

H 10

January 25, 2013

RECEIVED

JAN 25 2013

WASTE PERMITS DIVISION  
TEXAS COMMISSION ON  
ENVIRONMENTAL QUALITY

Mr. Bill Shafford, P.E.  
MC-123  
Technical Specialist  
Office of Waste  
Texas Commission on Environmental Quality  
P.O. Box 13087  
Austin, Texas 78711-3087

**Re: Facility Decontamination and Demolition Work Plan, Revision 1  
Exide Technologies Frisco Recycling Center**

Dear Mr. Shafford:

Please find enclosed five copies of the January 25th, 2013 Revision of the Decontamination and Demolition Work Plan prepared for the Exide Technologies Frisco Recycling Center in Frisco, Texas.

This Plan describes the air monitoring activities to be conducted during the demolition of the facility and is being provided for your information. This Plan describes the activities to be conducted during the decontamination and demolition of the facility and is being provided for your information. This plan will be utilized in conjunction with the Air Monitoring Plan and Dust Control Plan to mitigate dust issues associated with the demolition activities. Exide's responses to the EPA comments on the Decontamination and Demolition Work Plan provided to TCEQ in their December 20, 2012 letter are attached to this letter in comment/response format.

If you have any questions or need additional information, please feel free to call me at (972) 335-2121 ext. 26.

Sincerely,



Vanessa Coleman  
Exide Technologies

Enclosures

Cc: Sam Barrett, TCEQ Region 4 Solid Waste Section

**EPA Comments on the Decontamination and Demolition Work Plan Dated November 9, 2012 (provided to TCEQ on November 9, 2012)**

*EPA Comment No. 1: The plan indicates that rinsate samples will be taken and results compared to clean-up levels, which are class 2 non-hazardous waste classification criteria. A description of how many samples will be collected and exactly how the rinsate samples will be collected should be included.*

Response to Comment No. 1: The plan has been modified to provide additional details regarding rinsate samples. In accordance with the permit requirements, at least one sample will be collected from each of the Battery Receiving/Storage Building and the Raw Material Storage Building. Additional rinsate samples may be collected if multiple areas where significant visual indications of contamination are apparent in these buildings. As practical, rinsate samples will be collected from building sump and/or drain areas as those locations would tend to collect material during facility operations. Rinsate samples will be collected using the minimum amount of wash down water required. As feasible and necessary, samples will otherwise be collected by using a funneling device and/or plastic sheeting or bags placed directly on the building floor. The collected rinsate will then be transferred to laboratory-supplied sample containers.

Rinsate samples will be analyzed for lead and cadmium using US EPA test method 6010B. All sample collection, preservation, chain of custody procedures and chemical analysis will be performed in accordance with EPA Publication SW-846.

*EPA Comment No. 2: The plan indicates base and walls of the buildings will be cleaned; cleaning of the ceiling should also be included.*

Response to Comment No. 2: All structures to be demolished, including equipment, walls and ceilings, will be decontaminated using high-pressure washing. The permitted unit section of the plan specifically discusses the walls and floors of the permitted units because the permit expressly specifies decontamination of these areas. However, the ceilings will also be cleaned prior to demolition. Following demolition, only the masonry wall and floor/foundation of the permitted units will remain, therefore, these are the items that will require decontamination to the closure criteria described in the permit, the ceiling will not be present. The ceilings are metal and will be recycled. Residues generated during cleaning of the ceiling (e.g., vacuumed material, wash water) will be managed in accordance with applicable regulations.

*EPA Comment No. 3: There is only a general discussion on decontamination of other structures on site. Unless it can be shown that dust was not an issue, other process buildings should also be cleaned.*

Response to Comment No. 4: All structures to be demolished will be decontaminated using high-pressure washing, including equipment, walls and ceilings. The plan will be revised to clarify that all buildings, not just the permitted units, will be decontaminated prior to demolition.

**EPA Comments on the Decontamination and Demolition Work Plan Dated November 9, 2012 (provided to TCEQ on November 9, 2012)**

*EPA Comment No. 4: There is no discussion regarding closure of treatment units used to reduce the waste material to below class 2 standards for disposal in the on-site landfill (See page 17 of the plan). Please address.*

Response to Comment No. 4: The sentence the comment refers to states: "Materials that are listed wastes, or are characteristically hazardous due to their potential to leach lead and/or cadmium, and therefore subject to land disposal restrictions (LDR) will be treated to remove the hazardous characteristic in accordance with all applicable regulations." Alternatively, waste material that is determined to be hazardous may be shipped off-site for disposal as a hazardous waste. The only hazardous wastes generated during demolition activities that may be treated on-site will be masonry, which, if treated on-site, would be stabilized in the existing less than 90-day tank (the Slag Treatment Building). The Slag Treatment Building will be closed in accordance with TCEQ regulations applicable to the closure of less than 90-day Solid Waste Management Units.

*EPA Comment No. 5: The plan discusses unit inspection and verification sampling around the two RCRA permitted structures. However, based upon previous information concerning the condition of the containment building, additional sampling around the perimeter should be included.*

Response to Comment No. 5: The two RCRA permitted structures will be closed in accordance with the approved permit and closure plan, which does not prescribe sampling around the perimeter of the units. Any potential impacts to media outside of the permitted units will be addressed as part of the facility-wide RCRA investigation.

*EPA Comment No. 6: Is a separate Asbestos Abatement Plan being developed? What asbestos containing materials (ACM) are going to be abated and how? The following ACM are listed from the survey: sheet flooring, mastic, and ceiling texture. It is not clear if these materials are going to be removed. A separate section in the plan that deals directly with the asbestos issue should be included.*

Response to Comment No. 6: Exide conducted a facility-wide asbestos survey in 2008 and asbestos containing materials (ACM) identified in the 2008 report (attached to the plan as Appendix A) were removed by a licensed asbestos abatement contractor in May 2011, March 2012, and December 2012. During these removal activities, ACM was removed from all buildings other than the Main Office Building, which is identified in the report as Building #1 and which is not being demolished and will remain in use. Required notifications for the 2011 and 2012 asbestos abatement activity were made in accordance with applicable regulations. ACM from the May 2011 and March 2012 abatement work was disposed of off-site at an

**EPA Comments on the Decontamination and Demolition Work Plan Dated November 9, 2012 (provided to TCEQ on November 9, 2012)**

authorized disposal facility. ACM from the December 2012 abatement work will be disposed of off-site at an authorized disposal facility.

As a result, all of the ACM identified in the facility inspection report located in buildings planned for demolition has already been abated and no additional asbestos abatement plan is needed. However, RSI will have an individual trained in the provisions of the asbestos NESHAP on site during all demolition activities. If suspect ACM becomes exposed during demolition activities, the material will be sampled and if ACM is identified, applicable regulatory requirements for abating the ACM will be followed. The plan will be revised to reflect this procedure, to describe the previous asbestos survey and asbestos abatement activities and to indicate that, based on previous survey results, no ACM materials remain at the facility, other than in Building # 1, and no abatement is anticipated to be required as part of the demolition activity.

Additional details concerning the 2008 asbestos survey and the 2011 and 2012 asbestos abatement activity follow:

A facility asbestos survey was performed on August 4<sup>th</sup>, 2008 by Amy Gilbreath (DSHS Consultant No. 105556 of Environmental Logistics Company, LLC. (ELC). This report identified ACM in five locations, located in three different facility buildings. The ACM identified in Building #1 (Main Office Building) will remain in place as this building is not part of the planned demolition activities. The ACM identified in Building #3 (Oxide Building) was previously removed by ATMS, Inc. (License #80-0265) on 5-23-11 through 5-25-11. The ACM identified in Building #5 (Smelter Building) was previously removed in two separate abatement events. The first abatement was conducted on 3-20-12 to 3-21-12 by HP Ecological Services, LLC (License # 80-0630). The second abatement was conducted on 12-10-12 by ATMS, Inc.

**DECONTAMINATION AND DEMOLITION  
WORK PLAN**

**FOR THE  
EXIDE TECHNOLOGIES FRISCO RECYCLING CENTER  
FRISCO, TEXAS**

**PREPARED BY:**

**Pastor, Behling & Wheeler, LLC  
2201 Double Creek Drive, Suite 4004  
Round Rock, Texas 78664  
(512) 671-3434**

**AND**

**Remediation Services Inc.  
2735 S. 10<sup>th</sup> Street  
Independence, Kansas 67301  
(620) 331-1200**

**JANUARY 25, 2013**

**REVISION 1**

**TABLE OF CONTENTS**

	<u>Page</u>
LIST OF FIGURES .....	iv
LIST OF APPENDICES .....	v
1.0 INTRODUCTION .....	1
2.0 PROJECT WORK PLANS AND PERMITS .....	3
3.0 PROJECT SET UP .....	5
3.1 PRE-CONSTRUCTION MEETING.....	5
3.2 SITE PREPARATION.....	5
3.2.1 Prepare and Equip Site Lay Down Area(s) .....	5
3.2.2 Utility Location and Disconnection .....	6
3.2.3 Air Monitoring Equipment.....	6
3.2.4 Dust Suppression Equipment .....	6
3.2.5 Work Zones .....	6
4.0 DECONTAMINATION AND DEMOLITION WORK PLAN IMPLEMENTATION .....	8
5.0 PREPARATION FOR BUILDING AND STRUCTURE DEMOLITION .....	10
5.1 UTILITY DECOMMISSIONING.....	10
5.2 UNIVERSAL WASTE REMOVAL .....	10
5.2.1 Fluorescent Light Tubes / Ballast .....	10
5.2.2 High Intensity Discharge Lamps (Mercury / Sodium Vapor) .....	11
5.2.3 Mercury-Containing Electrical Devices.....	11
5.2.4 Pb Acid Batteries .....	11
5.3 ASBESTOS ABATEMENT .....	11
5.4 ABOVE GROUND DIESEL FUEL STORAGE TANK .....	12
6.0 WASTE REMOVAL AND BUILDING DECONTAMINATION .....	13
6.1 RCRA PERMITTED WASTE MANAGEMENT UNITS .....	13
6.1.1 Battery Receiving/Storage Area Decontamination .....	13
6.1.2 Raw Material Storage Area Decontamination.....	14
6.1.3 Decontamination Verification Sampling (Rinsate Samples).....	15
6.1.4 Equipment Decontamination.....	16
6.1.5 Unit Inspection .....	17
6.1.6 Soil Verification Sampling.....	17
6.1.7 Closure Alternatives .....	18
6.2 OTHER WASTE MANAGEMENT UNITS.....	18
6.3 DECONTAMINATION OF OTHER BUILDINGS AND STRUCTURES .....	19
7.0 WASTE MANAGEMENT AND DISPOSAL .....	20
8.0 BUILDING AND STRUCTURE DEMOLITION .....	21
8.1 DUST CONTROL AND AIR MONITORING.....	21

**TABLE OF CONTENTS (continued)**

8.2 PROTECTION OF ADJACENT STRUCTURES.....21  
8.3 PHASING OF DEMOLITION ACTIVITIES .....21  
8.4 DEMOLITION ZONE.....22  
8.5 SALVAGEABLE MATERIALS AND DEMOLITION DEBRIS.....22  
8.6 EQUIPMENT TO BE TRANSFERRED TO OTHER FACILITIES.....23  
8.7 DEBRIS CHARACTERIZATION AND DISPOSAL .....23  
    8.7.1 On-Site Waste Disposal .....24  
    8.7.2 Off-Site Waste Disposal.....24  
9.0 PROJECT CLOSEOUT.....25  
10.0 CONTACT INFORMATION.....26

**LIST OF FIGURES**

<u>Figure</u>	<u>Title</u>
1	Site Location Map
2	Facility Map and Demolition Areas



**LIST OF APPENDICES**

Appendix

Title

A        Asbestos Surveys

## 1.0 INTRODUCTION

Pastor, Behling & Wheeler, LLC (PBW) and Remediation Services Inc. (RSI) have developed this Work Plan (Plan) to address waste removal, decontamination and demolition activities to be performed at the Exide Technologies Frisco Recycling Facility located in Frisco, Texas (the Site) as part of the removal of certain site buildings, infrastructure and equipment in connection with the shutdown of the Site. These activities will be implemented in accordance with applicable laws and permit requirements, including requirements for addressing residual contaminants in materials removed during the demolition activities, which may include asbestos-containing material (ACM), Universal Waste (e.g., fluorescent light bulbs/ballast, mercury containing electrical devices, lead-acid batteries) and demolition debris or other materials containing lead. Wastes generated during decontamination and demolition activities will be characterized, managed, and disposed of in accordance with applicable laws. Hazardous or potentially hazardous wastes will be accumulated/staged in buildings permitted to contain the material (Raw Material Storage Area or Battery Storage Building) prior to their disposal. Hazardous or potentially hazardous wastes not stored in a permitted unit will be stored in tanks or containers and disposed of within 90 days.

The decontamination and demolition activities addressed in this Plan do not include remediation of environmental media as part of the facility's RCRA permit requirements. The facility was a lead acid battery recycling complex that ceased operating on November 30, 2012.

Decontamination activities commenced on December 3, 2012 after the battery recycling operations terminated. Demolition activities are expected to commence in February 2013. All buildings that are to be demolished will undergo decontamination and RCRA-permitted waste management units that are being decontaminated and dismantled as part of this plan will be closed in accordance with the requirements of the Closure Plan section of the RCRA permit.

The project consists of the decontamination of buildings and equipment used in the battery recycling process, and demolition of the various buildings, infrastructure and associated equipment. The Site contains numerous former operating areas, including furnace buildings, oxide building, battery breaker building, maintenance building, slag stabilization building, waste water treatment building and the crystallizer buildings. The support equipment to be decontaminated and/or demolished includes 18 bag houses, an above ground diesel fuel storage tank, a cooling tower, aboveground storage tanks associated with a stormwater pond and waste

water treatment facility, storage tanks associated with the crystallizer and additional ancillary piping, conduit and equipment. The primary work areas and a description of work activities for each of the areas are provided in Section 2.0.

The waste water treatment building, tanks and ancillary equipment will remain in place and operational until a future date with the exception of the crystallizer, which may be disassembled and sold or transferred to another Exide facility. The stormwater pond and ancillary equipment will also remain in use until a future date. The main office building, identified as Building No. 1, is not being demolished and will remain in use.

## 2.0 PROJECT WORK PLANS AND PERMITS

This Plan describes the procedures and protocols for decontamination and demolition activities associated with the Site shutdown, which includes the general work activities described in the following sections. RSI will provide equipment, materials, and sufficient labor force to complete decontamination and demolition activities, which will include removal of waste material, removal and off-site disposal of Universal Waste, disposal of contaminated materials and decontamination waste, and proper disposal or recycling of demolition and construction debris.

In addition to this Decontamination and Demolition Work Plan, the following supporting plans have been developed for the decontamination and demolition activities proposed for the facility:

Health and Safety Plan (HASP) - A comprehensive Site-specific HASP for work to be conducted by RSI has been prepared and will be adhered to for the duration of the demolition activities. PBW has prepared a separate Site-specific HASP for their personnel conducting oversight activities. Health and safety is of the utmost importance to the Project Team and therefore the Project Team will take every appropriate precaution in accordance with the HASP to ensure safe conditions during demolition activities. Due to the nature of the work, various critical potential risks required consideration and definition in the HASP. The HASP includes a summary of principal hazards, site-specific and activity-specific training to be provided, and methods used in the field to protect workers and equipment. The HASP also includes requisite figures and graphics necessary to provide an understanding of the hazards and the methods used to mitigate and protect against such hazards.

Some of the principal elements addressed as modules in the RSI HASP include the following:

- Proposed Communications System;
- Requisite Employee Training;
- Chemical Hazards;
- Site Traffic;
- Emergency Evacuation;
- Accident Investigation; and
- Personal Protective Equipment (PPE).

Dust Control/Air Monitoring Plans – Demolition air monitoring and dust control plans have been developed and will be implemented with specific monitoring, record keeping, abatement, and stop work protocols.

The following notifications will be made:

NESHAP Notification – The National Emissions Standard for Hazardous Air Pollutants (NESHAP) Notification has been submitted to the Texas Department of State Health Services (TDSHS) as required for removal of ACM. The form was submitted not less than 10-working days prior to commencement of structural demolition. A copy of the notification form has been provided to Exide.

Asbestos Demolition Notification Form — An Asbestos Demolition Notification Form has been prepared and submitted to the TDSHS as well as the TDSHS Region 2/3 local inspector prior to performance of asbestos removal activities. The form was submitted not less than 10-working days prior to commencement of ACM removal activities. A copy of the notification form has been provided to Exide. An asbestos survey of the Site has been performed and is included as Appendix A to this Work Plan.

The following permits have been obtained prior to beginning demolition activities:

Demolition Permit – Fee payment has been made and a demolition permit obtained from the City of Frisco.

### 3.0 PROJECT SET UP

Project setup will include preparation of project plans, conducting pre-construction meetings, and submitting/obtaining the necessary permits to conduct the demolition activities.

#### 3.1 PRE-CONSTRUCTION MEETING

The project team consists of Exide, RSI and PBW personnel. The project team will hold a pre-construction meeting via teleconference and/or in person to discuss the following:

- Introduction of project team field representatives and their respective roles;
- Discussion of demolition schedule;
- Relation and coordination of subcontractors;
- Field communication plan; and
- Use of project premises and materials.

#### 3.2 SITE PREPARATION

Once the project setup activities are underway, mobilization to the Site will be performed. The activities performed as part of these preparatory efforts will include, at a minimum, the following:

- Establishment of equipment and material laydown areas
- Utility locating and verification;
- Environmental stabilization;
- Air monitoring stations set up; and,
- Dust Suppression equipment setup.

A summary of the key activities performed as part of these efforts is provided in the following sections.

##### 3.2.1 Prepare and Equip Site Lay Down Area(s)

Upon arrival at the Site, the project team will establish lay down areas, material storage areas and the primary decontamination area for use as needed throughout the project. An office in the existing administration building will be used to maintain project plans/specifications and daily field documentation. Copies of all project plans and permits will be kept at the site, including the HASP, Decontamination and Demolition Plan, and Demolition Dust Control/Air Monitoring Plans.

### 3.2.2 Utility Location and Disconnection

Electric, gas, water, and other service lines will be verified to be shut off, capped, or otherwise controlled, at or outside the building before demolition work is started. In each case, the utility company which is involved with the task will be notified in advance, and its approval or services, if necessary, will be obtained.

### 3.2.3 Air Monitoring Equipment

The air monitoring equipment included in the Air Monitoring Plan will be mobilized to the site and made operational. The air monitoring equipment will be installed in locations as described in the Air Monitoring Plan.

### 3.2.4 Dust Suppression Equipment

The dust suppression equipment included in the Dust Control Plan will be mobilized to the site and made operational. The dust suppression equipment is all mobile equipment and will be installed in appropriate locations to control emissions.

### 3.2.5 Work Zones

Work zones will be established and enforced during the demolition project. These zones will be demarcated using signs, barricade tape, 4' orange safety fence, and/or other physical barriers. The work zones will include the exclusion zone and support zone. The location of the work zones and the load-out traffic pattern will be determined by the RSI Project Manager following a logistical evaluation of the Site and reviewed with Exide.

The Exclusion Zone will consist of the demolition and staging area portions of the site, as applicable. Specific locations of the Exclusion Zone may be modified based on the progress of work activities to each portion of the Site.

The Support Zone will be recognized as the support/administrative facilities, sanitary and shower facilities and parking areas. These areas will be clearly marked with appropriate signs for identification purposes. Access to the Support Zone is not controlled.

Access to the work zones will be controlled by RSI and Exide. All personnel and visitors requiring access to the work zone will be required to contact the RSI or Exide supervisor to be escorted into the Work Zone prior to entry.



#### 4.0 DECONTAMINATION AND DEMOLITION WORK PLAN IMPLEMENTATION

The project will be staffed with an experienced management team as summarized below. The management, subcontractors, and project staff members will have the requisite training and skill set necessary to complete the decontamination and demolition activities in accordance the work plans. Management personnel committed to the project are summarized below.

RSI Project Manager (on-site) — Manages project logistics, coordinates directly with the superintendent, and H & S / QA/QC officer on weekly activities and project schedule. Reviews project plans, submittals, and procurement activities. Coordinates with subcontractors and vendors and acts as primary liaison. The Project Manager will also enforce provisions in the Site-specific HASP.

RSI Site Safety Officer (on-site) - Serves as the general Site Competent Person responsible for accident prevention in accordance with 29 CFR 1926.20. The competent person is responsible for, and authorized to and authorized to act to ensure that personnel are not working under conditions that are unsanitary, hazardous, or dangerous to their health or safety. The competent person's accident prevention responsibilities include:

1. Frequent and regular inspections of the jobsite,
2. Enforcement of the Site-specific HASP;
3. Inspections of materials on Site,
4. Review of decontamination and demolition plans; and
5. Inspection of equipment on Site.

Exide Contract Manager (on-site) – Responsible for contracting decontamination and demolition activities.

Exide Facility Environmental Manager (on-site) –Provides oversight of waste/environmental activities conducted at the facility.

PBW On-Site Representative – Provides day-to-day oversight of decontamination and demolition activities.

PBW Project Manager – Provides oversight of decontamination, confirmation, and clean-closure activities of RCRA-permitted units and provides general oversight of decontamination and waste characterization procedures.

PBW Certifying Engineer -- Provides engineer's certification for closure of RCRA-permitted units.

## **5.0 PREPARATION FOR BUILDING AND STRUCTURE DEMOLITION**

### **5.1 UTILITY DECOMMISSIONING**

The isolation of the utilities shall be performed by RSI and facility utility personnel prior to the initiation of demolition activities. RSI will verify the disconnection of each utility. Removal of utilities will not occur unless each line has been checked and clearly marked. RSI's disconnection verification procedure requires a visible break in all utility lines, with green paint applied to disconnected utilities and red paint applied to live utilities. Disconnections and color-coding will only be performed by RSI employees in conjunction with Exide employees that are familiar with the site utilities.

RSI will perform Zero Energy State verification of all utilities for the Site structures prior to demolition. A Zero Energy State Verification Form shall be signed both by the RSI Project Manager and the Exide facility maintenance representative, stating that all utilities are at zero energy state, or that specific controls are in place to prevent injury to Site workers, (lockout/tagout procedures). The completed and signed form will be kept in a binder which will remain at the Site during the work activities.

### **5.2 UNIVERSAL WASTE REMOVAL**

#### **5.2.1 Fluorescent Light Tubes / Ballast**

Fluorescent light tubes will be removed intact. They will be placed in DOT- approved shipping containers and sent to a disposal facility authorized to accept the waste. The waste will be identified as RQ Mercury, UN2809 Class 8 PG II carrying the EPA characteristic waste code of D009 for mercury. Light Ballast will be removed from within the fixtures in order to verify whether or not they contain PCB's. All ballast which are not clearly marked Non-PCB will be treated as PCB-containing. The PCB Ballast will be placed into DOT 17-H open top drums, and sent to a facility authorized to receive this type of waste. The waste will be identified as RQ Poly Chlorinated Biphenyls UN2315, Class 9, PG III carrying the EPA hazardous waste code of PCB2. Non-PCB containing ballast will be handled and disposed of as a non-hazardous waste.

### 5.2.2 High Intensity Discharge Lamps (Mercury / Sodium Vapor)

These bulbs will be removed from within the facility intact. They will be placed in DOT-approved shipping containers and sent to a disposal facility authorized to accept the waste. The containers will then be labeled and shipped to disposal facility authorized to accept this type of waste.

### 5.2.3 Mercury-Containing Electrical Devices

Mercury contained within electrical devices will first be removed from the individual components and moved to a packaging area. The devices will be staged in a work area where 40-hour HAZWOPER-trained workers equipped with respirator / mercury vapor cartridge will lab-pack the materials for mercury retortion. The lab-packed mercury devices will be placed into appropriate DOT containers which will be labeled, and then shipped to a disposal facility authorized to accept this type of waste. The waste will be identified as RQ Mercury, UN2809 Class 8 PG II carrying the EPA characteristic waste code of D009 for mercury.

### 5.2.4 Pb Acid Batteries

Lead acid batteries that are removed from mobile equipment to be scrapped, emergency lights, etc. will be removed from the facility as part of the Site decontamination activities. The materials will be staged in the battery storage building or other secure covered area where they will be checked to verify the shipping integrity of each individual battery. The batteries will then be placed on a pallet with approved shipping cardboard covering placed over the top. The batteries will then be secured to the pallet using both banding straps and shrink wrap materials. The batteries will then be loaded and transported to an Exide reclamation facility. Lead batteries that were intended to be recycled as part of the facility operations were removed by Exide personnel during the facility shutdown process.

## 5.3 ASBESTOS ABATEMENT

A facility-wide asbestos survey was conducted in 2008 and ACM identified in the 2008 report was removed by a licensed asbestos abatement contractor in May 2011, March 2012, and December 2012. During these removal activities, ACM was removed from all buildings other than the Main Office Building, identified as Building No. 1, and which is not being demolished and will remain in use. As a result, all of the ACM identified in the facility inspection report located in buildings planned for

demolition has already been abated and no additional asbestos abatement is anticipated. However, RSI will have an individual trained in the provisions of the asbestos NESHAP on site during all demolition activities. If any suspect ACM becomes exposed during demolition activities, the material will be sampled and if ACM is identified, applicable regulatory requirements for abating the ACM will be followed.

If asbestos-containing floor tile is determined to be present, Class II Abatement (floor tile removal) removal will be accomplished by utilizing open air wet methods. The floor tile will be removed using procedures and guidelines specified in the document entitled "Recommended Work Practices for Removal of Resilient Floor Covering". The NACM will be wetted and handled in such manner so as to preclude the dispersion of dust. The NACM will be disposed of at a permitted landfill. Any asbestos-containing floor tile will be removed by a State of Texas Licensed Asbestos Abatement subcontractor.

Documentation of the 2008 asbestos survey and the 2011 and 2012 asbestos abatement activities is available on the public Exide facility web page: <http://exide.com/en/sustainability/recycling-centers-sustainability/frisco.aspx>.

#### **5.4 ABOVE GROUND DIESEL FUEL STORAGE TANK**

The above ground diesel fuel storage tank will be emptied and cleaned in accordance with Texas Commission on Environmental Quality (TCEQ) requirements. The rinsate will be transported offsite to a permitted facility for treatment and disposal. Air sampling will be performed prior to tank demolition to ensure that the tank atmosphere is less than 10% of the lower explosive limit (the minimum concentration of a substance that, when mixed with air, may ignite). The emptied and cleaned tank will be cut up using a demolition shear and the metal transported offsite for recycling.

## **6.0 WASTE REMOVAL AND BUILDING DECONTAMINATION**

This section describes the work activities to be performed to complete hazardous waste removal and unit decontamination.

### **6.1 RCRA PERMITTED WASTE MANAGEMENT UNITS**

There are two RCRA-permitted waste management units requiring closure at the facility, the Battery Receiving/Storage Area and the Raw Materials Storage Areas. In addition to these units, there are several other Solid Waste Management Units (SWMUs) at the facility that are outside the scope of this plan, but will be closed in accordance with applicable regulations. Closure procedures for the permitted waste management units will require a coordinated group of activities to obtain closure of the units as described in Section 3 of the RCRA Closure Plan. Affected media identified during the closure activities will be addressed in accordance with Texas Risk Reduction Program (TRRP) requirements (30 TAC 350). The tasks associated with the closure activities of these units include:

- Preparatory activities
- Contractor mobilization
- Removal of any accumulated waste (not removed by Exide as part of normal facility shutdown procedures)
- Decontamination/demolition/removal of unit components for off-site recycling/disposal (not removed by Exide as part of normal facility shutdown procedures)
- Collection and analysis of verification samples (rinsate and underlying soils)
- Decontamination of equipment used to conduct closure
- Development and submittal of closure verification report

Work activities and waste management protocols associated with these units are briefly described in the sections below.

#### **6.1.1 Battery Receiving/Storage Area Decontamination**

All of the batteries in the battery storage area were removed by Exide and processed through the facility smelter for the reclamation of the lead as part of the Site shutdown. The ceiling of this building will be decontaminated using high-pressure water blasting equipment. The floor of the

building will be cleaned by wet sweeping with the facility floor cleaning equipment. The building will then be demolished using hydraulic shears and the material removed for recycling. The floor will then be cleaned using hydroblasting equipment. Areas of the floor that exhibit a high potential for contamination (i.e., stained or discolored areas) may be further decontaminated using wet sandblasting or concrete scarifying equipment. Hydroblasting and/or wet sandblasting or wet concrete scarification will be conducted until all visual evidence of contamination has been removed.

Decontamination fluids from the decontamination activities will be removed from the unit with a vacuum truck and processed through the facility's wastewater treatment unit or disposed at an authorized off-site facility following appropriate characterization and waste classification/profiling of the material. Sandblasting media that is not removed by the vacuum truck during removal of the decontamination liquids and concrete removed from surface scarification will be removed and placed into containers for appropriate waste characterization and profiling prior to disposal. If the sandblasting media meets the Class 2 waste disposal criteria, it will be disposed of onsite or offsite at an authorized offsite disposal facility. Any sandblasting media that does not meet the Class 2 waste disposal criteria will be disposed of offsite disposal at an authorized offsite disposal facility.

Following the decontamination activities, rinsate samples will be collected by Exide's Consultant to verify the unit has been decontaminated to the appropriate cleanup levels. At least one rinsate sample will be collected from the building with additional rinsate samples collected if significant visual indications of contamination are apparent. As practical, rinsate samples will be collected from building sump and/or drain areas as those locations would tend to collect material during facility operations as described in Section 6.1.3 below.

#### 6.1.2 Raw Material Storage Area Decontamination

Waste removal and decontamination will be completed with the bag house(s) that serve this building in operation (other than to the extent power must be turned off to allow pressure-washing and/or hydroblasting). All of the remaining materials contained in the raw material storage area will be sent off-site for recycling at another Exide facility or transported offsite for disposal at an authorized disposal facility. The equipment within the building will be decontaminated and removed. After the waste material has been removed, the ceilings, walls and floor of the building will be decontaminated using hydroblasting equipment. The building will then be demolished using hydraulic shears and the

materials removed for off-site recycling. The floor will then be cleaned using hydroblasting equipment. Areas of the building that exhibit a high potential for contamination (i.e., stained or discolored areas) may be further decontaminated using wet sandblasting equipment or wet concrete scarification equipment. Hydroblasting and/or wet sandblasting or wet concrete scarification will be conducted until all visual evidence of contamination has been removed.

Decontamination fluids from the decontamination activities will be removed from the unit with a vacuum truck and processed through the facility's wastewater treatment unit or disposed at an authorized offsite facility following appropriate characterization and waste classification/profiling of the material. Sandblasting media that is not removed by the vacuum truck during removal of the decontamination liquids and concrete removed from surface scarification will be removed and placed into containers for appropriate waste characterization and profiling prior to disposal. If the sandblasting media meets the Class 2 waste disposal criteria, it will be disposed of onsite, or offsite at an authorized offsite disposal facility. Any sandblasting media that does not meet the Class 2 waste disposal criteria will be disposed of offsite at an authorized disposal facility.

Following the decontamination activities, rinsate samples will be collected by Exide's Consultant to verify the unit has been decontaminated to the appropriate cleanup levels. At least one rinsate sample will be collected from the building with additional rinsate samples collected if significant visual indications of contamination are apparent. As practical, rinsate samples will be collected from building sump and/or drain areas, as those locations would tend to collect material during facility operations as described in Section 6.1.3 below.

### 6.1.3 Decontamination Verification Sampling (Rinsate Samples)

In accordance with the RCRA Permit requirements, rinsate samples will be collected following a triple-rinse of potable water using the minimum amount of wash down water required. Prior to rinsing, the water to be used will be analyzed for the chemicals of concern (COCs) to ensure there are no interferences. As feasible, samples will otherwise be collected by using a funneling device and/or plastic sheeting or bags placed directly on the building floor. The collected rinsate will then be transferred to laboratory-supplied sample containers. Rinsate samples will be analyzed for lead and cadmium using US EPA test method 6010b (or equivalent). The cleanup levels that will be used for the COCs are the Texas Risk Reduction Program (TRRP) protective concentration levels (PCLs) for Class 3 groundwater at the Site (0.5 mg/L for cadmium and 1.5 mg/L for lead in the rinsate water). If



the sample does not meet the decontamination standards, additional hydroblasting and sandblasting may be used to further decontaminate the areas until the decontamination standards have been met. If additional hydroblasting or wet sandblasting does not meet the decontamination criteria, those portions of the floor (or other areas) may be removed, or the surface scarified to remove the upper one-half to one-inch of concrete (approximate), followed by re-sampling as described above. Waste generated from hydroblasting, wet sandblasting or scarification will be characterized and disposed of in accordance with applicable regulations. The air quality in and around the work area will be continuously monitored to ensure that workers are wearing the proper protective clothing and to evaluate any potential impacts outside the work area. Air quality monitoring will consist of low-volume sampling for lead and cadmium conducted over the work period (approximately 8 to 10 hours).

If it is determined that that continued decontamination is impractical or ineffective, the unit may be demolished and the concrete removed and disposed at an authorized off-site facility or the unit may be closed in-place under Remedy Standard B (discussed below). If the unit is to be demolished, the concrete base and sidewalls will initially be pulverized with jackhammers. The resultant concrete chunks will then be removed from the unit with a backhoe. The removed concrete will be placed in 50 cubic yard stockpiles and analyzed for TCLP lead and cadmium by US EPA Method 6010b. Each stockpile will be sampled immediately upon placement of 50 cubic yards of concrete (or at the end of the day) and covered with visqueen sheeting. The stockpile will be identified with the unique sample ID number.

Material which meets the Texas landfill criteria for non-hazardous Class 2 waste (i.e., TCLP lead <1.5 mg/L, TCLP cadmium <0.5 mg/l), may be placed in the onsite Class 2 landfill or disposed of offsite at an authorized disposal facility. Material that does not meet the Class 2 criteria for onsite disposal will be further analyzed to comply with the specific analytical requirements of the offsite receiving facility.

#### 6.1.4 Equipment Decontamination

Any vehicle or piece of equipment that has come into contact with contaminated media will be decontaminated before being released from service. Equipment and vehicles will be cleaned of any visible contamination by hand tools (such as brooms or shovels) to the extent possible, and then washed with potable water before release from the unit area. Wash water and any other contaminated

media generated from decontamination activities will be collected and sent to the onsite wastewater pretreatment plant or characterized and disposed of at an authorized offsite facility.

#### 6.1.5 Unit Inspection

After each permitted unit has been decontaminated, an independent professional engineer will conduct a visual inspection of the concrete floor and walls to assess the presence of gaps or cracks present in the structure that may have the potential to provide a pathway to the underlying soils. The engineer will also review available inspection records to identify portions of the structure that have been repaired and determine if they pose a potential pathway. If a potential pathway is identified, additional evaluation will be performed to determine if the potential pathway has resulted in, or has the potential to result in, impacts to the environment.

#### 6.1.6 Soil Verification Sampling

In accordance with the RCRA Permit requirements, verification samples will be collected from soils underlying the Battery Receiving/Storage Building at locations where potential exposure pathways exist to the underlying soil (cracks or other defects in the foundation noted during the unit inspection). Soil samples will be collected from each location at various depth intervals until the first saturated zone is reached. Soil samples collected at the Battery Receiving/Storage Building will be analyzed for lead and cadmium by US EPA Method 6010b. Analytical results will be compared to the critical PCLs established for the closure activities and the extent of any impacts further evaluated if needed. If it is determined that excavation or treatment of impacted soils is required, any remaining concrete portions of the unit will be demolished and removed to provide access for such excavation or treatment.

Per the RCRA permit requirement, verification sampling conducted at the Raw Material Storage Area will include collection of nine soil samples from below the area formerly covered by the building using a grid system. A grid based on 35-ft by 45-ft centers will be established and samples collected at each point of intersection (see Figure 2). Verification samples collected from the Raw Material Storage Building will be analyzed for cadmium and lead by US EPA Method 6010b. To verify other waste constituents are not present, samples collected from three of the sample locations will be analyzed for a broader suite of compounds as follows:

RCRA 8 metals by US EPA Method 6010/7471

Volatile Organic Compounds by US EPA Method 8260B (laboratory Target Analyte List)

Semi-volatile Organic Compounds by US EPA Method 8270 (laboratory Target Analyte List)

Analytical results will be compared to the critical PCLs established for the closure activities and the extent of any impacts further evaluated if needed. If closure under Remedy Standard A is determined to be practical following the verification sampling, impacted soils underlying the units may be stabilized in roll-off containers prior to disposal to meet the disposal criteria for placement in the onsite Class 2 non-hazardous landfill. If stabilization is not practical or effective, soils may be excavated and transported to an offsite facility authorized to accept the soil.

#### 6.1.7 Closure Alternatives

Decontamination shall be deemed complete when no visible evidence of contamination is observed and when the results from verification sampling and analyses indicate rinse concentrations and soil concentrations are below the applicable critical PCLs for Remedy Standard A. Removal and/or decontamination activities shall continue until all hazardous constituents are below the critical PCL for Remedy Standard A. If closure of any RCRA-permitted containment building cannot be completed under Remedy Standard A, then contingent closure of the unit as a landfill shall be performed under Remedy Standard B in accordance with the requirement of Provision VII.D.2 of the permit. Closure under Remedy Standard B would utilize institutional controls and post-closure care to reduce potential exposure in accordance with a response action plan reviewed and approved by the TCEQ.

## 6.2 OTHER WASTE MANAGEMENT UNITS

Any lead-bearing waste (other than waste water) to be treated onsite in connection with demolition activities may be treated in the existing less than 90-day tank, (the Slag Treatment Building, N.O.R. management unit 8). This unit will be closed in accordance with RCRA and TCEQ closure performance standards. These standards include ensuring that wastes managed in the unit are disposed of properly and identifying whether there has been a release from the unit. Following demolition, soil samples will be collected from below the Slag Treatment Building and evaluated for potential impacts. Soil samples will be analyzed for lead and cadmium and compared to critical TRRP PCLs. If soils at the unit are found to be impacted, a decision to remediate the unit to obtain

closure under Remedy Standard A or close the unit in place with controls (Remedy Standard B) will be made and closure will proceed using the TRRP process under TCEQ oversight. In either case, a final report will be prepared documenting the closure of the unit in accordance with TCEQ requirements.

In addition to this unit, there are several other Solid Waste Management Units (SWMUs) at the facility that are outside the scope of this plan but will be closed in accordance with applicable regulations.

### **6.3 DECONTAMINATION OF OTHER BUILDINGS AND STRUCTURES**

All structures to be demolished, including equipment, walls, ceilings and floors, will be decontaminated using high-pressure washing prior to actual demolition. The wash water generated during decontamination activities will be collected and sent to the on-site water treatment facility.

Waste removal and decontamination will be completed with the bag house(s) that services each building in operation. Operation of the baghouses will cease when power to the associated building is shut off to allow high-pressure washing to be completed in a safe manner. A high-efficiency particulate air (HEPA) filtration system will be used to create negative air pressure within the baghouses during the removal of the final baghouse bags and during decontamination.

When the presence of hazardous materials or substances is apparent or suspected, testing will be conducted as warranted and purging will be performed so the hazard can be eliminated before clean demolition processes are initiated. Hazardous materials will be characterized, profiled, and managed as described in Section 7.

Each area will also be inspected for suspect ACM prior to demolition. If suspect ACM is identified, a licensed asbestos inspector will be contacted and will travel to the site to collect samples for laboratory analysis. No demolition will occur in the area containing the suspect asbestos until it has been confirmed that the material is not asbestos or the material has been abated in accordance with applicable regulations.

## 7.0 WASTE MANAGEMENT AND DISPOSAL

Waste materials that are generated after the shutdown of the facility will be characterized to determine their disposition. Characterization will consist of chemical analysis using the Toxicity Characteristic Leaching Procedure, Test Method 1311 to evaluate the leaching potential of the waste material. The leachate will be analyzed for lead and cadmium using US EPA test method 6010B. All sample collection, preservation, chain of custody procedures and chemical analysis will be performed in accordance with EPA Publication SW-846. Any additional specific analysis required by the receiving facility will be performed as required. Additional analytes will be analyzed based upon generator knowledge of the waste material and the requirements of the disposal facility, if being disposed at an authorized offsite disposal facility.

Hazardous wastes generated during demolition activities that may be treated on-site may include masonry, which, if treated on-site, will be stabilized in the existing less than 90-day tank (the Slag Treatment Building). The Slag Treatment Building will be closed in accordance with TCEQ regulations applicable to the closure of less than 90-day Solid Waste Management Units (see Section 6.2). The treatment will achieve the Universal Treatment Standard (UTS) prior to onsite disposal, or, if the UTS cannot be met, the material will be managed at a waste management facility authorized to accept the hazardous waste for treatment and disposal. No hazardous waste will be disposed of at the Site.

Wastes that meet the Texas landfill criteria for non-hazardous Class 2 waste (i.e., TCLP lead <1.5 mg/L, TCLP cadmium <0.5 mg/l), will be placed in the on-site Class 2 landfill or disposed of at an appropriate off-site disposal facility authorized to accept Class 2 wastes. Materials exceeding the non-hazardous Class 2 waste criteria will either be: (1) treated on-site in less than 90-day tanks or containers prior to such disposal to meet the criteria for disposal in the on-site landfill; (2) disposed at appropriate off-site disposal facility based on the waste classification (including post-treatment classification if on-site treatment is performed); or (3) transported to an off-site Exide lead smelting facility for reclamation. All waste shipments sent to a non-Exide facility will be manifested utilizing EPA and Texas Waste Codes. The generator section of each manifest will be signed by Exide's designated representative prior to transport to the authorized disposal facility. Material shipped to an Exide facility for reclamation will be shipped under a Bill of Lading

## **8.0 BUILDING AND STRUCTURE DEMOLITION**

This section describes the general building and structure demolition procedures and execution strategy.

### **8.1 DUST CONTROL AND AIR MONITORING**

Any time demolition activities that create dust are being conducted, the work area will be sufficiently wetted to prevent fugitive dust emissions. Implementation of dust suppression activities and air quality monitoring will be conducted in accordance with the Demolition Air Monitoring and Dust Control Plans.

### **8.2 PROTECTION OF ADJACENT STRUCTURES**

Adjacent structures that are not to be demolished, including the administration building and the waste water treatment plant, will initially be identified by bright colored flagging. These structures will be discussed, identified by posted map, and visited to ensure that project personnel are aware of the structure protection status. In addition, a Daily Tailgate Safety Meeting will be held to discuss the day's work assignments to ensure work locations are clearly understood. Demolition of any structure will require clearance through the on-site RSI Project Manager. In addition to building protection, it is also understood that the lowest concrete slab and the outermost below-grade concrete walls in the below-grade pits/sumps and pipe trenches will not be demolished.

### **8.3 PHASING OF DEMOLITION ACTIVITIES**

Where lead-bearing materials such as batteries, slag, and dust presently exist, buildings and structures will be cleared of this material as described in Section 6.0 prior to initiating clean demolition operations. While material removal and decontamination activities are being conducted, demolition activities will commence at locations that have been previously cleared of residual lead-containing materials. These activities may include but are not limited to removal of steel rail, demolition of clean structures, dismantling conveyor systems, and collection, segregation, and removal of motors and other miscellaneous equipment. Executing the project in this manner will allow the project to proceed with decontamination and demolition and waste removal taking place concurrently, but in separate areas. The Project Team will utilize the size of the facility and the spacing of structures strategically to allow for these operations to proceed safely.

Once residue removal and salvage operations are complete, hydraulic excavators equipped with shears or grappling attachment will be utilized to dismantle the structure. Crews with cutting torches will be required to cut structural members at strategic locations to provide for safe and controlled dismantlement of steel structures as well as cutting anchor bolts at the surface to eliminate trip hazards.

#### **8.4 DEMOLITION ZONE**

Demolition zones will be established within the Exclusion Zone around each day's demolition area to ensure the safety of on-site personnel during demolition activities. The demolition zone will move concurrently with the progress of demolition activities. Only those personnel specifically assigned to work or operate equipment will be allowed in the demolition zone. Personnel responsible for dust suppression and water management activities will be kept at a safe distance from the demolition area. Barricades, caution tape and signs warning of demolition activities will be posted around the perimeter of each demolition zone. A drop zone will be established within the demolition zone to protect against pieces of debris that may fall during demolition activities. The drop zone will be large enough to accommodate for any material kick-out or bounce after landing on the ground. A member of the project demolition team on the ground will be responsible for policing the drop zone. A fire-watch zone will be delineated within the demolition zone if torch cutting will be employed. Whenever torch work or an open flame is used for demolition, a demolition team member will be present with a fire hose and/or extinguisher and will remain onsite at least 30 minutes after the open flame cutting has been completed.

#### **8.5 SALVAGEABLE MATERIALS AND DEMOLITION DEBRIS**

This section covers management and handling of salvageable materials and clean demolition debris. Regulated waste handling was previously discussed in Sections 6.1 and 7.0.

Salvageable materials (e.g., steel and other metals going off-site for reclamation) and demolition debris such as masonry, fiberglass, PVC, wood, and glass, will be sorted and stacked or piled neatly within the staging areas to create distinct areas of like materials for loading and transportation to the appropriate mill or processing facility. Demolition debris will be placed in stockpiles covered with plastic sheeting (visqueen) while awaiting the results of the waste characterization analysis (see

Section 8.7 below). Other materials will be managed in a manner that prevents migration of water that comes in contact with demolition debris beyond the limits of the site stormwater collection system. Roll-off containers, dump trucks and debris staging areas containing potentially contaminated materials will be securely covered (using covers/tarps appropriate for each container) during the non-working hours, weekends and holidays.

## **8.6 EQUIPMENT TO BE TRANSFERRED TO OTHER FACILITIES**

Certain pieces of equipment will be transferred to another Exide facility for reuse. Equipment that is selected for transfer to another facility for reuse will be decontaminated and disassembled as required, removed and loaded onto trucks for transportation to the designated Exide facility.

## **8.7 DEBRIS CHARACTERIZATION AND DISPOSAL**

Debris and other materials generated during the decontamination and demolition activities will be characterized by RSI to determine the waste classification of the materials. Materials generated during the demolition activities will include various types of building components (e.g., cinder blocks, concrete, piping). Debris material will be segregated into discrete stockpiles based on the type of material. One or more composite samples consisting of sub-samples collected from throughout a specific debris area will be collected to produce a sample or samples representative of the debris type. Composite debris samples will be collected for each 50 cubic yard accumulation of a specific debris type. Composite samples will be collected by combining representative portions of the debris to produce a minimum 100 gram sample volume. The representative portions of the debris will be collected using crow bars, power drills, and other hand/power tools as needed to obtain properly sized material for the sample.

Chemical analysis of the debris sample will be performed using the Toxicity Characteristic Leaching Procedure, Test Method 1311. The leachate will be analyzed for metals using test method 6010B. All sample collection, preservation, chain of custody procedures and chemical analysis will be performed in accordance with EPA Publication SW-846. Specific analysis will be performed as required by the receiving facility. This analysis will at a minimum include TCLP lead and cadmium. Additional analytes will be analyzed based upon the generator knowledge of the waste material and the requirements of the disposal facility.



Debris that produces a TCLP leachate result exceeding the threshold value for a characteristically hazardous waste will be stabilized to meet the criteria for non-hazardous waste, or, if stabilization is not possible or successful, managed as a hazardous waste. The waste characterization thresholds used to determine the classification of wastes generated during the decontamination and demolition activities are listed below. It should also be noted that depending on the waste characterization results and disposition methods, land disposal restriction requirements may also apply.

**Table 1. Waste classification criteria**

TCLP Result mg/L		Waste Class	Disposition
Cadmium	Lead		
≥1	≥5	Hazardous	Will be disposed of off-site as hazardous material or treated to Class 2 criteria and UTS criteria and disposed in the on-site landfill
0.5-1	1.5-5	Non-hazardous Class 1	Will be disposed of off-site as a Class 1 waste material or treated to Class 2 criteria and disposed in the on-site landfill
<0.5	<1.5	Non-hazardous Class 2	May be disposed of in on-site Class 2 landfill

#### 8.7.1 On-Site Waste Disposal

Demolition debris may be placed in the onsite landfill if the material meets the criteria for a non-hazardous Class 2 waste as indicated in Table 1. Material which is targeted for disposal in the on-site landfill, but does not meet the Class 2 criteria, will be treated on-site followed by additional sampling and analysis to ensure it meets the Class 2 criteria (and UTS criteria of 0.11 mg/l for TCLP cadmium and 0.75 mg/l for TCLP lead) prior to disposal.

#### 8.7.2 Off-Site Waste Disposal

Depending on the waste characterization and available landfill capacity, some waste material from demolition activities may be transported to an off-site landfill. This waste material will be classified, transported, and disposed in accordance with applicable regulatory requirements.

## 9.0 PROJECT CLOSEOUT

This section summarizes project closure activities to be conducted at the end of the project to ensure that relevant project information is appropriately cataloged and retained by Exide. Project data covered by the HASP or the Demolition Dust Control/Air Monitoring Plans will be provided to Exide, TCEQ and the public as specified in the respective plan. Under this Decontamination and Demolition Work Plan, project data will be available to Exide upon request and at the end of project so the information may be referenced as needed. Upon completion of the project, information will be submitted to Exide in hardcopy and electronic form. The type of information maintained during the project to be submitted at project close out will, at a minimum, include:

- Air monitoring information, including sampling and analysis records;
- Waste tracking information including manifest numbers, trucks, destinations, weights, and dates;
- Safety statistics including man hours, job safety analysis, inspections, and incident investigations;
- Wind monitoring, including baseline conditions and routine monitoring results;
- Weekly Status Reports;
- Photographic documentation, and
- Copies of executed notifications and permits.

## 10.0 CONTACT INFORMATION

Concerns regarding activities conducted at the Exide Technologies Frisco Recycling Center should be addressed to the following points of contact:

**Exide:**

Vanessa Coleman  
7471 South Fifth Street  
Frisco, Texas 75034  
Ph: 972-335-2121x26  
Cell: 916-296-4292  
Fax: 972-377-2707  
Vanessa.coleman@Exide.com

**Texas Commission on Environmental Quality:**

Margaret Ligarde  
Office of Legal Services  
MC-173  
P.O. Box 13087  
Austin, Texas 78711  
Ph: 512-239-3426  
Fax: 512-239-0330  
Margaret.ligarde@tceq.texas.gov

**City of Frisco:**

Mack Borchardt  
City of Frisco  
6101 Frisco Square Blvd.  
Frisco, Texas 75034  
Ph: 972-292-5127  
Fax: 972-292-6319  
mborchardt@friscotexas.gov

## **APPENDICES**

**APPENDIX A**  
**ASBESTOS SURVEYS**



ENVIRONMENTAL & INDUSTRIAL SERVICES  
REMEDATION AND COMPLIANCE SPECIALISTS

January 4, 2013

Grant Sherwood  
Remediation Services, Inc.  
PO Box 587/ 2735 South 10<sup>th</sup> Street  
Independence, Kansas 67301

RE: Exide Technologies, Frisco, Texas, Limited Asbestos Survey

Dear Mr. Sherwood:

Environmental Logistics Company, LLC (ELC) has completed the Limited Asbestos Survey of the Oxide Building located within the Exide Technologies facility located at 7471 South 5<sup>th</sup> Street in Frisco, Texas. The survey was performed to comply with the U.S. EPA regulations (40 CFR 61, Subpart M- National Emission Standard for Hazardous Air Pollutants) and the Texas Asbestos Health Protection Rules (25 TAC 295.31 - .73), which require that, prior to any construction, renovation or demolition, the area where work is to be performed shall be inspected by a properly trained and licensed individual for the presence of asbestos-containing materials (ACM) that may be disturbed during work.

The EPA, OSHA and Texas DSHS consider a material to be "asbestos-containing" only if it contains more than one percent asbestos. Materials that contain trace amounts of asbestos (less than one percent) are not currently subject to EPA and Texas regulations. These materials, however, are subject to OSHA regulations when their disturbance may elevate the concentration of airborne fibers above the eight-hour time weighted average (TWA) permissible exposure limit (PEL) of 0.1 fibers per cubic centimeter of air (f/cc) or the 30-minute short term excursion limit (STEL) of 1.0 f/cc. It should be noted, despite the limits established by OSHA, that no "safe" level of asbestos exposure has been determined.

Current regulations specify that a homogenous area be considered asbestos-containing if any one of the samples obtained from that area is found to contain more than one percent asbestos. Once a sample is found to contain more than one percent asbestos, the remaining samples obtained from that homogeneous area may be held without analysis, which is called a "positive stop" analysis protocol. All of the samples obtained from a homogeneous area must be analyzed and found to contain less than one percent asbestos before that area can be considered non-ACM. Homogenous areas are defined to be areas visibly uniform in color and texture.

The Limited Asbestos Survey at Exide Technologies, in Frisco, Texas was performed on December 26, 2012 by Amy Gilbreath (DSHS Asbestos Consultant No. 105556) of ELC. After a walkthrough of the Oxide building, the suspected flooring material previously noted in the upstairs office was no longer present. Additionally, no other suspect materials were identified during the walkthrough of the Exide Technologies facility that had not previously been assessed.

ELC appreciates the opportunity to be your consultant in this matter. If you have any questions or need additional information, please do not hesitate to contact me at 469-576-4398.

Very truly,  
ENVIRONMENTAL LOGISTICS COMPANY, LLC

A handwritten signature in black ink that reads "Amy Gilbreath". The signature is written in a cursive, flowing style.

Amy Gilbreath, IAC, 105556  
Project Manager



## **Environmental Logistics Company**

Environmental Services and Technical Support

P.O. Box 3238 • McKinney, Texas 75070  
469-742-9981 • Fax 469-742-9985

[www.envirologistics.com](http://www.envirologistics.com)

August 11, 2008

Exide  
Attn: James Messer  
5<sup>th</sup> Street  
Frisco, Texas 76

RE: Asbestos Survey – Exide Facility, Frisco, Texas

Dear Mr. Messer:

Thank you for this opportunity to be of service. Environmental Logistics Company, LLC (ELC) has completed the asbestos survey of the Exide Technologies (Exide) facility located at 5th Street in Frisco, Texas (Site). The survey was performed to comply with U.S. EPA regulations (40 CFR 61, Subpart M – National Emission Standard for Hazardous Air Pollutants) and the Texas Asbestos Health Protection Rules (25 TAC 295.31 - .73), which require that, prior to any construction, renovation or demolition, the area where the work is to be performed shall be inspected by a properly trained and licensed individual for the presence of asbestos-containing materials (ACM) that may be disturbed during work.

All materials identified as suspect were sampled and submitted under chain-of-custody to Steve Moody Micro Services, Inc. (SMMS) (Department of State Health Service (DSHS) Laboratory License No. 30-0084) for analysis by polarized light microscopy (PLM) with dispersion staining utilizing visual area of estimation as outlined in the EPA's "Method for Determination of Asbestos in Bulk Materials" (EPA/600/R-93/116).

The EPA, OSHA and Texas DSHS consider a material to be "asbestos-containing" only if it contains more than one percent asbestos. Materials that contain trace amounts of asbestos (less than one percent) are not subject to EPA or Texas regulations. These materials, however, are subject to OSHA regulations when their disturbance may elevate the concentration of airborne fibers above the eight-hour time weighted average (TWA) permissible exposure limit (PEL) of 0.1 fibers per cubic centimeter of air (f/cc) or the 30-minute short term excursion limit (STEL) of 1.0 f/cc. It should be noted, despite the limits established by OSHA, that no "safe" level of asbestos exposure has been determined.

Current regulations specify that a homogeneous area be considered asbestos-containing if any one of the samples obtained from that area is found to contain more than one percent asbestos. Once a sample is found to contain more than one percent asbestos, the remaining samples obtained from that homogeneous area may be held without analysis, which is called a "positive stop" analysis protocol. All of the samples obtained from a homogeneous area must be analyzed and found to contain less than one percent asbestos before that area can be considered non-ACM. Homogeneous areas are defined to be areas visibly uniform in color and texture.

The asbestos survey of the Exide Facility was performed on August 4, 2008 by Amy Gilbreath (DSHS Asbestos Consultant No. 105556) of ELC. After a walkthrough of the entire facility, only six buildings were observed to have suspect asbestos containing materials. A total of 99 samples were collected from suspect materials in the Office, Human Resources, Oxide, Maintenance, Smelter and Crystalizer Buildings. Materials observed and sampled during the site visit included: sheet flooring, resilient floor tiles and associated mastics, wall systems, ceiling tiles, sink undercoating, pipe joint sealant, cove base and associated mastic, acoustical ceiling texture, mastic buttons, plaster, and roofing materials. Of the samples collected and analyzed, eighteen were reported to contain asbestos. A summary of the identified asbestos-containing materials is provided below based on the buildings in which the materials were located:

**Building 1 – Office Building**

- **Sheet Flooring** was observed in the spectrometer room under pink sheet flooring. The fiber backing associated with this flooring material was reported to contain 45% chrysotile asbestos.

**Building 2 – Office Building**

- No asbestos was reported in any of the samples collected and analyzed from this building.

**Building 3 – Oxide Building**

- **Gray Sheet Flooring and Tan Sheet Flooring** were observed in the office portion of this building. The backing associated with this flooring was reported to contain between 15 and 45% chrysotile asbestos. Approximately 150 square feet of this material was present in the office portion of this building.
- **Acoustical (Popcorn) Ceiling Texture** was observed over the office portion of this building. This white texture was reported to contain 5% chrysotile asbestos. Approximately 200 square feet of this material was present in the office portion of this building.
- **Black Mastic** was observed intermittently under the sheet flooring and resilient floor tiles in the office portion of this building. This mastic was reported to contain 5% chrysotile asbestos and the extent of this material is unknown.

**Building 4 – Maintenance Building**

- No asbestos was reported in any of the samples collected and analyzed from this building.

**Building 5 – Smelter Building**

- **Black Mastic** was observed under the 12'x12' black resilient floor tile located in the old office portion of this building. This room was used to store red phosphorous at the time of the survey. This mastic was reported to contain 5% chrysotile asbestos and extended across approximately 100 square feet of the room.

**Building 6 – Crystalizer Building**

- No asbestos was reported in any of the samples collected from this building.

Sample locations and the approximate extent of the identified asbestos containing materials are provided on the attached Sample Location Maps. A copy of the analytical report is also attached to this letter report.

ELC appreciates the opportunity to be your consultant in this matter. If you have any questions or need additional information, please do not hesitate to contact me at 469-742-9981.

Very truly,  
ENVIRONMENTAL LOGISTICS COMPANY, LLC



Amy Gilbreath, IAC  
#10-5556 Exp. 7/12/10