217/782-2113

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT
NSPS SOURCE -- RENEWAL

PERMITTEE

GNB Industrial Power
Attn: Mark Breseman
2475 West Station Street
Kankakee, Illinois 60901

Application No.: 73100154 I.D. No.: 091055AAH
Applicant's Designation: Date Received: July 17, 2000
Subject: Lead Acid Battery Manufacturing
Date Issued: Expiration Date:
Location: 2475 West Station Street, Kankakee

This permit is hereby granted to the above-designated Permittee to OPERATE emission source(s) and/or air pollution control equipment consisting of:

Sub Assembly (3) with Baghouse BH B32
Black Oxide Area Ventilation with BH B7
Plate Consolidation Area and Plate Cleaning Area Controlled by BH B13
Lead/Tin Melt Pot with Filter B31
Forming
Black Oxide Mill 1 with BH B17 and BH B16
Black Oxide Mill 2 BH19 and B16
Black Oxide Mill 3 with BH B20 and B16
Black Oxide Mill 4 with BH B21 and BH B16
Black Oxide Mill 5 with BH B22 and B16
Casting Pot Nos. 1-12 with BH B1
Humidity Cure/Dry Ovens 1-11
Cyclotherm Boiler (Natural Gas)
York Shippley Boiler (Natural Gas)
Absolyte Assembly Line #1 with BH B13
Wrap and Stack Station #1 with BH B32
Absolyte Assembly Line #2 and #3 with BH B14
Wrap and Stack Station #2 and #3 with BH B2
Central Vacuum System BH B15 and BH B32
Pasting Area Ventilation with BH B16
Oxide Storage with BH B16
Silos (4) with BH B25, BH B26, BH B27, BH B28, and BH B16
Pasting Lines with Scrubber B30
Paste Mixers (4) with Scrubber B12
Oxide Transfer System with BH B29
Black Oxide Central Vacuum System with BH B18 and Secondary Control BH B16
Winkel Small Parts Caster with BH B1
Sub-Drying Ovens (4)
Plate Cleaning (2) with BH B10
Grid Casting Machines (6)/Pots (6) with BH B1
Seawolf Caster with BH B32
Lab Exhaust with BH B32

Black Oxide Slug Caster with BH B8
Post Casting with BH B1
Natural Gas Fired Make-Up Air Heaters

as described in the above referenced application. This Permit is subject to standard conditions attached hereto and the following special conditions:

1a. This federally enforceable state operating permit is issued to limit the emissions of air pollutants from the source to less than major source thresholds (i.e., particulate matter, carbon monoxide, nitrogen oxides, organic materials less than 100 tons/year each and lead less than 10 tons/year). As a result the source is excluded from the requirement to obtain a Clean Air Act Permit Program (CAAPP) permit. The maximum emissions of this source, as limited by the conditions of this permit, are described in Attachment A.

b. Prior to issuance, a draft of this permit has undergone a public notice and comment period.

c. This permit supersedes all operating permits issued for this location.

2a. The Lead-Acid Battery Manufacturing is subject to New Source Performance Standards (NSPS), 40 CFR 60, Subparts A and KK. The Illinois EPA is administering these standards in Illinois on behalf of the United States EPA under a delegation agreement.

b. i. For those sources subject to the NSPS, 40 CFR 60.372, the lead emissions shall not exceed the corresponding limit and 0% opacity :

Grid Casting	0.40 milligram/dscm or 0.000176 gr/dscf
Paste Mixing	1.00 milligram/dscm or 0.00044 gr/dscf
Three-Process	1.00 milligram/dscm or 0.00044 gr/dscf
Lead Reclamation*	4.50 milligram/dscm or 0.00198 gr/dscf
Other Lead Emitting Sources	1.00 milligram/dscm or 0.00044 gr/dscf

* 5% Opacity Applies

ii. For all other lead-emitting sources at the facility, not subject to the NSPS, the lead emissions shall be subject to a limit as defined in Table 2 of this permit.

c. At all times the Permittee shall also maintain and operate the lead-acid battery manufacturing plant, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions, pursuant to the NSPS, 40 CFR 60.11(d).

3a. Operation and emissions of the plant shall not exceed the following limits:

	Throughput	Emissions
Lead Usage (Metallic + Oxide):	72,000,000 pounds/year 7,500,000 pounds/month	See Tables 1 & 2
Fuel Usage (Natural Gas):	618.8 mmcft/year 55 mmcft/month	See Table 3

b. These limits define the potential emissions of the operation, and are based on the actual emissions determined from maximum production capacity, stack test data and standard emission factors.

c. Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months.

4a. The Permittee shall fulfill applicable notification and record-keeping requirements of the NSPS, 40 CFR 60.7.

b. The Permittee shall maintain monthly records of the following items:

i. Lead Usage (Metallic + Oxide): pounds/month; pounds/year

ii. Fuel Usage (Natural Gas): mmcft/month; mmcft/year

c. The Permittee shall maintain an operating and maintenance log for the baghouses and scrubbers including:

i. Incidents of malfunction, with duration, probable cause, and corrective actions;

ii. Maintenance activities, with inspection schedule, repair actions, and replacements, etc.; and

d. All records and logs required by this permit shall be retained at a readily accessible location at the source for at least three years from the date of entry and shall be made available for inspection and copying by the Illinois EPA or USEPA upon request. Any records retained in an electronic format (e.g., computer) shall be capable of being retrieved and printed on paper during normal source office hours so as to be able to respond to an Illinois EPA or USEPA request for records during the course of a source inspection.

5. The emissions of Hazardous Air Pollutants (HAPs) as listed in Section 112(b) of the Clean Air Act shall not equal or exceed 10 tons per year of any single HAP or 25 tons per year of any combination of such HAPs, or such lesser quantity as USEPA may establish in rule which would require the Permittee to obtain a CAAPP permit from the Illinois EPA. As a result of this condition, this permit is issued based on the

emissions of any HAP from this source not triggering the requirement to obtain a CAAPP permit from the Illinois EPA.

6. If there is an exceedance of the requirements of this permit as determined by the records required by this permit, the Permittee shall submit a report to the Illinois EPA's Compliance Section in Springfield, Illinois within 30 days after the exceedance. The report shall include the emissions released in accordance with the recordkeeping requirements, a copy of the relevant records, and a description of the exceedance or violation and efforts to reduce emissions and future occurrences.

7a. Within 90 days of a written request from the Illinois EPA, the emissions and opacity of the exhaust from any emission source or any air pollution control equipment of the plant shall be measured by an approved testing service, during conditions which are representative of the maximum performance, pursuant to 35 Ill Adm. Code Section 201.282. The Illinois EPA may provide additional time for the performance of this testing upon request from the Permittee which shows that it is not feasible to perform representative testing within 90 days.

b. i. The following methods and procedures shall be used for testing of emissions. Refer to 40 CFR 60, Appendix A for USEPA test methods.

Location of Sample Points	USEPA Method 1
Gas Flow and Velocity	USEPA Method 2
Moisture	USEPA Method 4
Particulate Matter	USEPA Method 5
Opacity	USEPA Method 9
Lead	USEPA Method 12

ii. A test shall consist of three separate runs, each at least 60 minutes in duration. Compliance shall be determined from the average of the runs, provided that the Illinois EPA may accept the arithmetic mean of two runs in circumstances described in 40 CFR 60.8(f).

c. Testing shall be performed by a qualified independent testing service.

d. At least 30 days prior to the actual date of testing a written test plan shall be submitted to the Illinois EPA for review and approval. A copy shall also be submitted to the USEPA. This plan shall describe the specific procedures for testing, including:

i. The person(s) who will be performing sampling and analysis and their experience with similar tests.

ii. The conditions under which testing will be performed, including a discussion of why these conditions will be representative of the maximum operating rate, the levels of operating parameters at or within which compliance is intended to be shown, if applicable,

and the means by which the operating parameters for the process and any control equipment will be determined.

e. The Illinois EPA shall be notified prior to these tests to enable the Illinois EPA to observe these tests. Notification for the expected date of testing shall be submitted a minimum of thirty (30) days prior to the expected date. Notification of the actual date and expected time of testing shall be submitted a minimum of five (5) working days prior to the actual date of the tests. The Illinois EPA may, at its discretion, accept notification with shorter advance notice, provided that the Illinois EPA will not accept such notifications if it interferes with the Illinois EPA's ability to observe the testing.

8. Two (2) copies of required reports and notifications concerning equipment operation or repairs, performance testing or a continuous monitoring system shall be sent to:

Illinois Environmental Protection Agency
Division of Air Pollution Control
Compliance Section (#40)
P.O. Box 19276
Springfield, Illinois 62794-9276

and one (1) copy shall be sent to the Illinois EPA's regional office at the following address unless otherwise indicated:

Illinois Environmental Protection Agency
Division of Air Pollution Control
9511 West Harrison
Des Plaines, Illinois 60016

9. The Permittee shall submit the following additional information with the Annual Emissions Report, due May 1st of each year: quantities of each item listed in the Special Condition 4b from the prior calendar year.

It should be noted that this permit has been revised to incorporate equipment in Construction Permit 00090026.

If you have any questions on this permit, please call John Blazis at 217/782-2113.

Donald E. Sutton, P.E.
Manager, Permit Section
Division of Air Pollution Control

DES:JPB:jar

cc: Illinois EPA, FOS Region 1
Illinois EPA, CASM
Lotus Notes

Attachment A

This attachment provides a summary of the maximum emissions from the lead acid battery plant operating in compliance with the requirements of this federally enforceable permit. In preparing this summary, the Illinois EPA used the annual operating scenario which results in maximum emissions from such a plant. The resulting maximum emissions are well below the levels (e.g., 10 tons per year of lead), at which this source would be considered a major source for purposes of the Clean Air Act Permit Program. Actual emissions from this source will be less than predicted in this summary to the extent that less material is handled, and control measures are more effective than required in this permit.

Table 1

PARTICULATE EMISSION LIMIT SUMMARY (PROCESS SOURCES)

Source No.	Description and No. Identical Sources	Control Device	PM Max. Exhaust Conc. (mg/dscm)	Exhaust Max. Air Flows (dscfm)	PM Max. Rate (Lbs/Hr)	Yearly Emission Rate Tons/yr (8,760 hrs)
1	Sub Assembly (3)	BH B32	15	33,000	1.881	8.239
2	Black Oxide Vent.	BH B7	15	7,786	0.444	1.944
3	Plate Consolidation Area and Plate Cleaning Area	BH B13	See Source 11	-----	-----	-----
4	Forming	No PM Emissions	0	-----	0	0
5	Black Oxide Mills (5)	Secondary Control BH B16	15	17,500	0.998	4.369
		Primary Control				
	Mill 1	BHB17*		0	0.000	0.000
	Mill 2	BH Bl9*		0	0.000	0.000
	Mill 3	BH B20*		0	0.000	0.000
	Mill 4	BH B21*		0	0.000	0.000
	Mill 5	BH B22*		0	0.000	0.000
6	Casting Pot Nos. 1-12	BH Bl	15	40,000	2.280	9.986
7	Lead/Tin Alloy Casting Pot	B31		350	0.000	0.000

Table 1 (Continued)

Source No.	Description and No. Identical Sources	Control Device	PM Max. Exhaust Conc. (mg/dscm)	Exhaust Max. Air Flows (dscf)	PM Max. Rate (Lbs/Hr)	Yearly Emission Rate Tons/yr (8,760 hrs)
8	Humidity Cure\Dry Ovens No. 1-11	None	15	22,000	1.254	5.493
9	Cyclotherm Boiler (Natural Gas)	See Fuel Combustion	---	-----	-----	-----
10	York and Shippley Boiler (Natural Gas)	See Fuel Combustion	---	-----	-----	-----
11	Absolyte Assembly Lines #1 Wrap and Stack	BH B13	15	41,000	2.337	10.236
		BH B32	See Source 1			
	Absolyte Assembly Lines #2 and #3 Wrap and Stack	BH B14	15	41,000	2.337	10.236
		BH B2		23,000	1.311	5.742
12	Central Vacuum System	Secondary Control				
		BH B32	See Source 1	------	-----	------
		Primary Control				
		BH B15*		0	0.000	0.000
13	Pasting Area Vent.	BH B 16	See Source 5	------	-----	------
	Oxide Storage Silos (4)	Secondary Control				
		BH B16	See Source 5	------	-----	------
		Control				
		BH B25*		0	0.000	0.000
		BH B26*	0	0	0.000	0.000
		BH B27*		0	0.000	0.000
		BH B28*	0	0	0.000	0.000
	Pasting Lines	Scrb B30	15	12,000	0.684	2.996
	Paste Mixers (4)	Scrb B12	15	6,000	0.342	1.498
	Oxide Transfer System	BH B29	15	1,200	0.068	0.300
14	Black Oxide Central Vacuum System	Secondary Control				
		BHB16	See Source 5	------	-----	------
		Primary Control				
		BHB18*	0	0	0.000	0.000

Table 1 (Continued)

Source No.	Description and No. Identical Sources	Control Device	PM Max. Exhaust Conc. (mg/dscm)	Exhaust Max. Air Flows (dscfm)	PM Max. Rate (Lbs/Hr)	Yearly Emission Rate Tons/yr (8,760 hrs)
15	Winkle Small Parts Casting	BH Bl	See Source 6	------	-----	------
16	Sub Drying Ovens (4)	None	15	4,000	0.228	0.999
17	Plate Cleaning (2)	BH B32	See Source 1	------	-----	------
18	Grid Casting Machines (6) W/Pots (6)	BH B1	See Source 6	------	-----	------
19	Seawolf Caster	BH B32	See Source 1	------	-----	------
20	Lab Exhaust	BH B32	See Source 1	------	-----	------
21	Black Oxide Slug	BH B8	15	5,023	0.286	1.254
22	Post Casting	BH B1	See Source 6	------	-----	------
				TOTAL: PM	63.29 Ton/Yr	

* Baghouse Vented to Another Baghouse

Table 2

LEAD EMISSION LIMIT SUMMARY (PROCESS SOURCES)

Source No.	Description and No. Identical Sources	Control Device	Lead Max. Exhaust Concentration (mg/dscm)	Exhaust Max. Air Flows (dscfm)	Lead Emissions Max. Rate (Lbs/Hr)	Lead Emissions Tons/yr (8,760 hrs)
1	Sub Assembly (3)	BH B32	1.0	33,000	0.126	0.552
2	Black Oxide Vent.	BH B7	1.0	7,786	0.030	0.130
3	Plate Consolidation Area and Plate Consolidation Area	BH B13	See Source 11	-----	-----	-----
4	Forming	No PM Emissions	0	0	0	0
5	Black Oxide Mills (5)	Secondary Control BH B16	1.0	17,500	0.067	0.291
		Primary Control				
	Mill 1	BHB17*	0	0	0.000	0.000
	Mill 2	BH Bl9*	0	0	0.000	0.000
	Mill 3	BH B20*	0	0	0.000	0.000
	Mill 4	BH B21*	0	0	0.000	0.000
	Mill 5	BH B22*	0	0	0.000	0.000
6	Casting Pots Nos. 1-12	BH Bl	0.4	40,000	0.061	0.266
7	Lead/Tin Alloy Casting Pot	B31	0.4	350	0.001	0.001
8	Humidity Cure\Dry Ovens No. 1-11	None	1.0	22,000	0.084	0.366
9	Cyclotherm Boiler (Natural Gas)	None	0	1,000	0.000	0.000
10	York and Shippley Boiler (Natural Gas)	None	0	1,000	0.000	0.000
11	Absolyte Assembly Line #1	BH B13	1.0	41,000	0.155	0.682
	Wrap and Stack	BH B32	See Source 1	------	-----	------

Table 2 (Continued)

Source No.	Description and No. Identical Sources	Control Device	Lead Max. Exhaust Concentration (mg/dscm)	Exhaust Max. Air Flows (dscfm)	Lead Emissions Max. Rate (Lbs/Hr)	Lead Emissions Tons/yr (8,760 hrs)
	Absolyte Assembly Line #2 and #3	BH B14	1.0	41,000	0.155	0.682
	Wrap and Stack	BH B2	1.0	23,000	0.080	0.383
12	Central Vacuum System	Secondary Control BH B32	See Source 1	------	-----	------
		Primary Control BH B15*	0	0	0.000	0.000
13	Pasting Area Vent.	BH B 16	See Source 5	------	-----	------
	Oxide Storage Silos (4)	Secondary Control BH B16	See Source 5	------	-----	------
		Control BH B25*	0	0	0.000	0.000
		BH B26*	0	0	0.000	0.000
		BH B27*	0	0	0.000	0.000
		BH B28*	0	0	0.000	0.000
	Pasting Lines	Scrb B30	1.0	12,000	0.046	0.200
	Paste Mixers (4)	Scrb B12	1.0	6,000	0.023	0.100
	Oxide Transfer System	BH B29	1.0	1,200	0.005	0.020
14	Black Oxide Central Vacuum System	Secondary Control BHB16	See Source 5	------	-----	------
		Primary Control BHB18*	0	0	0.000	0.000
15	Winkle Small Parts Casting	BH Bl	See Source 6	------	-----	------
16	Sub Drying Ovens (4)	None	1.0	4,000	0.015	0.067
17	Plate Cleaning (2)	BH B32	See Source 1	------	-----	------
18	Grid Casting Machines (6) W/Pots (6)	BH B1	See Source 6	------	-----	------
19	Seawolf Caster	BH B32	See Source 1	------	-----	------

Table 2 (Continued)

Source No.	Description and No. Identical Sources	Control Device	Lead Max. Exhaust Concentration (mg/dscm)	Exhaust Max. Air Flows (dscfm)	Lead Emissions Max. Rate (Lbs/Hr)	Lead Emissions Tons/yr (8,760 hrs)
20	Lab Exhaust	BH B32	See Source 1	------	-----	------
21	Black Oxide Slug Caster	BH B8	1.0	5,023	0.029	0.084
22	Post Casting	BH B1	See Source 6	------	-----	------
				TOTAL: LEAD	3.82 Ton/Yr	

* Baghouse Vented Through Another Baghouse

Table 3

Emissions from Natural Gas Combustion

Natural Gas Throughput	Pollutant	Emission Rate		Annual Emissions	
618.788 mmcft/year	PM	7.6	lb/mmcft	2.35	ton/year
55 mmcft/month	VOM	5.5	lb/mmcft	1.70	ton/year
	CO	84	lb/mmcft	26.0	ton/year
	NO_x	100	lb/mmcft	30.9	ton/year

These tables defines the actual emissions calculated from the combustion of natural gas and standard emission factors.

Table 4

PLANT EMISSION LIMIT SUMMARY

Pollutant	Process Source Emissions (Ton/Yr) (Table 1 and Table 2)	Fuel Combustion Emissions (Ton/Yr) (Table 3)	Total Emissions (Ton/Yr)
PM	63.29	2.35	65.6
VOM	-----	1.70	1.70
CO	-----	26.0	26.0
NO_x	-----	30.9	30.9
Lead	3.82	----	3.82

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