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SUPERIOR COURT OF THE STATE OF CALIFORNIA

COUNTY OF LOS ANGELES

CENTRAL DISTRICT

EXIDE TECHNOLOGIES, INC. a Delaware corporation, Plaintiff, **v.** **DEPARTMENT OF TOXIC SUBSTANCES CONTROL, a public agency of the State of California,** Defendant and Respondent.	Case No. BS143369 **APPENDIX OF DECLARATIONS IN SUPPORT OF RESPONSE OF DEFENDANT AND RESPONDENT DEPARTMENT OF TOXIC SUBSTANCES CONTROL TO ORDER TO SHOW CAUSE RE PRELIMINARY INJUNCTION** Date: July 2, 2013 Time: 9:30 a.m. Dept: 82 Judge: The Honorable Luis A. Lavin Trial Date: Not set Action Filed: June 13, 2013

Defendant and respondent Department of Toxic Substances Control submits the following attached declarations in support of its response to the Court's order to show cause:

1. Declaration of Rizgar Ghazi
2. Declaration of William Bosan, Ph.D
3. Declaration of Philip Fine, Ph.D

Dated: June 25, 2013

Respectfully Submitted,

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Decl. of Rizgar Ghazi

DECLARATION OF RIZGAR GHAZI

I, Rizgar Ghazi, declare:

1. I have a Bachelor of Science degree in Mechanical Engineering from California State University, Sacramento. I am a California licensed professional Engineer with twenty three years of experience in the environmental field with emphasis in remediation and hazardous waste facility permitting.

2. I am the Branch Chief of the Office of Permitting with the Department of Toxic Substances Control, the California Environmental Protection Agency. I am responsible for administering the Hazardous Waste Facility Permitting Program established under Chapter 6.5 of Division 20 of the California Health and Safety Code. As Branch Chief for the Office of Permitting, I am responsible for supervising, managing and providing technical assistance to an office of twenty-five staff. I provide consultative services to project managers, supervisors, and DTSC Executive Staff, as needed, to ensure that permitting decisions are technically sound, consistent with DTSC goals and procedures, and protective of public health and the environment. I oversee work performed by key senior and supervisory Permitting members and other Permitting staff in planning, organizing, monitoring, and controlling work related to the performance, review, oversight, investigation, permit preparations, characterizations and remedies for operating/abandoned/closed hazardous waste sites and landfills.

3. In my position, I manage the staff that is evaluating the hazardous waste permit application and investigation and cleanups associated with contamination caused by current and past operations at the Exide Technologies, Inc. Vernon facility. In that capacity, I have daily discussions with the staff and I am familiar with all key decisions made since becoming a Branch Chief on January 23, 2013. As Branch Chief, I have also become familiar with the permitting history at the Exide Vernon facility.

4. On March 19, 2013, Exide's environmental manager for the Vernon facility, Ed Mopas, gave me a tour of the facility. The tour involved a walk through all of the facility operations including looking at all the battery storage areas, surface impoundment, raw material processing system, furnace operations as well as closely looking at catch basins (also known as manholes and inlets) associated with Interim Status Unit 46 (Unit 46 Pump Sump), a unit permitted by DTSC.

5. Exide's stormwater piping system is attached to Unit 46 Sump Pump. The stormwater piping system at Exide is a series of catch basins, connected with underground pipes that capture water from the facility wash-down activities and rain. Exide continuously introduces water to the piping system under its daily wash-down operations. These waters and stormwater runoff contain toxic (i.e. hazardous) metals (sludge) that are released into the environment from Exide's battery smelting operations. The piping system acts as conveyance system carrying contaminated water from the catch basin to the Unit 46 Pump Sump.

6. The catch basins and the pipes are considered ancillary equipment to the Unit 46 Pump Sump and thus the hazardous waste standards in Chapter 6.5 apply to them. In the pipes and in the catch basins, settlement of the toxic metals occurs and maintenance of such ancillary equipment is needed to ensure proper management of the toxic metals. The collected water in the Unit 46 Pump Sump is pumped through a series of settling tanks and then is pumped to the wastewater treatment plant. The wastewater treatment plant is considered an Interim Status Unit that requires a permit from DTSC. The wastewater treatment plant generates toxic sludge when it removes most of the toxic metals from the waters. Before these waters can be discharged to the Publicly Owned Treatment Works (POTW) sewer system, they must be below specified levels for a several toxic constituents.

7. As part of DTSC's review of Exide's 2010 application for a hazardous waste facility permit (a "Part B" permit, named after that section in RCRA), DTSC requested that Exide include the underground storm water piping as ancillary equipment to Unit 46 associated with the Part B application. On two occasions (October 4, 2011 and July 27, 2012), DTSC also collected sediment samples within the ancillary equipment for the Unit 46 Pump Sump piping system at the Exide Vernon facility. The results for lead were found to be up to 150 times above hazardous levels. Cadmium and Antimony were also found above hazardous waste levels in the same catch basins.

8. In January 2012, Exide incorporated the catch basins and underground stormwater piping system as ancillary equipment to the Unit 46 Pump Sump. Exide was required to provide an assessment of Unit 46 Pump Sump and its ancillary equipment to determine compliance with the California Code of Regulations, title 22, Division 4.5, Chapter 15 requirements.

9. On June 11, 2012, Exide submitted a schedule to survey and clean the pipes and assess the integrity of the pipes. Assessment work began in July 2012 and terminated in December 2012, as reported in the March 5, 2013 Storm Sewer Inspection Report prepared by Advanced GeoServices (Inspection Report).

10. DTSC received the Inspection Report from Advanced GeoServices on behalf of Exide Technologies on March 5, 2013, eight (8) months after the inspections were started. The Inspection Report included a copy of the inspection videos. The Inspection Report states that the pipe inspections were done in two stages. The first stage for the West Yard piping system was completed in August 2, 2012, and the second stage for the North and South Yard piping system was completed in December 2012.

11. Promptly upon receipt, DTSC staff reviewed the Inspection Report submitted by Exide's consultant, along with three (3) hours of videos for the 3,500 feet long piping system. That review was completed on April 4, 2013. I have also reviewed the report and excerpts of the pipe inspection video. There is a link to the excerpts that I reviewed under the heading "Storm Sewer Inspection Video (YouTube)" on DTSC's website, http://www.dtsc.ca.gov/HazardousWaste/Projects/UpdateExideSuspension.cfm.

12. The report and video excerpts indicated the following:

West Yard Piping Inspection: The Inspection Report indicates that approximately 526 lineal feet of the West Yard piping contained a significant amount of sediment and required extensive cleaning using high pressure water before [Video] inspection could be completed. The technician's observation of the pipes indicated that segments of the pipes had either scaling, fraying, splitting, cracking and/or sagging. Video logs and assessment for certain parts of the pipes were not provided due to obstructions and conditions of the pipes.

North Yard Piping Inspection: The Inspection Report indicates the approximately 2,175 lineal feet of North Yard piping contained a significant amount of sediment and required extensive cleaning using high pressure water before [Video] inspection could be completed. The technician's observation of the pipes indicated that segments of the pipes had either damage, collapsed, scaling, and/or fraying. Most of the pipes in the North Yard were not video recorded or assessed due to obstruction.

South Yard Piping inspection: The Inspection Report indicates that approximately 680 lineal feet of South Yard piping contained a significant amount of sediment and required extensive cleaning using high pressure water before [Video] inspection could be completed. The technician's observation of the condition of the pipes is minimal or was not provided.

13. The Inspection Report, and associated videos and photographs reveal an accumulation of semi-solid materials (also known in the industry as mud) generally throughout the piping system that is highly likely to contain elevated levels of hazardous waste, based on how Exide uses the piping system. The documentation shows several areas within the pipelines with failed structural integrity (breaches), and lack of cured-in-place fiberglass slip lining that was reportedly applied in the 1990s. The videos show the slip linings are scaling, fraying, or non-existent. Additionally, the sewer system does not include required secondary containment. No leak testing data was presented and, based upon the physical condition of the pipes, as evidenced in the Inspection Report, the existing breaches would cause the ancillary equipment to fail any leak test.

14. Additionally, the Inspection Report proposes a replacement/abandonment schedule that spans over four (4) years. This would not resolve the requirement and the need to contain future releases into the environment until the new system is installed.

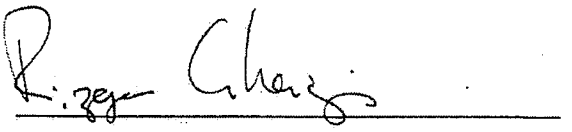
15. Based on information in Exide permit application submittals and reports, the existing pipes have been in service for over thirty years, and are long past their service life. In the mid-to-late 1990s, GNB, Exide's predecessor, attempted to lengthen the service life by slip lining the piping system after less than fifteen years of operation. It has been over fifteen years since the pipes were last repaired and as indicated in the Inspection Report and the videos, the pipes show wear and tear and are in no condition to convey hazardous wastes through the system. In addition, many segments of the pipes were never assessed due to damage and obstructions.

16. Based on my review of the report and video excerpts, and knowledge of Exide's system, I believe that the degraded and compromised physical condition of the piping system presents a continuous threat of releases to the environment of hazardous waste-containing water, and actually causes such releases on a regular basis. Furthermore, these hazardous waste releases to the environment present a serious threat of additional soil and groundwater underlying the facility, which is already contaminated. Groundwater in the area underlying the facility is already above maximum contaminant levels for drinking water, thereby increasing the urgency with which any sources of contamination must be curtailed and remediated to minimize further deleterious impacts to the state's drinking water supplies.

17. Russell Kemp suggests in paragraph 33 of his declaration that DTSC is holding Exide to a higher standard than its competitor Quemetco, which has received a hazardous waste facility permit from DTSC. But unlike Exide, Quemetco installed best available control

technologies to reduce the health risks from Quemetco's operations prior to receiving its hazardous waste facility permit.

I declare under penalty of perjury that the foregoing is true and correct. Executed on June 25, 2013, at Sacramento, California.



Rizgar Ghazi

DECLARATION OF WILLIAM BOSAN

I, William Bosan, declare:

1. I am a Senior Toxicologist and Unit Chief for the Southern California Unit of the Human and Ecological Risk Office (HERO) of the Department of Toxic Substances Control. In this role, I am responsible for toxicology and risk assessment activities for all sites in the southern California region and I supervise five PhD-level Staff Toxicologists.

2. I came to the California Environmental Protection Agency (Cal/EPA), Department of Toxic Substances Control (DTSC) in 2001 as a Staff Toxicologist. As a Specialist Toxicologist, I was responsible for the oversight of human health issues associated with numerous projects throughout the State of California. This regulatory oversight role included meeting with the public and concerned citizens to explain health impacts, cleanup goals and strategies and overall protection of public health and the environment.

3. I received my BA in Chemistry and BS in Biological Science from the University of California, Irvine in 1978. I received my PhD in Pharmacology and Toxicology from the College of Medicine, University of California, Irvine in 1984. I have been practicing environmental toxicology and conducting human health risk assessments for over 27 years, in both private and public sector projects, including petroleum/petrochemical, chemical, aerospace, electronics, pesticide manufacture, hazardous waste storage and transfer facilities, public utilities, Department of Energy (DOE) and Department of Defense (DoD).

4. Human health risk assessment is a scientific tool used by Government agencies to help them prioritize which potential hazards are the most significant and guide them in mitigating environmental hazards. If it were possible to prevent all human exposure to all harmful or hazardous chemicals, there would be no need for risk assessment. However, the complete removal of harmful chemicals from the environment may be infeasible or impossible and many naturally occurring chemicals also pose health risks. Risk assessment aids regulators in identifying serious health threats and determining realistic goals for reducing exposure to harmful chemicals and pollutants so that there is no significant health threat to the public.

5. The risk assessment process consists of four basic steps: hazard identification, exposure assessment, dose-response assessment and risk characterization. The hazard identification step involves review of available research studies to determine the types of health effects a chemical may cause. Health effects can range from headache and respiratory irritation following short-term exposure to effects on sensitive populations, such as pregnant women and fetuses to long-term effects such as cancer.

6. People can be exposed to toxic chemicals in a variety of ways, including in the air we breathe, the food we eat and the water we drink. Exposure assessment determines how a person may be exposed to a chemical through inhalation, ingestion and dermal contact, how often a person may be exposed on a daily basis and how long a person may be exposed over the years. Exposure assessment relies on standardized exposure algorithms for each route of exposure. In order to ensure that potential exposures are not underestimated, regulatory agencies have developed procedures that rely on health protective exposure assumptions based on actual behavioral data. In dose-response assessment, the data obtained in the hazard identification step is used to estimate the dose of a chemical that may result in a particular health effect in humans.

7. For cancer causing chemicals, the general assumption made is that there are no exposures that have zero risk. Therefore, even very low exposures to carcinogens will result in some level of risk of cancer. For noncancer chemicals, the goal of dose-response assessment is to estimate levels of exposure that pose a negligible risk for noncancer health effects. The risk characterization step integrates all of the information from the previous steps to estimate the risk of health effects in an exposed population.

8. For carcinogenic chemicals, cancer risk is expressed as the maximum number of new cases of cancer projected to occur in a population of one million people due to exposure over a 70 year lifetime. An estimated cancer risk of one in one million or 10^{-6} means that no more than one person would be expected to develop cancer in a population of one million people exposed to that chemical. Noncancer risk or hazard is determined by comparing the exposure or dose of an individual to a level of exposure that will not cause adverse health effects, also known as reference level or dose.

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9. The one-in-one-million or 10^{-6} level of risk was specified in the National Oil and Hazardous Substances Pollution Contingency Plan (NCP) and the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), also known as Superfund. The NCP discusses the risk management range of 10^{-6} to 10-4, with 10^{-6} being the point of departure or that level of cancer risk considered to be de minimis risk or risk so low as not to be of concern. The upper bound of the risk management range, 10^{-4} is considered in the NCP and CERCLA to be an unacceptable risk requiring mitigation or remedial action.

10. DTSC also considers a one in a million risk de minimis at hazardous waste facilities. However, this is not a pass or fail measure; risks are typically considered on a site-specific basis. DTSC has given permits to hazardous waste facilities exceeding that de minimis risk value on a case by case basis, as long as facility owners or operators have taken all feasible actions to minimize the health risks from their operations.

11. I first became involved with the Exide Facility in late 2009, when I was promoted to Senior Toxicologist and Southern California Unit Chief for the Human and Ecological Risk Office (HERO). As I discussed previously, I oversee all toxicology and risk assessment activities for DTSC projects in the southern California Region. Dr. Shukla Roy-Semmen of my staff, is the project toxicologist assigned to the Exide facility. Consequently, I oversee all risk assessment work conducted by Dr. Roy-Semmen for this site.

12. DTSC received notice in March 2013 that the revised AB2588 Health Risk Assessment (HRA) for the Exide Facility had been accepted by the South Coast Air Quality Management District (SCAQMD). On March 1, 2013, the SCAQMD issued an approval letter of the revised AB2588 HRA for the Exide facility, with a modification to the risk assessment using the maximum, non-facility receptor as the Maximally Exposed Individual Worker (MEIW) instead of the fenceline or facility worker. In addition to approving the AB2588 HRA, the letter from the SCAQMD also requested public notification and risk reduction by Exide because the exceptionally high risks and hazards posed by the facility to the surrounding community. Because of the elevated cancer risks, chronic hazards and acute hazards for workers and off-site receptors, I personally reviewed the HRA.

13. As part of the RCRA Part B Permit process for the Exide facility, DTSC has been working with Exide and their consultants on a multimedia, cumulative risk assessment for the facility. The AB2588 HRA is one component of the cumulative risk assessment associated with facility emissions. Another component of the cumulative risk assessment is a multi-media human health and environmental risk assessment that addresses soil, soil gas and groundwater contamination on-site, as well as soil, dust, surface water and sediment sampling off-site. A third component of the risk assessment is an accidental risk analysis that addresses the short-term risks associated with facility operation failures or catastrophic accidents. Finally, the last component of the risk assessment is the mobile source risk assessment to address contamination and emissions as a result of daily truck traffic in and out of the facility. Currently, the AB2588 HRA is the only complete component of the cumulative risk assessment.

14. Given the revised location of the MEIW by the SCAQMD in their letter of March 1, 2013, the risk and hazard to off-site workers were now associated with actual off-site worker locations, unlike previous drafts of the HRA. The maximum individual cancer risk (MICR) for an off-site worker was 156 in one million or 1.56×10^{-4}. This clearly represents an unacceptable risk.

15. According to the March 1, 2013 SCAQMD letter, the MICR "far exceeds the AB2588 Public Notice MICR Threshold." The SCAQMD further requested that risk reduction be completed as quickly as feasible due to the elevated cancer risk. In addition to cancer risk, the maximum chronic HI was 63, well above the 1.0 level of concern. Likewise, the maximum acute HI was 3.8 and above the 1.0 level of concern, indicating that adverse health effects may occur from both short-term and long-term exposure. These unacceptable risks and hazards were based on emission data averaged from 2010 and 2012 source tests. Consequently, receptors in the community surrounding the facility have been exposed to unacceptable emissions for three years.

16. Based on these multiple lines of evidence, it is my opinion that the Exide facility emissions present an imminent and substantial danger to the public health of the surrounding community, requiring immediate action.

17. DTSC made a similar determination at 28th Street Elementary School in Los Angeles. A plating facility across the street from the school was the source of subsurface soil gas contamination as a result of their historical operations. Based on elevated soil gas data, several rounds of indoor air sampling were conducted. Elevated indoor air concentrations were detected in two classrooms at levels 100-times higher than ambient air. Based on these results, DTSC relocated the students and teachers from two classrooms and issued an Imminent and Substantial Endangerment (ISE) order against the facility. The underlying assumption for this order was that the exposures were now becoming chronic or long-term exposures. Obtaining the multiple lines of evidence at this school took between six and nine months before the order was issued.

18. In addition to the nearest off-site workers, the Exide facility poses a MICR of 22 in one million or 2.2 x 10-5 for the nearest residential receptor. The maximum chronic HI for the nearest resident was 2.9. Both the risk and hazard were well above DTSC's point of departure for cancer risk (10-6) and noncancer risk (1.0). The number of residents and sensitive receptors impacted by Exide facility emissions at the 10-5 risk level is approximately 110,000 people.

19. The Office of Environmental Health Hazard Assessment (OEHHA) of the Cal/EPA recently released the California Communities Environmental Health Screening Tool (CalEnviroScreen 1.0, April 2013). This model is a science-based methodology for evaluating multiple pollution sources and stressors on more vulnerable, disadvantaged communities. Existing research on environmental pollutants and health risk has consistently identified socioeconomic and sensitivity factors as effect modifiers. For example, numerous studies on the health effects of particulate air pollution have found that low socioeconomic status is associated with about a 3-fold increased risk of morbidity or mortality for a given level of particulate pollution. According to this model, the communities surrounding the Exide facility and within the 10-5 risk contour are some of the most impacted communities in the State of California. Given the fact that these are disadvantaged communities shown to be more vulnerable to the effects of pollution burden, DTSC believes it is crucial that the facility take all feasible actions to minimize the health risks from their operations, so as not to impact the community further.

20. Russell Kemp, in section H of his declaration, discusses the isolation door and limited, preliminary testing results from April 9 and 10, and April 18 and 19. Mr. Kemp refers to risk calculations demonstrating a 99.7 percent reduction compared to the emission rates used in the 2013 HRA. In a letter dated May 17, 2013, the SCAQMD responded to Exide's letter to DTSC regarding the effectiveness of the isolation door. While the SCAQMD agreed that the isolation door should reduce arsenic emissions, they also state that the data provided do not represent a full source test and do not represent the arsenic emission reductions that will occur during normal operations. Consequently, these data are preliminary, as are the revised risk numbers based on them and should not be considered evidence that the facility is not adversely impacting people in the surrounding community.

I declare under penalty of perjury that the foregoing is true and correct. Executed on June 25, 2013, at ~~Sacramento~~ Cypress, California.

William Bosan, Ph.D

Decl. of Philip M. Fine, Ph.D

DECLARATION OF PHILIP M. FINE, PH.D

I, Philip M. Fine, declare as follows:

1. I am an Assistant Deputy Executive Officer in the Office of Science and Technology Advancement for the South Coast Air Quality Management District (District). My specific areas of responsibility include overseeing the functions of the District's laboratory, ambient air monitoring, source-specific air monitoring, and source testing functions. I have worked in the Office of Science and Technology Advancement for over five years and have become aware of District source testing requirements through that work. In addition, I worked for a source-testing company prior to graduate school (1994-1995), and personally conducted a number of source tests.

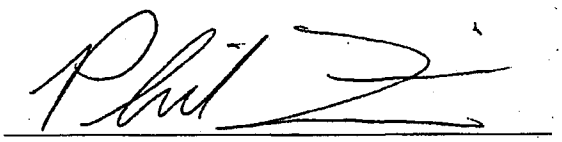
2. I am also familiar with the Health Risk Assessment for Exide Technologies by virtue of my former position as Planning Manager in the Office of Planning, Rule Development, and Area Sources., which I held for about two years. In that capacity I was in charge of overseeing the development of the Air Quality Management Plan, particulate matter reduction strategies, annual emissions reporting, air toxic reporting and health risk assessments, air quality data analysis, meteorology and forecasting, and climate and energy policy. I am also familiar with the facility since I was involved in developing rule 1420.1, which imposed lead risk reduction requirements on Exide and its competitor, Quemetco, and in charge of developing the lead state implementation plan required by the US. EPA under provisions of the Clean Air Act to show how these facilities would comply with the new lead standard developed by EPA and adopted at the end of 2008.

3. I received a Ph. D. in Environmental Engineering Science from the California Institute of Technology in 2002, and a B.S. in Mechanical Engineering and Materials Science and Engineering in 1993 from the University of California at Berkeley. After receiving my Ph.D., I was a Research Assistant Professor at the University of Southern California (USC) for four years prior to joining the District. My research in graduate school and at USC involved the measurement, chemistry, and health effects of particulate matter pollution resulting in over 45 peer-reviewed publications.

4. The attached copy of a letter dated May 17, 2013, to Mr. John Hogarth, Plant Manager for Exide Technologies in Vernon, California, is a true and correct copy of the letter I wrote to Mr. Hogarth setting forth what needed to be done to conduct approvable source testing to determine the effectiveness of the isolation door installed by Exide at the blast furnace in reducing arsenic emissions. The letter reflects my best professional judgment and includes the input of the District's source testing engineers who work for me.

I declare under penalty of perjury that the foregoing is true and correct and of my own personal knowledge and if called upon as a witness, I could and would competently testify thereto under oath.

Executed on June 25, 2013, in Diamond Bar, State of California.



Philip M. Fine, Ph.D

South Coast
Air Quality Management District
21865 Copley Drive, Diamond Bar, CA 91765-4178
(909) 396-2000 • www.aqmd.gov

May 17, 2013

Mr. John Hogarth
Plant Manager
Exide Technologies
2700 S. Indiana Street
Vernon, CA 90058

Re: *Exide Technologies, Inc., Vernon, California*

Dear Mr. Hogarth:

The South Coast Air Quality Management District (SCAQMD) has received a copy of your May 2, 2013 letter to Rizgar Ghazi, Branch Chief of Permitting Office at DTSC along with the attached May 2, 2013 memorandum from Exide's consultant, Russell Kemp, Principal with Environ, to Exide titled "Assessment of Effectiveness of Blast Furnace Isolation Door, Vernon California Facility."

In the May 2nd Environ memorandum, it is stated on page 1, that, "Based upon the details and analysis provided below, we conclude that the isolation door has been effective in its intended pupose and has resulted in reducing the overall calculated facility risks to below the Action Risk Levels specified in South Coast Air Quality Management District (AQMD) Rule 1402, which implements the AB2588 air toxics program. This conclusion is based upon preliminary engineering test data collected on April 9, 10, 18 and 19, 2013 subsequent to the installation of an isolation door on the blast furnace charge chute." The memorandum also states, on page 2, that, "The recent data indicate a further reduction beyond the 2012 improvement on the order of 98%. Comparable levels of improvement are also seen in the emissions of benzene and 1,3-butadiene, both of which would be associated with furnace process gases, further demonstrating the effectiveness of the isolation door in minimizing the escape of process gases into the Hard Lead Ventilation System."

Please note that although the SCAQMD agrees that the installation of isolation door should reduce the fugitive emissions and associated health risk, the SCAQMD must clarify that the information provided so far does not constitute the full source test reports

needed to properly evaluate the test, and can't be considered as establishing the degree of arsenic emission reductions that will occur during normal full capacity operations. Therefore, as Mohsen Nazemi, Deputy Executive Officer of Engineering & Compliance, SCAQMD has informed you on May 16, 2013 and you have agreed to, upon restart of the operations additional testing must be done to reflect operating conditions representing full capacity or permitted throughput capacity. Since the majority of emissions are associated with the Hard Lead Baghouse, for the next source test we propose that SCAQMD staff will test the Hard Lead Baghouse. Also, SCAQMD staff has the following comments regarding additional data that is needed and requirements that must be met for the proposed "confirmation" tests.

While the test results referred to by Environ as "engineering test data," reflect an indication of arsenic emissions reductions as stated by Environ, we believe it is necessary to conduct additional testing. We agree that it is prudent to conduct "confirmatory official tests" on the Hard Lead Baghouse, and Neptune Scrubber stacks. We believe that the Soft Lead Baghouse stack should be tested concurrently as well. As with all source tests, it is necessary to ensure that the confirmatory tests be conducted during operating conditions that will represent emissions which will not increase under higher throughput, closer to full capacity or permitted throughput operating conditions. The confirmatory tests would also need to address the following issues that are based on observations made during the engineering tests.

1. For the engineering tests, SCAQMD has received the full source test reports that are typically required for source tests to be reviewed. However, the full laboratory data has not been received and is not expected until the week of May 21, 2013. As such, the engineering test results are not currently considered validated final data. The proposed confirmatory tests must be submitted in a full test report format including the narrative, calculations, raw data, and full lab package subject to review by SCAQMD, as is typical for these test reports.

2. During the engineering tests, the isolation door was observed to be operated in conjunction with a substantial negative pressure present inside the Blast Furnace, as indicated by dust created during charging of material into the furnace being quickly pulled down into the furnace via the open isolation door. According to the May 2, 2013 Environ memo, the previous fugitive discharge from this charge opening is believed to be the primary source of the previously elevated arsenic emissions. These fugitive emissions, when not collected by negative pressure in the Blast Furnace, are vented to the Hard Lead system resulting in high arsenic and lead emissions in the Hard Lead stack. Based on our experience with capture efficiency test requirements, and as you have also stated in your May 16, 2013

email to Mohsen Nazemi, we have concluded that maintaining this negative pressure is critical, and needs to be maintained in conjunction with the operation of the isolation door. Additionally, several air streams including the two baghouse quench air streams are also vented to the Neptune Scrubber system. These several streams have a significant effect on the remaining air flow available to maintain a negative pressure in the Blast Furnace. It was also observed that the operators in the control room needed to maintain constant attention to these flow balances to maintain a negative pressure during the engineering tests. To address this issue in the confirmatory tests, process data must be provided, that is capable of indicating the level of negative pressure in the Blast Furnace. Most preferably, this would be in the form of measurement of the blast furnace negative static pressure in units of inches water column by a permanently installed and calibrated pressure monitoring device. Without this information, arsenic emissions reductions will be difficult to maintain without monitoring this negative pressure during future operation of the Blast Furnace.

3. Exide should provide an explanation of how and where the Blast Draft in the Smelting Shift Report is measured.

4. With the efforts that have been made to increase flow rates and negative pressure on the Blast Furnace, there is a concern that these efforts could result in reduced flow to the Reverb Furnace which, in turn, could have its fugitive arsenic emissions vented to the Soft Lead Baghouse. To address this concern, the confirmatory tests must also include testing on the Soft Lead Baghouse stack.

5. On April 18, 2013 Michael Garibay and Marco Polo requested that the feed rates during the engineering tests be at least that from the previous HRA tests and recommended that they be at least 80% of permitted capacity to address a concern that lower emissions may be the result of lower feed rates. Since the feed rates to the blast furnace for the April 18 and 19, 2013 tests were lower than the previous HRA tests and lower than 80% of permitted capacity, we request Exide to test at at least to the highest feed rate possible for the confirmatory tests. Otherwise, it may be concluded that the arsenic emissions reductions measured may not apply at higher feed rates.

6. Based on observations, the melting rate of the feedstock to the furnace and/or the temperature of the furnace may not have been typical of normal operations. It was observed that the feed stock was piling up near the feed door during the tests, suggesting the melting rate was slower than when the furnace is running at full firing rate.

7. Since the Hard Lead refining kettles are also vented to the Hard Lead Baghouse, the confirmatory tests must be scheduled to coincide with periods of additions of arsenic to at least one kettle during each test run.

8. Since the Hard Lead refining kettles are also vented to the Hard Lead Baghouse, the confirmatory tests must be scheduled to coincide with periods of high temperature operation to at least one kettle during each test run. This high temperature operation is defined as 1100 – 1170 F as indicated in Exide's refining process flow chart provided to SCAQMD during the 4/18 – 4/19 tests.

9. Exide shall provide access to the SCAQMD source testing team to conduct testing during Exide's confirmatory tests in addition to observing the Exide testing and splitting samples as during the engineering tests. Alternatively, SCAQMD may test the Hard Lead stack and the Soft Lead stack, while Exide's contractor tests the Neptune scrubber stack, subject to further approval by SCAQMD.

Finally, SCAQMD would like to remind Exide that although you are not operating the furnaces at this time, a number of housekeeping and maintenance operations are required under SCAQMD Rule 1420.1, Exide Title V Permit, Rule 1420.1 Compliance Plan and federal National Emission Standards for Hazardous Air Pollutants for Secondary Lead Smelting (NESHAP Subpart X). Attached please find a list of housekeeping, maintenance activity, total enclosure and standards for fugitive dust.

Please contact Dr. Philip Fine at 909-396-2239 should you have any questions.

Sincerely,

Philip M. Fine, Ph.D.
Asst. Deputy Executive Officer,
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Sincerely,

Barbara Baird
Chief Deputy Counsel

cc: Rizgar A. Ghazi, P.E., DTSC
Encl.
PMF:BB:vmr

Exide Technologies, Inc.

Housekeeping / Maintenance / Air Monitoring Requirements

South Coast Air Quality Management District Rule 1420.1/ Permit / Rule 1420.1 Compliance Plan and NESHAP Subpart X Requirements

Housekeeping Requirements

1. Clean by wet wash or a vacuum equipped with a filter(s) rated . . . to achieve 99.97% capture efficiency for 0.3 micron particles . . . the following areas:
   - Monthly cleaning of roof tops less than or equal to 45 feet in height
   - Quarterly cleaning of roof tops > 45 feet in height
   - Weekly cleanings of all areas where lead-containing wastes generated from housekeeping are stored
   - Initiate immediate cleaning of any maintenance activity or event . . . that causes deposition of fugitive lead-dust
   - Inspect all total enclosures and facility structures...any lead-acid battery that is cracked or leaking shall be immediately sent to the battery breaking area . . . or stored
   - Store all materials capable of generating . . . fugitive lead-dust . . . in sealed, leak-proof containers, unless in a total enclosure
   - Surfaces that accumulate lead-containing dust subject to vehicular or foot traffic shall be washed down, vacuumed, or wet-mopped . . . or maintained with dust suppressants
   - Lead or lead-containing wastes from housekeeping activities shall be stored, disposed of, recovered, or recycled using practices that do not lead to fugitive lead-dust emissions
   - Transport all materials capable of generating any amount of fugitive lead-dust . . . within closed conveyor systems or in sealed, leak-proof containers, unless in a total enclosure
   - Maintain and use an onsite mobile vacuum sweeper or vacuum
   - Vacuum sweep all paved, concrete . . . etc. facility areas subject to vehicular or foot traffic three times per day
   - Immediately vacuum sweep any area . . . including accidents, process upsets, ...etc.
   - Vacuum sweeping activities . . . shall not be required during days of measureable precipitation

Maintenance Activity
1. Conduct . . . any maintenance activity in a negative air containment enclosure vented to permitted negative air machine . . . Any maintenance activity that cannot be conducted in a negative air containment enclosure . . . shall be conducted: • In a partial enclosure • Using wet suppression or a vacuum equipped with a filter . . . 99.7% efficiency • While collecting 24-hour samples for every day • Shall be stopped immediately when instantaneous wind speeds are > 25 mph
2. Store or clean by wet wash or a vacuum equipped with a filter . . . 99.7% efficiency all equipment and materials used for any maintenance activity
Total Enclosures
1. Total Enclosure Ventilation • Ventilate enclosures at any opening at negative pressure of at least 0.02 mm of Hg
2. Digital Differential Pressure Monitoring Systems • Operate and maintain a digital differential pressure monitoring system for each total enclosure
3. In-draft Velocity • In-draft velocity of the total enclosure shall be maintained at greater than or equal to 300 feet per minute at any opening
Subpart X NESHAP from Secondary Lead Smelting Requirements
Standards for Fugitive Dust Sources
• Plant roadways – Clean all areas subject to vehicle traffic twice per day • Battery Breaking areas – Partially enclose storage piles, use wet suppression to prevent dust formation, and clean pavement twice per day; or total enclosure of battery breaking area

- Materials storage and handling area – Partially enclose storage piles, use wet suppression on storage piles to prevent dust formation, wash vehicles at each exit, pave the area; or have total enclosure and vent to control device, and have a vehicle wash at each exit