK. CODE ANN. SEC. 8-4-101 ET SEQ.) AND THE REGULATIONS PROMULGATED THEREUNDER, AND IS SUBJECT TO ALL LIMITS AND CONDITIONS CONTAINED HEREIN.

Signed:

_____

Michael Bonds Date Amended

SECTION I: FACILITY INFORMATION

PERMITTEE:	Exide Technologies
AFIN:	66-00212
PERMIT NUMBER:	288-AR-13
FACILITY ADDRESS:	4115 South Zero Street Fort Smith, AR 72903
COUNTY:	Sebastian
CONTACT PERSON:	Rusty L. Griffin
TELEPHONE NUMBER:	(479) 649-2147
REVIEWING ENGINEER:	Siew Low
UTM North-South (X):	Zone 15 [3910]
UTM East-West (Y):	Zone 15 [374]

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SECTION II: INTRODUCTION

Summary

Exide Technologies, formerly GNB Technologies Inc., owns and operates a lead-acid battery manufacturing facility in Fort Smith, Arkansas. With this modification, Exide will be:

1. removing the PDQ area and its associated burn box, and rerouting the ventilation from the existing M assembly area to SN-01; the N assembly area will remain ducted and controlled by SN-02;
2. installing three new natural gas curing ovens, each with a heat input capacity of 150,000 Btu/hr, and one plate boxing back-draft hood (SN-04);
3. installing four new natural gas curing ovens (approximately 285 ft^3/min each), each with a heat input capacity of 150,000 Btu/hr (SN-51), removing the Absolyte Line 1 ventilation duct (to be rerouted to SN-53), adding the ventilation ductwork from Absolyte Line 3 (to be rerouted from SN-53), and adding a burn box each to Absolyte Lines 2 and 3 (two burn boxes total);
4. removing the Absolyte Line 3 ventilation ducts (to be rerouted to SN-51), adding the ventilation ductwork from Absolyte Line 1 (to be rerouted from SN-51), and adding one burn box to Absolyte Line 1 (SN-51); and
5. reconfiguring the melting and casting operation to replace outdated equipment (adding four new grid casters) at SN-56.
6. Authorized to stack test the nine baghouses for lead and PM/PM_{10} emissions every five years instead of every year.

Total allowable emissions will increase 0.5 tons/year of PM/PM_{10}, 0.1 tons/year of sulfur dioxide, 0.9 tons/year of nitrogen oxides, 0.1 tons/year of volatile organic compounds, 2.6 tons/year of carbon monoxide, and 0.08 tons/year of lead.

Process Description

The manufacturing of lead-acid batteries begins with two casting operations. The post casting and the grid casting operations both have a small gas-fired lead melting pot where lead ingots, also known as pigs, are melted and the temperature is maintained a few degrees above the melting point. By maintaining the lead close to the melting point, lead vapor emissions are minimized. In the post casting operation, the lead is manually poured by ladle into the mold. After cooling, the mold is opened and the part removed. Some post castings include a bus bar for attaching the plates. Grid casting is a similar operation. The grid is a thin frame with two lugs on one end or side. The center of the frame is made up of several stringers running from side to side and from top to bottom forming a rectangular grid, thus the name.
In the next operation, a positive paste is prepared by mixing powdered lead oxide, water, and sulfuric acid. The same ingredients, in slightly different proportions, plus an expander, make a negative paste. After the paste is properly mixed in the pasting machine, a grid is placed in the

machine where a quantity of paste is pressed into the voids of the grid. The grid passes under a roller which insures that the paste fills the voids and is of uniform thickness. The pasted grid is now called a plate. The plate passes through an oven where the paste is dried. Upon leaving the pasting machine, the plates are hung on a mobile rack.

When the rack is filled with plates, it is placed in one of the curing ovens. The paste in the plates is cured after several hours at an elevated temperature.

The post and the plates are the only battery components fabricated at this facility. The acid, the battery case, the case top, and the plate insulators are purchased. The assembly operation begins with plate stacking. The plates are stacked in an alternating positive and negative arrangement with insulating material between the plates. In the burning process, a torch is used to weld all the positive plate lugs to the positive post bus bar. The process is repeated for the negative plates and post. At this point, the plate assemblies destined for dry batteries, those to be shipped without acid, are sent to the charging area. The top and the posts are welded in place on the batteries to be shipped "wet," with acid. The battery is filled with acid and the top is plugged, becoming a sealed unit.

The wet batteries, those filled with acid, are connected to a charging unit. The batteries are charged and discharged twice and then charged a third time. This cycling of the battery improves the life of the battery. This operation requires a week to complete.

Regulations
This facility is subject to regulation under Regulation 18, Regulation 19, and NSPS Subpart KK, *Standards of Performance for Lead-Acid Battery Manufacturing Plants*.

The following table is a summary of the facility's total emissions.

TOTAL ALLOWABLE EMISSIONS		
Pollutant	Emission Rates	
	lb/hr	tpy
PM	10.8	46.3
PM_{10}	10.8	46.3
SO_2	0.6	0.6
VOC	12.2	18.2
CO	2.0	8.0
NO_x	2.5	10.2
Lead	0.78	3.22
H_2SO_4	0.2	0.8

SECTION III: PERMIT HISTORY

Permit **#288-A** was issued to Gould Inc. in 1975. Gould proposed to install equipment for the control of particulate matter and fume emissions formed during the manufacture of lead-acid industrial batteries.

Permit **#288-AR-1** was issued to GNB Technologies Inc. (GNB) on April 14, 1987.

Permit **#288-AR-2** was issued to GNB on August 25, 1987. This permit allowed the installation of two new lead melting pots and a new dust collector.

Permit **#288-AR-3** was issued to GNB on July 25, 1991. This permit allowed the installation of a new pasting machine, the routing of the flash dryer to another source, modifications of SN-01 and SN-02, and an increase in the production of absolyte batteries.

Permit **#288-AR-4** was issued to GNB on June 11, 1992. This permit allowed the re-routing of some emissions, the installation of several new sources, and the reactivation of an old source.

Permit **#288-AR-5** was issued to GNB on October 15, 1993. This permit allowed the reconfiguration of duct work and control equipment, the installation of SN-51, and other changes related to processes and the control equipment for each process.

Permit **#288-AR-6** was issued to GNB on June 2, 1994. This permit allowed the installation of new sources and an increase in production.

Permit **#288-AR-7** was issued to GNB on January 23, 1997. In this permit, the plant underwent an equipment rearrangement in the production area. GNB eliminates some outdated product assembly lines and replaced them with assembly lines for new products. All equipment processing lead would now be vented to a baghouse.

Permit **#288-AR-8** was issued to GNB on September 30, 1998. This permit allowed several changes: an increase in the emission rates at several baghouses, a baghouse realignment, the modification of non-point source emissions, the installation of a new grid casting machine, and the correction of some emission rates due to a previous calculation error.

Permit **#288-AR-9** was issued to GNB on November 18, 1999. This de minimis modification included the following changes: (1) The construction of two new automated plate cleaning lines at the positive and negative pasting lines. The emissions of particulate matter and lead from SN-53 were increased as a result of this addition. (2) The construction of one new natural gas fired boiler (SN-55) for the curing ovens, each with a heat input capacity of 3.4 MMBtu/hr.
Permit **#288-AR-10** was issued to GNB on April 21, 2000. This de minimis modification included the following changes: (1) The construction and operation of six new plate curing ovens. The six new curing ovens are controlled by the existing Absolyte Assembly Area

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Baghouse and exhaust via SN-51. Each unit has a heat input capacity of 0.15 MMBtu/hr. (2) Relocation of an existing lead melt pot. The existing lead pot was moved from the casting department (controlled by a baghouse and exhausting via SN-04) to the Absolyte Assembly Area (controlled by a baghouse and exhausting via SN-51).

Permit #**288-AR-11** was issued to GNB on June 13, 2001. With this de minimis modification, GNB installed two grid casters, two melt pots and two oxide silos. The two oxide silos are controlled by the existing Paste Mixing and Curing Baghouse and exhaust via SN-03. The emissions of lead and particulate matter from SN-03 did not increase. The two grid casters and the two melt pots are controlled by the existing Curing Ovens, Oxide Unloading, Casting Baghouse and exhaust via SN-04. The total exhaust flow rate from SN-04 did not increase; however, the carbon monoxide emissions increased by 0.6 tons/yr and the nitrogen oxides emissions increased by 0.7 tons/yr. Emissions of other pollutants did not increase. The new grid casters, melt pots, and oxide silos are subject to all applicable requirements of 40 CFR Part 60 Subpart KK.

Permit **#288-AR-12** was issued to Exide Technologies on January 30, 2002. With this de minimis modification, Exide Technologies installed an additional dust collector, reconstructed the existing duct work, rerouted the emissions from the existing production equipment to different collection devices, and modified and/or replaced two baghouses. Total allowable emissions increased 4.8 tons/year of PM/PM_{10} and 0.33 tons/year of lead. Total allowable emissions decreased 0.4 tons/year of volatile organic compounds and 6.7 tons/year of nitrogen oxides.

SECTION IV: EMISSION UNIT INFORMATION

Specific Conditions

1. Pursuant to §19.501 et seq of the Regulations of the Arkansas Plan of Implementation for Air Pollution Control, effective February 15, 1999 (Regulation #19), A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR Part 60 Subpart KK, the permittee shall not exceed the emission rates set forth in the following table.

SN	Description	Control Equipment	Pollutant	lb/hr	tpy	max. gr/dry scf
01	M and H Assembly Line (18,407 dry scfm)	Baghouse	PM_{10} Lead	0.7 0.06	3.1 0.23	0.0044 0.00033
02	TekMax Automatic Plate Stacker (18,407 dry scfm)	Baghouse	PM_{10} Lead	0.7 0.06	3.1 0.23	0.0044 0.00033
03	Paste Mixing and Curing (18,407 dry scfm)	Baghouse	PM_{10} Lead	0.7 0.06	3.1 0.25	0.0044 0.00033
04	Curing Ovens, Oxide Unloading, and Casting (18 Ovens, 4 Grid Casters) (6.0 MMBtu/hr for all sources) (18,407 dry scfm)	Baghouse	PM_{10} SO_2 VOC CO NO_x Lead	0.8 0.1 0.1 0.3 0.3 0.05	3.2 0.1 0.2 1.1 1.3 0.19	0.0044 -- -- -- – 0.000274
11	Boiler (2.0 MMBtu/hr)	None	PM_{10} SO_2 VOC CO NO_x	0.1 0.1 0.1 0.1 0.2	0.2 0.1 0.1 0.2 0.9	-- -- -- -- --
37	Pasting Area (16,566 dry scfm)	Baghouse	PM_{10} Lead	0.7 0.05	2.8 0.22	0.0044 0.00035
51	Absolyte Assembly Area (4 lead pots @ 0.8 MMBtu/pot) (24 ovens @ 0.15 MMBtu/oven) (55,222 dry scfm)	Baghouse	PM_{10} SO_2 VOC CO NO_x Lead	2.2 0.1 0.1 0.6 0.7 0.17	9.5 0.1 0.2 2.5 3.0 0.69	0.0044 -- -- -- – 0.00032

53	MST Assembly Area (60,000 actual cfm)	Baghouse	PM_{10} Lead	2.1 0.16	9.2 0.67	0.0044 0.00032
54	Non-Point Source Emissions	None	VOC	11.6	17.3	--
55	Boiler (6.8 MMBtu/hr)	None	PM_{10} SO_2 VOC CO NO_x	0.2 0.2 0.2 0.6 0.8	0.4 0.2 0.2 2.6 3.0	– – – – --
56 (52a)	Grid Casting (13 lead pots) (0.8 MMBtu/hr per pot) (40,000 actual cfm)	Baghouse	PM_{10} SO_2 VOC CO NO_x Lead	1.3 0.1 0.1 0.4 0.5 0.06	5.6 0.1 0.2 1.6 2.0 0.25	0.0040 -- -- -- – 0.000176
57	Mixing, Pasting, and Oxide Unloading (40,000 actual cfm)	Baghouse	PM_{10} Lead	1.4 0.11	6.1 0.49	0.0044 0.00035

2. Pursuant to §18.801 of the Arkansas Air Pollution Control Code, effective February 15, 1999 (Regulation #18) and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall not exceed the emission rates set forth in the following table.

SN	Description	Control Equipment	Pollutant	lb/hr	tpy	max. gr /dry scf
01	M and H Assembly Line (18,407 dry scfm)	Baghouse	PM	0.7	3.1	0.0044
02	Tek Max Automatic Plate Stacker (18,407 dry scfm)	Baghouse	PM	0.7	3.1	0.0044
03	Pasting, Mixing and Curing (18,407 dry scfm)	Baghouse	PM	0.7	3.1	0.0044

04	Curing Ovens, Oxide Unloading, and Casting (18 Ovens, 4 Grid Casters) (6.0 MMBtu/hr for all sources) (18,407 dry scfm)	Baghouse	PM	0.8	3.2	0.0044
06	Acid Scrubber	Removed from Service				
11	Boiler (2.0 MMBtu/hr)	None	PM	0.1	0.2	--
37	Pasting Area (16,566 dry scfm)	Baghouse	PM	0.7	2.8	0.0044
47	No. 1 Acid Storage Tank (3000 gallons)	None	H_2SO_4	0.1	0.4	--
48	No. 2 Acid Storage Tank (3000 gallons)	None	H_2SO_4	0.1	0.4	--
51	Absolyte Assembly Area (4 lead pots @ 0.8 MMBtu/pot) (24 ovens @ 0.15 MMBtu/oven) (55,222 dry scfm)	Baghouse	PM	2.2	9.5	0.0044
53	MST Assembly Area (60,000 actual cfm)	Baghouse	PM	2.1	9.2	0.0044
55	Boiler (6.8 MMBtu/hr)	None	PM	0.2	0.4	--
56 (52a)	Grid Casting (13 lead pots @ 0.8 MMBtu/hr) (7 grid casting systems @ 0.025 MMBTU/hr) (40,000 actual cfm)	Baghouse	PM	1.3	5.6	0.0040
57	Mixing, Pasting, and Oxide Unloading (40,000 actual cfm)	Baghouse	PM	1.4	6.1	0.0044

2. Pursuant to A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, visible emissions shall not exceed the limits specified in the following table of this permit as measured by EPA Reference Method 9.

SN	Limit	Regulatory Citation

01, 02, 03, 04, 37, 47, 48, 51, 53, 54, and 56	0	18.501 of Regulation #18
11 and 55	5	18.501 of Regulation #18

2. Pursuant to §18.801 of Regulation 18, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall not cause or permit the emission of air contaminants, including odors or water vapor and including an air contaminant whose emission is not otherwise prohibited by Regulation #18, if the emission of the air contaminant constitutes air pollution within the meaning of A.C.A. §8-4-303.

2. Pursuant to §18.901 of Regulation 18, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall not conduct operations in such a manner as to unnecessarily cause air contaminants and other pollutants to become airborne.

2. Pursuant to §19.705 of Regulation #19, §18.1004 of Regulation #18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, natural gas shall be the only fuel used for the combustion sources at this facility.

2. Pursuant to §18.1004 of Regulation #18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall not use in excess of 96 drums (55 gallons per drum) of isopropyl alcohol (6.55 lb VOC per gallon) per twelve consecutive months.

2. Pursuant to §18.1004 of Regulation #18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall maintain records which demonstrate compliance with Specific Condition #7. These records shall be kept on site, updated by the last day of the following month and provided to Department personnel upon request.

Control Equipment

2. Pursuant to §19.303 of Regulation #19 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the equipment, control apparatus and emission monitoring equipment shall be operated within their design specifications as described in the permit application at all times and shall be maintained in good condition at all times.

   A. The lead oxide unloading building shall be maintained in good and weather-tight condition. All doors shall remain closed during the lead oxide transfer to the silos.

   B. All nine baghouses (SN-01, SN-02, SN-03, SN-04, SN-37, SN-51, SN-53, and SN-56, and SN-57) shall be operated according to the vendor's specifications at all times. They shall be inspected as necessary, but not less than once per month, to insure that they are in good working condition. Maintenance records shall be kept on site at all times and shall be made available to Department personnel upon request.

C. The Department reserves the right to add additional pollution control requirements as needed.

NSPS Subpart KK

2. Pursuant to §19.304 and 40 CFR §60.370, Exide Technologies is subject to and shall comply with all applicable provisions of NSPS Subpart KK - *Standards of Performance for Lead-Acid Battery Manufacturing Plants*. A copy of Subpart KK is provided in Appendix A.

Testing

2. Pursuant to §19.702 of Regulation #19, §18.1002 of Regulation #18, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, Exide shall conduct a compliance test on all nine baghouses (SN-01, SN-02, SN-03, SN-04, SN-37, SN-51, SN-53, SN-56 and SN-57) within one testing period. The stack shall be tested for lead and PM/PM_{10}. EPA Reference Method 12, as found in 40 CFR Part 60 Appendix A, shall be used for lead. EPA Reference Method 5, with inclusion of the back half sampling train particulate, as found in 40 CFR Part 60 Appendix A, shall be used for PM/PM_{10}. A testing period shall not exceed ten working days. At least one compliance test shall be conducted every five calendar years. There shall be no more than sixty-two months between any two compliance tests. The 5-year testing cycle shall commence with the stack testing event scheduled for November 2002.

This testing shall be used to demonstrate compliance with the gr/dscf and lb/hr limits of each of the nine baghouses. The annual emission limits are based on the maximum capacity of the baghouse.

SECTION V: INSIGNIFICANT ACTIVITIES

The following types of activities or emissions are deemed insignificant on the basis of size, emission rate, production rate, or activity in accordance with Group A of the Insignificant Activities list found in Regulation 18 and 19 Appendix A. Insignificant activity emission determinations rely upon the information submitted by the permittee in an application dated August 14, 2002.

Description	Category
19 Lead Pots (NG fired at 0.8 MM BTU/hr each)	Group A.1
Sink Station	Group A13
Heat Sealer	Group A13
Helium Leak Tester	Group A13
2 Linburg ovens (0.5 MM Btu/hr each)	Group A1
Milling machine, drill press, grinder, sander at electrical test lab	Group A5
Air Compressor	Group B19
23 Battery Chargers Area	Group A5
Finishing and Pack Operation	Group A-13
Shop Size Glass Bead Blaster	Group A-13
Milling and Sawing of Post at Casting Operation	Group A-13

SECTION VI: GENERAL CONDITIONS

1. Any terms or conditions included in this permit which specify and reference Arkansas Pollution Control & Ecology Commission Regulation 18 or the Arkansas Water and Air Pollution Control Act (A.C.A. §8-4-101 *et seq*.) as the sole origin of and authority for the terms or conditions are not required under the Clean Air Act or any of its applicable requirements, and are not federally enforceable under the Clean Air Act. Arkansas Pollution Control & Ecology Commission Regulation 18 was adopted pursuant to the Arkansas Water and Air Pollution Control Act (A.C.A. §8-4-101 *et seq*.). Any terms or conditions included in this permit which specify and reference Arkansas Pollution Control & Ecology Commission Regulation 18 or the Arkansas Water and Air Pollution Control Act (A.C.A. §8-4-101 *et seq*.) as the origin of and authority for the terms or conditions are enforceable under this Arkansas statute.

1. Pursuant to A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, this permit shall not relieve the owner or operator of the equipment and/or the facility from compliance with all applicable provisions of the Arkansas Water and Air Pollution Control Act and the regulations promulgated thereunder.

1. Pursuant to §19.704 of the Regulations of the Arkansas Plan of Implementation for Air Pollution Control (Regulation 19) and/or A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, the Department shall be notified in writing within thirty (30) days after construction has commenced, construction is complete, the equipment and/or facility is first placed in operation, and the equipment and/or facility first reaches the target production rate.

1. Pursuant to §19.410(B) of Regulation 19 and/or §18.309(B) of the Arkansas Air Pollution Control Code (Regulation 18) and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, construction or modification must commence within eighteen (18) months from the date of permit issuance.

1. Pursuant to §19.705 of Regulation 19 and/or §18.1004 of Regulation 18 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, records must be kept for five years which will enable the Department to determine compliance with the terms of this permit--such as hours of operation, throughput, upset conditions, and continuous monitoring data. The records may be used, at the discretion of the Department, to determine compliance with the conditions of the permit.

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1. Pursuant to §19.705 of Regulation 19 and/or §18.1004 of Regulation 18 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, any reports required by any condition contained in this permit shall be certified by a responsible official and submitted to the Department at the address below.

   Arkansas Department of Environmental Quality
   Air Division
   ATTN: Compliance Inspector Supervisor
   Post Office Box 8913
   Little Rock, AR 72219

1. Pursuant to §19.702 of Regulation 19 and/or §18.1002 of Regulation 18 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, any equipment that is to be tested, unless stated in the Specific Conditions of this permit or by any federally regulated requirements, shall be tested with the following time frames: (1) Equipment to be constructed or modified shall be tested within sixty (60) days of achieving the maximum production rate, but in no event later than 180 days after initial start-up of the permitted source or (2) equipment already operating shall be tested according to the time frames set forth by the Department. The permittee shall notify the Department of the scheduled date of compliance testing at least fifteen (15) days in advance of such test. Compliance test results shall be submitted to the Department within thirty (30) days after the completed testing.

1. Pursuant to §19.702 of Regulation 19 and/or §18.1002 of Regulation 18 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, the permittee shall provide:

   a. Sampling ports adequate for applicable test methods
   b. Safe sampling platforms
   c. Safe access to sampling platforms
   d. Utilities for sampling and testing equipment

1. Pursuant to §19.303 of Regulation 19 and/or §18.1104 of Regulation 18 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, the equipment, control apparatus and emission monitoring equipment shall be operated within their design limitations and maintained in good condition at all times.

1. Pursuant to §19.601 of Regulation 19 and/or §18.1101 of Regulation 18 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, if the permittee exceeds an emission limit established by this permit, they shall be deemed in violation of said permit and shall be subject to enforcement action. The Department may forego enforcement action for emissions exceeding any limits established by this permit provided the following requirements are met:

    a. The permittee demonstrates to the satisfaction of the Department that the emissions resulted from an equipment malfunction or upset and are not the result of negligence or improper maintenance, and that all reasonable measures have been taken to immediately minimize or eliminate the excess emissions.
    b. The permittee reports the occurrence or upset or breakdown of equipment (by telephone, facsimile, or overnight delivery) to the Department by the end of the next business day after the occurrence or the discovery of the occurrence.
    c. The permittee shall submit to the Department, within five business days after the occurrence or the discovery of the occurrence, a full, written report of such occurrence, including a statement of all known causes and of the scheduling and nature of the actions to be taken to minimize or eliminate future occurrences, including, but not limited to, action to reduce the frequency of occurrence of such conditions, to minimize the amount by which said limits are exceeded, and to reduce the length of time for which said limits are exceeded. If the information is included in the initial report, it need not be submitted again.

1. Pursuant to A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, the permittee shall allow representatives of the Department upon the presentation of credentials:

    a. To enter upon the permittee's premises, or other premises under the control of the permittee, where an air pollutant source is located or in which any records are required to be kept under the terms and conditions of this permit
    b. To have access to and copy any records required to be kept under the terms and conditions of this permit, or the Act
    c. To inspect any monitoring equipment or monitoring method required in this permit
    d. To sample any emission of pollutants
    e. To perform an operation and maintenance inspection of the permitted source

1. Pursuant to A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, this permit is issued in reliance upon the statements and presentations made in the permit application. The Department has no responsibility for the adequacy or proper functioning of the equipment or control apparatus.

1. Pursuant to §19.410(A) of Regulation 19 and/or §18.309(A) of Regulation 18 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, this permit shall be subject to revocation or modification when, in the judgment of the Department, such revocation or modification shall become necessary to comply with the applicable provisions of the Arkansas Water and Air Pollution Control Act and the regulations promulgated thereunder.

1. Pursuant to §19.407(B) of Regulation 19 and/or §18.307(B) of Regulation 18 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, this permit may be transferred. An applicant for a transfer shall submit a written request for transfer of the permit on a form provided by the Department and submit the disclosure statement required by Arkansas Code Annotated §8-1-106 at least thirty (30) days in advance of the proposed transfer date. The permit will be automatically transferred to the new permittee unless the Department denies the request to transfer within thirty (30) days of the receipt of the disclosure statement. A transfer may be denied on the basis of the information revealed in the disclosure statement or other investigation or, if there is deliberate falsification or omission of relevant information.

1. Pursuant to A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, this permit shall be available for inspection on the premises where the control apparatus is located.

1. Pursuant to A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, this permit authorizes only those pollutant emitting activities addressed herein.

1. Pursuant to Regulation 18 and 19 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, this permit supersedes and voids all previously issued air permits for this facility.

APPENDIX A

NSPS Subpart KK

Standards of Performance for Lead-Acid Battery Manufacturing Plants

§§60.370 Applicability and designation of affected facility.

(a) The provisions of this subpart are applicable to the affected facilities listed in paragraph (b) of this section at any lead-acid battery manufacturing plant that produces or has the design capacity to produce in one day (24 hours) batteries containing an amount of lead equal to or greater than 5.9 Mg (6.5 tons).

(b) The provisions of this subpart are applicable to the following affected facilities used in the manufacture of lead-acid storage batteries:

(1) Grid casting facility.

(2) Paste mixing facility.

(3) Three-process operation facility.

(4) Lead oxide manufacturing facility.

(5) Lead reclamation facility.

(6) Other lead-emitting operations.

(c) Any facility under paragraph (b) of this section the construction or modification of which is commenced after January 14, 1980, is subject to the requirements of this subpart.

§§60.371 Definitions.

As used in this subpart, all terms not defined herein shall have the meaning given them in the Act and in subpart A of this part.

(a) Grid casting facility means the facility which includes all lead melting pots and machines used for casting the grid used in battery manufacturing.

(b) Lead-acid battery manufacturing plant means any plant that produces a storage battery using lead and lead compounds for the plates and sulfuric acid for the electrolyte.

(c) Lead oxide manufacturing facility means a facility that produces lead oxide from lead, including product recovery.

(d) Lead reclamation facility means the facility that remelts lead scrap and casts it into lead ingots for use in the battery manufacturing process, and which is not a furnace affected under subpart L of this part.

(e) Other lead-emitting operation means any lead-acid battery manufacturing plant operation from which lead emissions are collected and ducted to the atmosphere and which is not part of a grid casting, lead oxide manufacturing, lead reclamation, paste mixing, or three-process operation facility, or a furnace affected under subpart L of this part.

(f) Paste mixing facility means the facility including lead oxide storage, conveying, weighing, metering, and charging operations; paste blending, handling, and cooling operations; and plate pasting, takeoff, cooling, and drying operations.

(g) Three-process operation facility means the facility including those processes involved with plate stacking, burning or strap casting, and assembly of elements into the battery case.

§§60.372 Standards for lead

(a) On and after the date on which the performance test required to be conducted by §§60.8 is completed, no owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere:

(1) From any grid casting facility any gases that contain lead in excess of 0.40 milligram of lead per dry standard cubic meter of exhaust (0.000175 gr/dscf).

(2) From any paste mixing facility any gases that contain in excess of 1.00 milligram of lead per dry standard cubic meter of exhaust (0.000437 gr/dscf).

(3) From any three-process operation facility any gases that contain in excess of 1.00 milligram of lead per dry standard cubic meter of exhaust (0.000437 gr/dscf).

(4) From any lead oxide manufacturing facility any gases that contain in excess of 5.0 milligrams of lead per kilogram of lead feed (0.010 lb/ton).

(5) From any lead reclamation facility any gases that contain in excess of 4.50 milligrams of lead per dry standard cubic meter of exhaust (0.00197 gr/dscf).

(6) From any other lead-emitting operation any gases that contain in excess of 1.00 milligram of lead per dry standard cubic meter of exhaust (0.000437 gr/dscf).

(7) From any affected facility other than a lead reclamation facility any gases with greater than 0 percent opacity (measured according to Method 9 and rounded to the nearest whole percentage).

(8) From any lead reclamation facility any gases with greater than 5 percent opacity (measured according to Method 9 and rounded to the nearest whole percentage).

(b) When two or more facilities at the same plant (except the lead oxide manufacturing facility) are ducted to a common control device, an equivalent standard for the total exhaust from the commonly controlled facilities shall be determined as follows:

Where:

Se=is the equivalent standard for the total exhaust stream.

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

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

Qsda=is the dry standard volumetric flow rate of the effluent gas stream from each facility ducted to the control device.

QsdT=is the total dry standard volumetric flow rate of all effluent gas streams ducted to the control device.

[47 FR 16573, Apr. 16, 1982, as amended at 65 FR 61760, Oct. 17, 2000]

§§60.373 Monitoring of emissions and operations.

The owner or operator of any lead-acid battery manufacturing facility subject to the provisions of this subpart and controlled by a scrubbing system(s) shall install, calibrate, maintain, and operate a monitoring device(s) that measures and records the pressure drop across the scrubbing system(s) at least once every 15 minutes. The monitoring device shall have an accuracy of ±±5 percent over its operating range.

§§60.374 Test methods and procedures.

(a) In conducting the performance tests required in §§60.8, the owner or operator shall use as reference methods and procedures the test methods in appendix A of this part or other methods and procedures as specified in this section, except as provided in §§60.8(b).

(b) The owner or operator shall determine compliance with the lead standards in §§60.372, except §§60.372(a)(4), as follows:

(1) Method 12 shall be used to determine the lead concentration and, if applicable, the volumetric flow rate (Qsda) 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).

(2) When different operations in a three-process operation facility are ducted to separate control devices, the lead emission concentration (C) from the facility shall be determined as follows:

where:

C=concentration of lead emissions for the entire facility, mg/dscm (gr/dscf).

Ca=concentration of lead emissions from facility "a", mg/dscm (gr/dscf).

Qsda=volumetric flow rate of effluent gas from facility "a", dscm/hr (dscf/hr).

N=total number of control devices to which separate operations in the facility are ducted.

(3) Method 9 and the procedures in §§60.11 shall be used to determine opacity. The opacity numbers shall be rounded off to the nearest whole percentage.

(c) The owner or operator shall determine compliance with the lead standard in §§60.372(a)(4) as follows:

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

E=emission rate of lead, mg/kg (lb/ton) of lead charged.

CPbi=concentration of lead from emission point "i," mg/dscm (gr/dscf).

Qsdi=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).

(2) Method 12 shall be used to determine the lead concentration (CPb) and the volumetric flow rate (Qsd) 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).

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

P=N W/1T

where:

N=number of lead pigs (ingots) charged.

W=average mass of a pig, kg (ton).

1T=duration of run, hr.

[54 FR 6675, Feb. 14, 1989, as amended at 65 FR 61760, Oct. 17, 2000]