

Bryan W. Shaw, Ph.D., *Chairman*
Carlos Rubinstein, *Commissioner*
Toby Baker, *Commissioner*
Mark R. Vickery, P.G., *Executive Director*



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

April 26, 2012

Via Certified Mail
Return Receipt Requested
Article No. 7002 2030 0005 7059 7056

Exide Technologies
13000 Deerfield Parkway, Building 200
Milton, GA 30004

Attention: Mr. Joe Preuth, Vice President of Recycling and Operational Excellence

Re: Exide Agreed Order for the Collin County Attainment Demonstration SIP for the 2008 Lead National Ambient Air Quality Standard

Dear Mr. Preuth:

Enclosed for your signature please find the final Agreed Order for the Collin County Attainment Demonstration SIP for the 2008 Lead National Ambient Air Quality Standard. Please sign and date the signature page provided and return the document to me at TCEQ, Environmental Law Division, MC-173, P.O. Box 13087, Austin, TX 78711-3087.

The TCEQ appreciates your attention to this matter. If you have any questions, please contact me at (512) 239-0891.

Sincerely,

A handwritten signature in cursive script that reads "Amy L. Browning".

Amy L. Browning
Environmental Law Division

Enclosure

cc: Jennifer Keane, Baker Botts

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

IN THE MATTER OF AN § BEFORE THE TEXAS
AGREED ORDER CONCERNING § COMMISSION ON
EXIDE TECHNOLOGIES § ENVIRONMENTAL
ACCOUNT NO. CP-0029-G § QUALITY

AGREED ORDER DOCKET NO. 2011-0521-MIS

The Texas Commission on Environmental Quality (the Commission or TCEQ), hereby orders Exide Technologies (Exide), formerly known as Exide Corporation, which in 2000 acquired GNB Technologies Inc. (GNB), which was formerly known as Gould National Battery, Incorporated, to comply with the requirements herein regarding control of emissions of lead from the facilities referenced below, pursuant to §382.023 of the Texas Clean Air Act (the Act), Texas Health and Safety Code, Chapter 382, and §110 of the Federal Clean Air Act, 42 U.S.C. §7401 *et seq.*, for the purpose of revising the Texas State Implementation Plan (SIP) for control of lead. The Executive Director of the Commission (the Executive Director) and Exide have agreed on these control requirements, subject to the approval of the Commission. The Executive Director and Exide enter into this Agreed Order for the purpose of implementing the SIP measures in the Collin County Attainment Demonstration SIP for the 2008 Lead National Ambient Air Quality Standard (NAAQS).

I. STIPULATIONS

For the purpose of this Agreed Order, the parties have agreed and stipulated as follows:

1. Section 110 of the Federal Clean Air Act, 42 U.S.C. §§7401 *et seq.*, requires Texas to submit SIP revisions to the United States Environmental Protection Agency (EPA) for approval and to demonstrate that such SIP revisions provide protection of the National Ambient Air Quality Standard (NAAQS) and the Prevention of Significant Deterioration increments for lead.
2. Exide owns and operates a secondary lead smelter/lead oxide manufacturing plant (the Plant) located at 7471 South Fifth Street, Frisco, Collin County, Texas.
3. The Plant consists of one or more sources as defined in §382.003(12) of the Act.

4. In 1992, GNB entered into Agreed Board Order 92-09(k) (Order 92-09(k)) with a predecessor agency of the TCEQ, the Texas Air Control Board (TACB). Special provisions were included in amendments to Air Quality Permit Numbers R-1147A and R-5466D resolving notices of violations regarding exceedances of the 1978 NAAQS for lead. The purpose of Order 92-09(k) was to assure maintenance of the 1978 NAAQS for lead, and required GNB to continue implementation of or to implement certain measures to prevent recurrence of the violations alleged in Order 92-09(k).
5. GNB amended Texas Natural Resources Conservation Commission (TNRCC) predecessor agency of the TCEQ, Air Quality Permit Numbers 1147A and 3048A to incorporate the provisions of Order 92-09(k) as permanent and enforceable reductions. These permits were renewed in 2006 by Exide. The maximum allowable emission rate of lead in these permits ensured that lead emissions would not exceed 4.27 tons per year, unless otherwise authorized by a subsequent amendment or new permit that demonstrated through air dispersion modeling that the increase would not cause or contribute to a violation of the 1978 lead NAAQS. GNB and the TNRCC agreed to terminate Order 92-09(k). However, GNB agreed to continue implementation of the requirements of Paragraph 8 in Order 92-09(k) as incorporated into Air Quality Permit Numbers 1147A and 3048A, or to implement additional measures or control technologies proposed by GNB that were judged by the Executive Director to be similarly effective in controlling lead emissions from the plant. Exide agrees to continue to abide by these representations agreed to by GNB.
6. In 1993, GNB entered into Agreed Board Order 93-12 (Order 93-12) with the TACB to establish contingency measures related to the 1993 Lead SIP revisions for Collin County, Texas. GNB implemented the measures in Order 93-12 by adding a supplemental ventilation baghouse to its metallurgical furnace operation (the reverberatory and blast furnaces), covering its blast furnace bins and installing a water spray system over the bin area, installing a baghouse at the raw materials storage building; installing a feed dryer and baghouse to reduce the possibility of reverberatory furnace explosions due to wet feed, writing and implementing detailed site operation and maintenance plans for its baghouse operations, and installing a Tri-bo Flow® System in all baghouse ducts to detect upset emissions.
7. In 1999, TCEQ and GNB entered into Agreed Order 99-0351-SIP for the 1999 Collin County Redesignation and Maintenance Plan for Lead. The parties to Order 99-0351-SIP agreed to terminate Order 93-12; however, Exide agreed to continue implementation of these measures, or to

implement additional measures or control technologies proposed by Exide that were judged by the Executive Director to be similarly effective in controlling lead emissions from the plant.

8. In 2009, Exide entered into Agreed Order 2009-0071-MIS with the Executive Director as part of the second (2009) ten-year Maintenance Plan for the 1978 lead NAAQS. As part of that Agreed Order, Exide agreed to continue implementation of the measures previously implemented as detailed in Paragraphs 4 - 7 of this Agreed Order. Exide also agreed to maintain records for the period of the second (2009) Maintenance Plan and make those records available upon request by the TCEQ or any other air pollution control agency with jurisdiction.
9. This Agreed Order does not authorize or prohibit any modification of the plant listed above, nor does it authorize or prohibit the construction of any abatement equipment that may be necessary to achieve the emission limits set forth in this Agreed Order, other than that which is specifically authorized in this Agreed Order.
10. Emissions Point Numbers (EPNs) and Facility Identification Numbers (FINs), as used in this Agreed Order, are as specified in TCEQ Air Quality Permit Numbers 1147A and 3048A as of April 25, 2012. In addition, definitions for purposes of this Agreed Order are as follows:
 - a. The term "condition" is defined as the existence of data showing an exceedance of the 0.15 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$) lead NAAQS measured as a rolling three-month average at any TCEQ ambient air quality lead monitoring site in Collin County after quality assurance to validate the data.
 - b. The term "contingency measures" is defined to include the following:
 - i. Full enclosure of the lead oxide operational area and installation of negative pressure ventilation, a new point source, and filtration media (either a baghouse or cartridge filter) (Facility Identification Number (FIN) 46). This will include the full enclosure of the lead oxide operational area, the installation of negative pressure ventilation sufficient to ensure that lead oxide operational area fugitives are routed to the new baghouse, the installation of a new point source, the installation of a new baghouse with polytetrafluoroethylene (PTFE) filter media and improved seating design bags (see Attachment A), or equivalent or superior design if approved by the TCEQ, and secondary

- high efficiency particulate air (HEPA) filtration. All HEPA filters shall be rated by the manufacturer to achieve a minimum of 99.97% capture efficiency for particles 0.3 micrometre or larger. The enclosure performance shall be consistent with the requirements of 40 Code of Federal Regulations (CFR) §63.544(c) and §63.548(k), as promulgated on January 5, 2012;
- ii. Install and operate according to good engineering practices vacuum hooding over lead oxide loading operations (currently EPNs 27 and 28). The exhaust air from the vacuum hooding must be routed to an existing or new baghouse that meets the requirements of Paragraph 10(b)(i) of this Agreed Order; and
 - iii. Designate that wheeled and powered plant equipment, such as forklifts, used inside a fully enclosed area will not be used outside of such an area without cleaning inside a permanent total enclosure. Cleaning must include washing of tires, undercarriage, and exterior surface of the vehicle, followed by vehicle inspection.
11. Recognizing the importance of access to data for purposes of decision-making and implementation of this Agreed Order, the Executive Director shall provide Exide with all quality-assured air monitoring data within thirty (30) days after the sample is collected. The TCEQ agrees that it will install sample-saver devices on all TCEQ ambient air quality lead monitors in Collin County that do not have such devices as expeditiously as practicable, but not later than November 1, 2012.
 12. The Commission and Exide agree that the Commission has jurisdiction to enter into this Agreed Order, and Exide is subject to the Commission's jurisdiction.
 13. To better safeguard the air resources of this state, Exide agrees to comply with the terms of this Agreed Order. This Agreed Order includes emission control measures, specifically the measures in Paragraphs 15, 26, and 40 of this Agreed Order, which are in addition to those measures considered to be necessary, based on TCEQ attainment demonstration modeling, for attainment of the 2008 Lead NAAQS in Collin County.
 14. This Agreed Order continues in effect until the TCEQ submits a redesignation request and maintenance plan for the Collin County lead nonattainment area to the EPA, at which time this Agreed Order shall be deemed revoked by the TCEQ.

II. ORDER

Exide has completed, and it is therefore ordered by the TCEQ that Exide will continue to maintain, the following:

15. Retrofitted baghouses (TCEQ Air Permit Number 1147A EPNs 18, 21, 22, 23, 37, and 38). Exide has replaced all bags in the identified baghouses with PTFE membrane media and replaced all of the baghouse tube sheets with improved seating design (see Attachment A). All baghouses must continue to be maintained in good working order at all times.
16. Replaced the existing seals on the blast furnace "doghouse" emissions capture and ventilation hooding system (FIN 10).
17. Replaced the reverberatory furnace (FIN 35) hydraulic ram feeder with a screw conveyor.
18. Installed a non-fouling area misting system in the blast and reverberatory furnace areas (FINs 10 and 35), and will continue operation until the blast and reverberatory furnace area, including the refining/casting/charging area, is fully enclosed and placed under negative pressure, and secondary HEPA filtration is installed, as described in Paragraphs 21 and 26 of this Agreed Order.

It is therefore ordered by the TCEQ that Exide shall, from and after the date of this Agreed Order, complete the following:

19. By July 31, 2012, to the extent that no building permits are needed to conduct needed repairs, the raw material storage building must be free of significant cracks, gaps, corrosion, or other deterioration that could cause lead bearing material to be released from the building. After July 31, 2012, the raw material storage building will follow the inspection requirements of 40 CFR §63.544(d), as promulgated on January 5, 2012.
20. Construct a new slag treatment building that will be adjacent to the furnace and refining operations to reduce fugitive emissions associated with truck traffic. Construction of a new slag treatment building that will be fully enclosed and placed under negative pressure ventilation will be completed as expeditiously as practicable, but not later than January 6, 2014. Once the new slag treatment building is constructed and operational, the old slag treatment building (FIN 39) will no longer be used for activities involving processing or handling lead bearing materials as defined in 40 CFR §63.542, as promulgated on January 5, 2012, unless the building is fully enclosed and placed under negative pressure

ventilation sufficient to ensure that fugitive emissions are routed to a baghouse as described in Paragraph 21 of this Agreed Order.

21. Fully enclose and place under negative pressure ventilation the following buildings/areas as expeditiously as practicable, but not later than January 6, 2014: the blast and reverberatory furnace area, including the refining/casting/charging area (FINs 10, 35, 36, and 37); the new slag treatment building (FIN 39A); the battery breaker area (FIN 48A); and the raw material storage area (FIN 45). This will include the full enclosure of the above listed buildings/areas, the installation of negative pressure ventilation sufficient to ensure that the above listed buildings/areas fugitives are routed to new baghouses or existing baghouses, the installation of new point sources, and the installation of new baghouses with PTFE filter media and improved seating design bags (see Attachment A), or equivalent or superior design if approved by the TCEQ. Total enclosures must be ventilated continuously whenever, as addressed in the standard operating procedures manual described in Paragraph 30 of this Agreed Order, operation of equipment and processes with the potential to generate fugitive lead emissions are occurring within the enclosure. The ventilation must ensure negative pressure values of at least 0.013 millimeter of mercury (0.007 inches of water) consistent with the requirements of 40 CFR §63.544(c)(1), as promulgated on January 5, 2012.
22. Operate under a traffic plan for trucks unloading batteries at the plant and for traffic to, from, and across the on-site landfill (see Attachments B and C). Exide will relocate the spent battery loading docks to the north side of the battery breaker operation and reconfigure the traffic route such that the spent battery delivery trucks enter and leave along the north route and never enter the center of the plant. Traffic excluded from this plan includes chemical delivery trucks, plant service vehicles, and other scrap delivery vehicles. These measures are to be completed and operational as expeditiously as practicable, but not later than January 6, 2014.
23. Fence the property boundaries of the plant property to deter trespassers as shown on Attachment D. On the south and west property boundaries, Exide shall install a wire fence at least 48 inches high with mesh spacing approximately 2 inches by 4 inches topped by a strand of barbed wire for a total fence height of approximately 54 inches. The railroad tracks on the west side shall be gated at the fence boundary. On the east boundary, Exide shall install monitors to detect unlawful ingress onto Exide's property across the existing board fence. Exide shall also install a camera to monitor the plant entrance for trespassers. These measures are to be completed and operational as expeditiously as practicable, but not later than January 6, 2014.

24. Inspect any batteries that are not stored in a total enclosure once each week, and move any broken batteries to the battery breaking area for processing or move them to a total enclosure within 72 hours of identification. Exide must clean residue from broken batteries within 72 hours of identification.
25. Replace existing roll-up doors with fabric roll-up doors in the raw material storage building as expeditiously as practicable, but not later than November 1, 2012. Existing roll-up doors at openings without truck docks in the raw material storage building must be replaced with high-speed fabric roll-up doors.
26. Install secondary HEPA filtration on all baghouses that receive lead emissions (EPNs OCS, 10A, 18, 21, 22, 23, 35A, 37, 39A, 45, and 48A), except for the reverberatory furnace baghouse and the blast furnace baghouse (EPN 38). All HEPA filters shall be rated by the manufacturer to achieve a minimum of 99.97% capture efficiency for particles 0.3 micrometre or larger. Exide will evaluate the technical feasibility of installing secondary HEPA filtration on the reverberatory furnace baghouse and the blast furnace baghouse, and, if technically feasible, will also install secondary HEPA filtration on these two baghouses. If HEPA filtration is not technically feasible for these two baghouses, Exide will install high efficiency PTFE secondary filtration devices. These measures shall be completed and operational as expeditiously as practicable, but not later than January 6, 2014.
27. Process or mobile equipment that is contaminated with lead shall be initially cleaned inside of a permanent total enclosure prior to being moved to the maintenance building. This measure shall be implemented as expeditiously as practicable, but not later than January 6, 2014.
28. For the secondary filtration added to the baghouses, pressure drop monitoring must be conducted at least daily, with the reading taken at least at a minimum of 10 hours apart. If the pressure drop is outside the limit(s) specified by the filter manufacturer and the processes associated with the baghouse at which the pressure drop occurred continue to operate, Exide shall initiate appropriate corrective measures as expeditiously as practicable, but not later than eight hours after discovery of the reading, and complete those measures as expeditiously as practicable. Appropriate corrective measures, which may include but are not limited to those given in 40 CFR §63.548(g)(1) - (4), as promulgated on January 5, 2012, must be identified in the standard operating procedures manual required in Paragraph 30 of this Agreed Order.

29. For the buildings listed in Paragraph 21 of this Agreed Order that are maintained under negative pressure, negative pressure monitoring must be conducted by use of a digital differential pressure monitoring system operated continuously in accordance with the General Provisions of 40 CFR Part 63, Subpart A. The monitoring system shall meet the requirements described in 40 CFR Part 63, Subpart X, as promulgated on January 5, 2012, as expeditiously as practicable, but not later than January 6, 2014.
30. The fugitive dust control standard operating procedures manual and the standard operating procedures manual for baghouses required by 40 CFR Part 63 Subpart X, as promulgated on January 5, 2012, shall be updated to address the installation of new equipment and changes required by this Agreed Order as such equipment and changes become operational, but not later than January 6, 2014. Power outages and plant idlings shall be addressed in the fugitive dust control and baghouse standard operating procedures manuals. All baghouses must be addressed in the standard operating procedures manual, even if those baghouses are not required to be installed under 40 CFR Part 63, Subpart X, as promulgated on January 5, 2012. Exide shall operate in accordance with these standard operating procedures manuals.
31. The following lead point sources will be stack tested annually to establish the actual quantities of air contaminants from each source: EPNs OCS, 10A, 18, 21, 22, 23, 35A, 37, 38, 39A, 45, 48, and 48A. Sampling must be conducted in accordance with the TCEQ Sampling Procedures Manual or in accordance with applicable 40 CFR procedures or EPA guidance. Any deviations from those procedures or guidance must be approved by the Executive Director or by the appropriate TCEQ Regional Director prior to conducting sampling.
32. In addition to other required record-keeping, Exide shall keep records of the following:
 - a. Results of all stack tests conducted in accordance with Paragraph 31 of this Agreed Order that are not already required to be maintained by 40 CFR Part 63, Subpart X, as promulgated on January 5, 2012;
 - b. Fugitive control activities required under this Agreed Order and lead control device inspection and maintenance requirements not otherwise required by permit or 40 CFR Part 63, Subpart X, as promulgated on January 5, 2012, including the name of the person performing the activity, and the dates and times on which specific activities were completed;

- c. Negative pressure monitoring in accordance with Paragraph 29 of this Agreed Order;
 - d. After January 6, 2014, quarterly inspections of the buildings under negative pressure to ensure that they are maintained at least to the standard described in 40 CFR §63.544(c), as promulgated on January 5, 2012; and
 - e. Results of the daily pressure drop monitoring required in Paragraph 28 of this Agreed Order, along with records of inspections and maintenance activities.
33. Maintain records until this Agreed Order is revoked, but not longer than eight (8) years from the creation of any such records, sufficient to demonstrate compliance with the requirements in Paragraphs 15 to 31 of this Agreed Order, and make those records available upon request by the TCEQ or any other air pollution control agency with jurisdiction. Retention of these records does not affect in any way any other terms of this Agreed Order.
34. After implementation of the controls required by Paragraphs 15 to 27 of this Agreed Order, emit no more than a maximum of 0.4517 pound per hour (lb/hr) of lead from stack sources, the amount of emissions demonstrated by the air dispersion modeling completed for the Collin County Attainment Demonstration SIP for the 2008 Lead NAAQS as the maximum that Exide can emit without causing or contributing to an exceedance of the 2008 lead NAAQS. As long as Exide qualifies for such a permit, Exide may use permits by rule or standard permits at the plant to make changes at the plant, including the addition of new equipment, but only if use of such authorizations will not increase actual emissions of lead above 0.4517 lb/hr from stack sources and submission to the TCEQ of modeling shows that any such change will not cause or contribute to an exceedance of the 0.15 $\mu\text{g}/\text{m}^3$ 2008 lead NAAQS.
35. Apply for and obtain necessary authorizations to implement the control strategies listed in Paragraphs 15 to 27 of this Agreed Order, and to ensure that any changes at the facilities will be incorporated into TCEQ Air Quality Permit Numbers 1147A and 3048A. Any necessary new source review applications for these permit changes will be submitted by Exide to the Executive Director within ninety (90) days upon signature of this Agreed Order by both parties, and the applications will be administratively complete within 120 days of signature of this Agreed Order by both parties, unless a later deadline is approved by the Executive Director.

36. Notify the TCEQ prior to submitting an application for a permit amendment that would allow Exide to increase site-wide actual lead emissions above permitted levels of 0.4517 lb/hr from stack sources as identified in Paragraph 34 of this Agreed Order, in order to determine whether an amendment to this Agreed Order or issuance of a new agreed order with corresponding revisions to the SIP are needed.
37. Continue to maintain all air pollution abatement equipment in good working order and operate it properly during normal operations.
38. Beginning ninety (90) days after installation of the control measures under this Agreed Order, if the TCEQ provides notice of a condition, within thirty (30) days of TCEQ notification, Exide shall have the opportunity to submit to the TCEQ for review and approval or disapproval within forty-five (45) days thereafter an affirmative demonstration that an identifiable problem involving existing operations is the root cause of the condition and a proposal for remedy and prevention of recurrence of the problem (a demonstration and proposal for correction). If Exide does not submit a demonstration and proposal for correction within the allotted thirty (30) days, or the TCEQ disapproves of such submission within the allotted forty-five (45) days, Exide shall implement the contingency measures listed in Paragraph 10(b)(i)-(iii) of this Agreed Order as expeditiously as practicable, but not later than twelve (12) months after TCEQ's notification to Exide of the condition.
39. The Executive Director may grant an extension of any deadline in this Agreed Order upon a written and substantiated showing of good cause, except that no deadline shall be extended beyond January 6, 2014. All requests for extensions by Exide shall be made in writing to the Executive Director. Extensions are not effective until Exide receives approval from the Executive Director. Any extension request must be received by the Executive Director at least thirty (30) days before the applicable deadline. While the determination of what constitutes good cause rests solely with the Executive Director, approval of an extension shall not unreasonably be withheld.
40. To the extent that Exide does not complete any of the measures specified in Paragraphs 20 (slag treatment building), 21 (blast and reverberatory furnace enclosure), 22 (traffic plan), 26 (HEPA), or 27 (cleaning) of this Agreed Order before November 1, 2012, Exide shall undertake and complete the following interim measures by November 15, 2012:
 - a. Install dock seals at existing truck docks to help minimize fugitive emissions; and

- b. Change existing baghouse cleaning cycle controls from time-based to pressure drop demand-based cycles to allow for increased filter cake on bags.

The provisions of this Agreed Order shall apply to and be binding upon Exide, its successors, assigns and upon those persons in active concert or participation with them who receive actual notice of this Agreed Order by personal service or otherwise. Exide is hereby ordered to give notice of this Agreed Order to any successor in interest prior to transfer of ownership of all or any part of its plant, located at 7471 South Fifth Street, Frisco, Collin County, Texas, and, within ten (10) days of any such transfer, provide the TCEQ with written certification of such transfer, and that such notice has been given.

If any portion of this Agreed Order is for any reason held to be invalid by a court of competent jurisdiction, the invalidity of any portion shall not affect the validity of the remaining portions.

SIGNATURE PAGE

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

For the Commission
Bryan W. Shaw, Ph.D.
Chairman
Texas Commission on Environmental Quality

Date

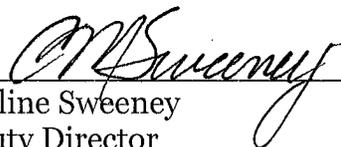
I, the undersigned, have read and understand the attached Agreed Order. I am authorized to agree to the attached Agreed Order on behalf of the entity, if any, indicated below my signature, and I do agree to the terms and conditions specified therein.



Joe Preuth
Vice President of Recycling and Operational Excellence
Exide Technologies

5/2/12

Date



Caroline Sweeney
Deputy Director
Office of Legal Services
Texas Commission on Environmental Quality

5/3/12

Date