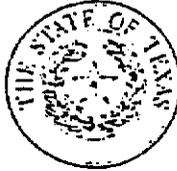


APPENDIX A

AIR QUALITY PERMIT NUMBERS 3048a AND 1147A

Barry R. McBee, *Chairman*
R. B. "Ralph" Marquez, *Commissioner*
John M. Baker, *Commissioner*
Dan Pearson, *Executive Director*



TEXAS NATURAL RESOURCE CONSERVATION COMMISSION

Protecting Texas by Reducing and Preventing Pollution

March 20, 1996

Mr. Carlos Liscano
Assistant Plant Manager
GNB TECHNOLOGIES, INC.
P.O. Box 250
Frisco, Texas 75034

Re: Permit Alteration
Permit No. 1147A
Battery Recycling Facility
Frisco, Collin County
Account ID No. CP-0029-G

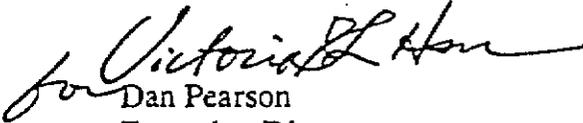
Dear Mr. Liscano:

This is in response to your letter dated January 22, 1996, requesting to consolidate Permit No. 5466E into Permit No. 1147A with the subsequent change of the conditions and maximum allowable emission rates table (MAERT) of the referenced permit.

Pursuant to the authority conferred under Section 382.0511(b) of the Texas Clean Air Act, Texas Health and Safety Code, Chapter 382, and 30 TAC Section 116.116(b) (Regulation VD), Permit No. 1147A is altered and Permit No. 5466E is voided but remains on file. The altered permit conditions and MAERT are enclosed. Please attach these to your permit.

Your cooperation in this matter is appreciated. If you have further questions, please contact Mr. Earl Jones of our Office of Air Quality, New Source Review Division at (512) 239-1351.

Sincerely,


Dan Pearson
Executive Director

DP/EJ/ss

Enclosures

cc: Mr. Jesse Macias, Air Program Manager, Arlington

SPECIAL CONDITIONS

Permit No. 1147A

EMISSION STANDARDS AND FUEL SPECIFICATION

1. This permit covers only those sources of emissions listed in the attached table entitled "Emission Sources - Maximum Allowable Emission Rates," and these sources are restricted to the emission limits and other conditions specified in that attached table. Compliance with these permitted emission limits is based on a maximum reverberatory furnace lead scrap feed rate of 20 tons per hour and a maximum blast furnace lead scrap feed rate of 12 tons per hour for a combined feed rate maximum total of 228,000 tons per year of feed comprised of recovered battery lead, acceptable lead bearing scrap as defined by the Resource Conservation and Recovery Act Part B Permit No. HW-50206 and Title 40 Code of Federal Regulations Part 266 (40 CFR 266) including Appendix XI, limestone, iron/steel scrap, coke and coke fines, sand, small amounts of reductant material, and furnace adjustment material.

Compliance is also based on a combined maximum reverberatory and blast furnace finished lead production rates of 400 tons per day and 72,000 tons per year.

2. This facility shall comply with all requirements of Environmental Protection Agency Regulations on Standards of Performance for New Stationary Sources promulgated for Secondary Lead Smelters in 40 CFR 60, Subpart L.

Emissions from this facility shall not cause or contribute to an exceedance of the National Ambient Air Quality Standard for lead at any of the following air monitoring sites:

Monitors No. 480850009, 480850001, 480850001 (QA), 480850003, and 480850006 operated by Texas Natural Resource Conservation Commission (TNRCC).

3. Natural gas used in the smelting/refining process shall be pipeline-quality, sweet natural gas which is currently defined by industry practices as containing no more than 0.25 grain of hydrogen sulfide (H_2S) and 5 grains of total sulfur per 100 dry standard cubic feet (dscf). To the extent the industry definition changes, the TNRCC Executive Director shall modify this permit to make it consistent with such definition provided, however, that in no event shall the definition ever provide limits in excess of 1.5 grains of H_2S and 30 grains of total sulphur per 100 dscf.

Fuel used in the blast furnace processes shall be high temperature coke with a maximum (by weight) ash content of 12 percent and a maximum (by weight) sulfur content of 1.3 percent. Materials that appear in 40 CFR 266, Appendix XI, may be used in the reverberatory or blast furnace consistent with the requirements of 40 CFR 266.100(c)(3). Plastic curtains shall not be added to the reverberatory or blast furnace feed stock.

SPECIAL CONDITIONS

Permit No. 1147A

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OPACITY/VISIBLE EMISSION LIMITATIONS

4. No visible emissions that result from the permitted activities shall leave the plant property boundary. If this condition is violated, further controls shall be installed and/or implemented as required to limit visible emissions.
5. Except for those periods described in TNRCC Section 111.111(a)(1)(E) of Regulation I, the stack sources listed on the table entitled "Emission Sources - Maximum Allowable Emission Rates" shall not exceed 5 percent opacity averaged over a six-minute period when adjusted for uncombined water vapor.
6. Fabric filter baghouses or cartridge filter dust collectors, properly installed and in good working order, shall control particulate matter (PM) emissions from Emission Point Nos. (EPNs) 18, 22, 37, 39, and 45. Particulate emissions from EPNs 18, 22, 39, and 45 shall not exceed 0.01 grains/dscf. Particulate emissions from EPNs 21 and 37 shall not exceed 0.015 grains/dscf.
7. The Wet Scrubbers associated with EPNs 38 and 46 shall be properly installed and maintained in good working order. The PM emissions from EPNs 38 and 46 shall not exceed 0.015 grains/dscf.
8. Opacity of fugitive emissions from material handling activities (defined for purposes of this permit as the storage, loading and unloading, transportation, lead pouring, or conveyance of any material, fuel, intermediate product, finished product, by-product or waste product) such as moving materials (either mechanically or with a front-end loader) shall be minimized using partial covers, watering, and/or good work practice operating procedures. In addition, material handling activities shall not cause any visible emissions to leave the plant property boundary.

OPERATIONAL LIMITATIONS AND WORK PRACTICES

9. The supplemental baghouse shall capture and control the blast furnace's fugitive emissions (including, but not limited to, the upper charging area) during normal operations and as long as this control system's baghouse is operational during furnace upset conditions. The system shall be installed and operated such that:
 - A. There shall be no visible emissions from the building that houses the blast furnace.
 - B. The hooding for each fugitive emission source shall maintain a negative airflow around the source (i.e., airflow, as indicated by anemometer or smoke indicator shall be inward toward the system's hooding such that all air around the source is pulled into the system hoods).

SPECIAL CONDITIONS

Permit No. 1147A

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- C. This system shall effectively capture not less than 80 percent of the blast furnace fugitive emissions which shall ultimately be exhausted from EPN 37.
10. The blast furnace chamber shall operate at a negative pressure and the exhaust gases shall be vented to a direct-fired (natural gas) afterburner equipped with a fully modulating 10 MMBTU/hour burner to oxidize volatile organic compounds and designed for a residence time of 1.0 second. The average minimum operating temperature of the afterburner chamber shall be 1500°F as measured near the midpoint of the afterburner chamber. The exit gases from the afterburner shall be cooled in a series of heat exchangers to approximately 275°F at the intake of the blast furnace baghouse. The blast furnace baghouse shall be vented to a wet spray scrubber that is common control for both the blast furnace and the reverberatory furnace with Stack EPN 38.
11. A system shall be installed for the reverberatory furnace to capture and control the furnace's fugitive emissions (including, but not limited to, the slag and metal tap areas and the charging area) during normal operations and as long as this control system's baghouse is operational during furnace upset conditions. The system shall be installed and operated such that:
 - A. There shall be no visible emissions from the building that houses the reverberatory furnace.
 - B. The hooding for each fugitive emission point shall maintain a negative airflow around the emissions point (i.e., airflow, as indicated by anemometer, smoke bomb, or smoke generator, shall be inward toward the system's hooding such that all air around the emissions point is pulled into the system hoods).
12. The reverberatory furnace shall operate with sufficient negative draft to remove smoke and fumes but still allow retention of as much heat as possible over the hearth and the smoke and fumes shall be vented to the reverberatory baghouse which exhausts to the Wet Spray Scrubber (EPN 38) which also controls the blast furnace baghouse exhaust. Hoods that control fugitive emissions shall be not less than 80 percent effective in capturing reverberatory fugitive emissions and shall be vented to either (1) the fugitive baghouse which also controls the fugitives from the blast furnace and exhausts to Stack EPN 37 or (2) the soft lead baghouse.
13. The motors of the blowers and fans used in the capture and control systems specified for the blast and reverberatory furnaces (Special Condition Nos. 9 and 11 above) shall include a control system to automatically restart the motors following power interruptions of less than five seconds.

SPECIAL CONDITIONS

Permit No. 1147A

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14. The hard lead, soft lead, and specialty alloy refining kettles and portable dressing pots shall be fitted with hoods that shall maintain a negative airflow into the system hoods. There shall be no visible emissions from the building that houses the refining kettles, and these controls shall be operated at all times these units are in operation.
15. The raw material storage building shall be equipped with doors on the north and west sides of the building which will be kept normally closed except when necessary. This building shall be kept under negative pressure at all times and vented to a dust collector. During feed shredder downtime, pallets and associated material may be broken or otherwise appropriately sized and fed to the blast furnace.
16. The battery breaker concrete pad shall be sloped downward toward the bins in order to minimize material runoff onto plant roads. The battery breaker operation emissions shall be controlled by a wet scrubber.
17. All wet scrubbers listed in this permit shall be maintained and operated as recommended by the manufacturer but the maintenance and operation requirements shall not be less than as follows:
 - A. The scrubbing solution for removal of sulfur dioxide (SO_2) in the metallurgical scrubber shall be maintained at or above a minimum pH set-point of 5.7 to be continuously monitored and adjusted as necessary.
 - B. The spray nozzles and general condition of the scrubber shall be visually inspected a minimum of once per quarter for the metallurgical scrubber and feed drier scrubber and once per week for the battery breaker scrubber, and any malfunction shall be corrected during this maintenance check. Spray nozzles not functioning with a full spray shall be replaced and not less than 85 percent of the spray nozzles shall be functioning with a full spray at all times.
 - C. There shall be a scheduled system for sludge removal consistent with the operational requirements of the scrubber.
18. Material transfer routes between battery breaking bins, raw material storage bins, reverberatory furnace charge bins, blast furnace charge bins, charge hoppers, charge bucket, and slag fixation building plus all acid sludge and slag transfer routes shall be paved with concrete smooth enough to assure effective vacuum sweeping and shall be swept completely clean a minimum of once daily.

SPECIAL CONDITIONS

Permit No. 1147A

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19. This condition applies to storage and transport of lead containing furnace raw material, such as battery plate and paste material, of lead powder, flue dust, lead oxide powder, collected bag filter dust, and other similar materials. This condition does not apply to storage and transport of whole, unbroken batteries or to clean lead ingots, sheets, or tubes or to other similar non-powdery materials.
 - A. Outside storage of this material is limited to the following:
 - (1) Damp battery breaking material in the battery breaking bins and blast furnace charge bins.
 - (2) Reverberatory slag in the blast furnace slag bins and/or raw material storage building, except during final cooling of reverb slag pots.
 - (3) Covered or enclosed transport containers or vehicles.
 - (4) Sealed barrels, sealed drums, or other sealed containers except during inspection and transport.
 - B. There shall be no liquid leaks or material spills from any vehicles, barrels, drums, or any container listed in 19A (3) and (4) above, outside the plant containment area. Any spills shall be cleaned up as soon as possible.
 - C. There shall be no emissions from any railcar loading or unloading of any materials at this facility.
 - D. The transport of this material into the plant in over-the-road vehicles shall be as follows:
 - (1) All such vehicles shall transport only sealed or covered containers; or
 - (2) The cargo compartments of said vehicles shall be covered or enclosed.
 - E. Broken battery material and scrap lead materials for the blast furnace charge shall be handled as follows:
 - (1) There shall be no visible outdoor fugitive emissions of this material above the roofline of the blast furnace storage bins and the refining building during storage, transport, or furnace charging.
 - (2) Material for the reverberatory furnace shall be stored in the raw materials storage building.

SPECIAL CONDITIONS

Permit No. 1147A

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- (3) Material stored in the battery breaker bins or blast furnace bins or transported to and from these bins shall be kept damp at all times. Material in the blast furnace bins shall be dampened to minimize fugitive emissions.
 - (4) If, due to extended non-working periods, there is insufficient material in the battery breaker bins for the blast furnace charge, then damp material may be taken from the raw material storage building. This material shall be dampened with sufficient water to prevent visible fugitive emissions during transfer and charging.
- F. Any spill of this material shall be cleaned up immediately. There shall be no visible emissions during the cleanup process.
20. The wheels of each over-the-road vehicle leaving the material storage areas shall be washed to remove residues.
 21. All in-plant roads and in-plant vehicle routes (including the material transfer routes) shall be swept a minimum of once a day using wet sweepers, vacuum sweepers, or by dampening the area prior to sweeping. No dry sweeping shall be allowed. Further, these roads and routes shall be scraped and washed as necessary to permit effective sweeping and prevent buildup of lead containing material. There shall be no visible emissions leaving the plant boundary from these roads or routes.
 22. The floors in the areas of the blast and reverberatory furnaces shall be cleaned as necessary to prevent buildup of lead containing material. There shall be no visible emissions from the refining building during this process.
 23. Collection, storage, and transport of collected material from bag filters and flues shall be accomplished using an enclosed or covered system.
 24. No emission source shall be operated unless all associated emission control systems are in operation and in good working order.
 25. General use roads, as described on the site map filed with the appropriate TNRCC Regional Office, shall be paved and cleaned as necessary to control the emission of dust to the minimum level possible under existing conditions. All other roads and traffic areas, as described on the map, shall be oiled or sprinkled with water and/or chemicals, as necessary, to control the emission of dust to the minimum level possible under existing conditions.

SPECIAL CONDITIONS

Permit No. 1147A

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26. Any particulate and flue dust collected from baghouses or ductwork shall be collected and transferred in enclosed or covered conveyors or covered containers to the reverberatory or blast furnace. The method of disposal of material collected by air pollution abatement equipment which is not returned to the process shall be approved by the Executive Director of TNRCC, if necessary.
27. The holder of this permit shall demonstrate that all hooding, duct, and collection systems are effective in minimizing fugitive emissions to as low a level as practicable with respect to the sources which they are controlling.

CONTINUOUS DEMONSTRATION OF COMPLIANCE

28. The TNRCC Executive Director may require at a later date that additional property line monitors are required for lead and/or SO₂. The TNRCC Executive Director may also at any time require stack testing, analyses, and other testing by an independent laboratory at the company's expense. If testing is required, the TNRCC Fort Worth Regional Office shall be notified a minimum of 45 days in advance of any tests and a pre-test meeting shall be held with the TNRCC to establish test parameters and dates. All required test data, reports, etc., shall be forwarded within 45 days of stack test and/or other tests to the TNRCC Fort Worth Regional Office with copy maintained on-site which must be made available upon request to any agent or representative of the TNRCC or local air control program having jurisdiction.

RECORDKEEPING

29. The company shall maintain on-site the following records for a rolling two-year period:
 - A. The number of batteries received daily and summed monthly and annually.
 - B. The type and daily quantity (tons) of scrap and/or lead contaminated material received for recycling of the lead. This daily tonnage shall be summed monthly and annually.
 - C. The type and daily quantity (tons) of all raw materials feed to the feeder dryer, reverberatory furnace, and blast furnace. This daily tonnage shall be summed monthly and annually.
 - D. The separate and designated daily melt lead production from each furnace. This daily tonnage shall be summed monthly and annually.
 - E. The total quantity of finished soft and hard lead produced from the refining kettles shall be recorded and summed monthly and annually.

SPECIAL CONDITIONS

Permit No. 1147A

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- F. The daily quantity molten lead recycled back into the reverberatory or blast furnaces for reprocessing shall be summed monthly and annually. If the recycled molten throughput exceeds 20,000 tons per year, the TNRCC Fort Worth Regional Office shall be notified.
- G. The hourly record of the blast furnace afterburner operating temperature.
- H. Any scheduled or unscheduled maintenance on any abatement equipment including (but not limited to) baghouses, scrubbers, pumps, piping, duct, hoods, sweeper, and water sprinkler vehicle system.

These and other records shall be made immediately available upon request of a TNRCC representative or any local air control program having jurisdiction.

- 30. GNB shall complete the proposed construction items within 18 months of the date of the approval of the consolidated permit for the battery recycling operations, Permit No. 1147A. Until completion of the proposed construction items, GNB will continue to operate as currently configured.

Dated 3-20-96

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Permit No. 1147A

This table lists the maximum allowable emission rates and all sources of air contaminants on the applicant's property covered by this permit. The emission rates shown are those derived from information submitted as part of the application for permit and are the maximum rates allowed for these facilities. Any proposed increase in emission rates may require an application for a modification of the facilities covered by this permit.

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY
18	Hard Lead Ventilation Baghouse Stack	TSP	0.98	3.38
		PM ₁₀	0.98	3.38
		Pb	0.06	0.24
		NO _x	11.28	0.60
		SO ₂	0.04	0.17
		CO	8.26	4.26
		VOC	1.65	4.85
		Trace Compounds	0.01	0.01
21	Soft Lead Refining Baghouse Stack	TSP	1.58	5.99
		PM ₁₀	1.58	5.99
		SO ₂	5.33	12.49
		NO _x	11.92	9.33
		CO	26.44	64.14
		Pb	0.17	0.38
		VOC	15.39	48.23
		HCl	0.18	0.74
		H ₂ SO ₄	0.27	1.17
		Trace Compounds	0.01	0.01
22	Specialty Alloy Baghouse Stack	TSP	1.28	4.51
		PM ₁₀	1.28	4.51
		Pb	0.02	0.08
		NO _x	11.03	0.58
		SO ₂	0.42	1.00
		CO	8.08	5.00
		VOC	1.62	4.75
		Trace Metals	0.04	0.10
	Refining Building Vacuum Stack	TSP	0.21	0.56
		PM ₁₀	0.21	0.56
		Pb	0.03	0.11

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY
37	Reverberatory/Blast Furnaces Fugitives Baghouse Stack	TSP	8.21	30.49
		PM ₁₀	8.21	30.49
		Pb	0.16	0.39
		NO _x	0.48	2.08
		SO ₂	21.68	68.31
		CO	8.75	28.32
		VOC	15.16	45.81
		HCl	0.21	0.92
		H ₂ SO ₄	2.82	12.34
		SiO ₂	0.02	0.03
	Trace Metals	0.01	0.04	
38	Reverberatory/Blast Furnaces Metallurgical Scrubber Stack	TSP	4.63	19.12
		PM ₁₀	4.63	19.12
		Pb	0.64	1.62
		NO _x	14.60	59.53
		SO ₂	445.59	1199.51
		CO	298.58	1190.35
		VOC	7.61	33.32
		Cd	0.02	0.05
		SiO ₂	0.09	0.41
		HCl	0.74	3.23
		H ₂ SO ₄	4.96	21.74
			Trace Metals	0.04
5	Raw Material Storage/Shredder Baghouse Stack	TSP	2.85	10.57
		PM ₁₀	2.85	10.57
		Pb	0.06	0.22
8	Battery Breaker Scrubber Stack	TSP	2.45	4.68
		PM ₁₀	2.45	4.68
		Pb	0.06	0.13
		H ₂ SO ₄	0.06	0.14
3FUG	Battery Breaker Scrubber	H ₂ SO ₄	0.05	0.22
		Sodium Bicarbonate Filter Vent	TSP PM ₁₀	0.17 0.17

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY
4	Soft Lead Kettle Heating	TSP	0.07	0.32
		PM ₁₀	0.07	0.32
		VOC	0.02	0.10
		NO _x	0.60	2.63
		CO	0.13	0.55
		SO ₂	<0.01	0.02
5	Hard Lead Kettle Heating	TSP	0.07	0.32
		PM ₁₀	0.07	0.32
		VOC	0.02	0.10
		NO _x	0.60	2.63
		CO	0.13	0.55
		SO ₂	<0.01	0.02
	Raw Material Storage (4)	TSP	1.43	5.72
		PM ₁₀	0.72	2.86
		Pb	0.03	0.11
) and 35	Furnace Fugitives (4)	TSP	1.83	8.00
		PM ₁₀	1.83	8.00
		Pb	0.27	1.20
		Cd	0.01	0.04
		Trace Metals	<0.01	<0.04
5	Refining/Casting (4)	TSP	0.03	0.10
		PM ₁₀	0.03	0.10
		Pb	<0.01	<0.01
		Trace Metals	<0.01	<0.01
?	Slag Handling (4)	TSP	0.07	0.31
		PM ₁₀	0.07	0.31
		Pb	0.01	0.05
		Trace Metals	<0.01	<0.01
, 42, and 43	Vehicle Traffic (4)	TSP	--	0.63
		PM ₁₀	--	0.31
		Pb	--	0.31
	Material Handling (4)	TSP	4.51	1.38
		PM ₁₀	0.45	0.14
		Pb	0.32	0.10

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY
39	Slag Fixation Baghouse Stack	TSP	1.71	3.12
		PM ₁₀	1.71	3.12
		Pb	0.12	0.11
		Al	0.05	0.10
49	Reagent Silo No.1 Baghouse Stack	TSP	0.36	0.38
		PM ₁₀	0.36	0.38
50	Reagent Silo No. 2 Baghouse Stack	TSP	0.36	0.38
		PM ₁₀	0.36	0.38

- (1) Emission point identification - either specific equipment designation or emission point number from plot plan.
- (2) Specific point source name. For fugitive sources use area name or fugitive source name.
- (3) TSP - total suspended particulate matter including PM₁₀
 PM₁₀ - particulate matter less than 10 microns in diameter
 Pb - lead and lead compounds
 NO_x - total oxides of nitrogen
 SO₂ - sulfur dioxide
 CO - carbon monoxide
 VOC - volatile organic compounds as defined in General Rule 101.1
 HCl - hydrochloric acid mist/fumes
 H₂SO₄ - sulfuric acid mist/fumes
 SiO₂ - silica
 Cd - cadmium and cadmium compounds
 Al - aluminum
 Trace Compounds
 Trace Metals
- (4) Fugitive emissions are an estimate only and should not be considered as a maximum allowable emission rate.

* Emission rates are based on and the facilities are limited by the following maximum operating schedule and maximum production rates:

24 Hrs/day 7 Days/week 52 Weeks/year or 8,760 Hrs/year

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Maximum Allowable Molten Lead Production Rates:

Reverberatory Furnace: 20 Tons/hour

Blast Furnace: 12 Tons/hour

Combined Maximum Molten Lead Production: 400 Tons/day and 72,000 Tons/year

Dated 3-20-96

Barry R. McBee, *Chairman*
R. "Ralph" Marquez, *Commissioner*
M. Baker, *Commissioner*
Dan Pearson, *Executive Director*



TEXAS NATURAL RESOURCE CONSERVATION COMMISSION

Protecting Texas by Reducing and Preventing Pollution

September 24, 1996

Mr. Carlos Liscano
Assistant Plant Manager
GNB Technologies, Inc.
P.O. Box 250
Frisco, Texas 75034

Re: Permit Alteration
Permit No. 3048A
Lead Oxide Production
Frisco, Collin County
Account ID No. CP-0029-G

Dear Mr. Liscano:

This is in response to your letter dated April 4, 1996 requesting alteration of the conditions and maximum allowable emission rates table (MAERT) of the referenced permit. We understand that you are requesting to consolidate Permit Nos. 5818A and 1589A into this permit.

Pursuant to the authority conferred under Section 382.0511(b) of the Texas Clean Air Act, Texas Health and Safety Code, Chapter 382, and 30 TAC Section 116.116(c) (Regulation VI), Permit No. 3048A is altered. The altered permit conditions and MAERT are enclosed. Please attach these to your permit.

Your cooperation in this matter is appreciated. If you have further questions, please contact Mr. Earl Jones of our Office of Air Quality, New Source Review Division at (512) 239-1351.

Sincerely,

A handwritten signature in cursive script, appearing to read "Dan Pearson".

Dan Pearson

Executive Director

DP/EJ/js

Enclosures

cc: Mr. Jesse Macias, Air Program Manager, Arlington

SPECIAL CONDITIONS

Permit No. 3048A

EMISSION STANDARDS AND FUEL SPECIFICATIONS

1. Emissions from this facility shall not cause or contribute to an exceedance of the National Ambient Air Quality Standard for lead at any location including (but not limited to) the following air monitoring sites:

Monitors No. 480850009, 480850001, 480850001 (QA), 480850003, and 480850006 operated by Texas Natural Resource Conservation Commission (TNRCC).

2. The total emissions of air contaminants from any of the sources shall not exceed the annual and hourly values stated on the attached table entitled "Emission Sources - Maximum Allowable Emission Rates." The values in this table are based on a maximum hourly production of 2,300 pounds of lead oxide per reactor and a maximum annual production of 58,300 tons of lead oxide.

OPACITY/VISIBLE EMISSION LIMITATIONS

3. Except for those periods described in TNRCC 30 TAC Section 111.111(a)(1)(E) (Regulation D), the stack sources listed on the table entitled "Emission Sources Maximum Allowable Emission Rates" shall not exceed 5 percent opacity averaged over a six-minute period when adjusted for uncombined water vapor.
4. No visible emissions that result from the permitted activities shall leave the plant property boundary. If this condition is violated, further controls shall be installed and/or implemented as required to limit visible emissions.

OPERATIONAL LIMITATIONS, WORK PRACTICES, AND PLANT DESIGN

5. All lead oxide spills shall be cleaned up immediately. Cleanup of these spills shall be accomplished with no visible emissions outside the oxide plant building.
6. An adequate number of filter replacement bags shall be kept on the site at all times. Bags weighing nine ounce/yard² or more shall be used in all baghouses.
7. Storage and transport of the collected material from all baghouses, fabric filters, and cyclones shall be accomplished using a covered system. Prior to processing in the furnace, used bag filters shall be stored inside an enclosed container.

SPECIAL CONDITIONS

Permit No. 3048A

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8. Enclosed conveyors shall be used to transport lead oxide through the plant. Emissions at all drop points shall be controlled by exhaust fans pulling air to baghouses or cartridge filter dust collectors. The conveyor covers are considered abatement equipment and shall be kept in good repair. Conveyor covers with holes larger than 1/4-inch in diameter or missing sections of covers shall not be considered in good repair.
9. The holder of this permit shall keep all air pollution control equipment in good repair and operating as represented in the permit application and as required in these conditions. For this permit, the air pollution control equipment consists of the baghouses, the fabric filters, and the conveyor system. If GNB or TNRCC should determine that any air pollution control equipment is not meeting the requirements of the first sentence of this special condition, GNB shall immediately cease operations at the facilities that are controlled by such air pollution control equipment.
10. The floor in the lead oxide production building shall be paved with concrete and cleaned as necessary to prevent lead emissions leaving the building. There shall be no visible emissions from the oxide plant building during the cleanup process.

DETERMINATION OF COMPLIANCE

11. The TNRCC Executive Director may at any time require stack testing, analyses, and other testing by an independent contractor at the company's expense. If testing is required, the TNRCC Fort Worth Regional Office shall be notified a minimum of 45 days in advance of any tests and a pre-test meeting shall be held with the TNRCC to establish test parameters and dates. All required test data, reports, etc., shall be forwarded to the TNRCC Fort Worth Regional Office within seven days of the date GNB receives the final data, reports, etc. from the independent contractor. GNB shall maintain a copy of any such report on-site and make a copy available, upon request, to any agent or representative of the TNRCC or local air program that has jurisdiction.
12. Inspection and maintenance of the baghouses shall be performed on a daily, weekly, and monthly basis. Compliance with this condition may be based on the baghouse inspection records which shall be maintained by the holder of this permit and made available to the personnel of the TNRCC. These records shall be maintained for a 24-month rolling period.

Dated 9-24-96

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Permit No. 3048A

This table lists the maximum allowable emission rates and all sources of air contaminants on the applicant's property covered by this permit. The emission rates shown are those derived from information submitted as part of the application for permit and are the maximum rates allowed for these facilities. Any proposed increase in emission rates may require an application for a modification of the facilities covered by this permit.

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY
**	Reactor No. 3 Baghouse Stack	Pb	0.050	0.21
**	Reactor No. 2 Baghouse Stack	Pb	0.032	0.13
**	Reactor No. 1 Baghouse Stack	Pb	0.050	0.21
	Ventilation System	TSP	0.320	1.34
	Baghouse Stack	PM ₁₀	0.320	1.34
		Pb	0.032	0.13
A	Hammermill Baghouse Stack	Pb	0.050	0.21
B	Hammermill Baghouse Stack	Pb	0.050	0.21
	Reactor No. 4 Baghouse Stack	Pb	0.016	0.07
	Reactor No. 5 Baghouse Stack	Pb	0.006	0.03
	Reactor No. 6 Baghouse Stack	Pb	0.004	0.02
	Vacuum System Baghouse Stack	Pb	0.001	<0.01
A	Truck Loading East	Pb	0.001	<0.01
B	Truck Loading West	Pb	0.001	<0.01
	Railcar Loading	Pb	0.001	<0.01

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Emission point identification - either specific equipment designation or emission point number from plot plan.

Specific point source name. For fugitive sources use area name or fugitive source name.

TSP - total suspended particulate including PM_{10}

PM_{10} - particulate matter less than 10 microns in diameter

Pb - lead and lead compounds as lead

These grandfathered reactors are included in this permit for clarification only.

Emission rates are based on and the facilities are limited by the following maximum operating schedule:

24 Hrs/day 7 Days/week 52 Weeks/year or 8,400 Hrs/year

Dated 9-24-96