



To: Amanda Cruz, United States Environmental Protection Agency

From: Eric Fraske, Alta Environmental/NV5

CC: Peter Ruttan, Dan Gamon, and Poonam Acharya, California Department of Toxic Substances Control

Date: December 16, 2020

Subject: Technical Memorandum No. 2: Interim Measures Order Response Work Plan

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## **BACKGROUND**

On July 3, 2020, the Department of Toxic Substances Control (DTSC) issued a Notification of Requirement to Perform Interim Measures (Notification) to Exide Technologies (Exide), in response to the results of dust samples collected by DTSC in November 2019. The dust samples were from various surfaces at seven (7) locations (See Figure 1) throughout the former Exide facility located at 2700 S. Indiana Street in Vernon, California (Site). Laboratory analysis of the collected dust samples identified concentrations of lead ranging from 10,500 milligrams per kilogram (mg/kg) to 48,800 mg/kg (Notification attached for reference). These concentrations are above the State of California Commercial/Industrial health screening concentration for lead in soil, which is 320 mg/kg. The Notification indicated that the detected concentrations of lead represented an identifiable, immediate, and potential threat to human health through inhalation and/or dermal contact by on-site workers at the Site, and also a potential threat to human health and the surrounding environment due to off-site migration if the dust was not removed prior to any future man-made or natural disturbances at the Site. The Notification ordered Exide to mitigate these threats.

Following Exide's 2020 bankruptcy, Site operations and management were transferred to the Vernon Environmental Response Trust (VERT) on October 26, 2020. On December 1, 2020, the VERT submitted a plan (Technical Memorandum No. 1) for immediate actions to mitigate the threat to human health of Site workers and the threat of off-site migration of dust. This Technical Memorandum No. 2 is a work plan prepared to address the long-term risk associated with the dust located within these structures at the Site.

## **MITIGATION STRATEGY**

In order to mitigate the long-term risk associated with the dust located within the non-Phase I Closure structures at the Site, the VERT has proposed to decontaminate and deconstruct all Site buildings (both Phase I Closure and Non-Interim Status [Non-IS] buildings) down to slab grade, thus eliminating the potential risk to Site workers and the community. These structures include the seven (7) buildings identified in the Notification (Blue Lead Warehouse, Machine Shop, Mobile Maintenance Building, South Yard Water Softener Building, South Yard Employee Services Building, South Yard Material Storage Building, and Engineering Building) as well as the other non-Phase I Closure structures located at the Site (North Yard Scale House, Electricians Shop, Bess Building, and Finished Lead Warehouse).

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The decontamination and deconstruction of these structures will be performed by American Integrated Services (AIS), a licensed environmental remediation contractor. AIS's decontamination and deconstruction approach will generally follow the procedures outlined in the previously approved Closure Implementation Plan (CIP) to ensure that the lead-containing dusts are safely removed from the structures prior to deconstruction to protect both Site workers and the surrounding community. These procedures are presented in greater detail as follows.

## **SEQUENCE OF WORK**

The general overall sequence of work for the Non-IS building decontamination and deconstruction is described below. AIS has determined that using multiple crews working in parallel to sequentially decontaminate and demolish each of the non-IS structures at the Site is the most time and cost-effective work strategy. Non-IS building activities will be scheduled to avoid interference with ongoing Phase I Closure-related activities.

### **Pre-Decontamination Activities**

#### **Health and Safety**

The activities described in this Work Plan will be performed in accordance with AIS's existing Health and Safety Plan, which include Covid-19 safety protocols. Additionally, AIS will prepare individual job-hazard-analysis (JHA's) for specific tasks conducted as part of this scope of work.

#### **Permits and Notifications**

Prior to commencement of decontamination and deconstruction activities, AIS will obtain necessary demolition permits from the South Coast Air Quality Management District (SCAQMD) and City of Vernon. For structures located along the Site perimeter (Engineering Building, Garage, Material Storage Warehouse), AIS will prepare an encroachment plan and obtain necessary sidewalk closure permits from the City of Vernon.

#### **Supplemental Asbestos Survey**

Additionally, NV5 will complete supplemental asbestos surveys of each of the non-IS structures to ensure that asbestos-containing materials (ACM) are identified for abatement.

#### **Waste Management Practices**

Bulk waste items will also be removed from each building and placed within Container Storage Area #1 for consolidation, lab packing, profiling and packaging for disposal.

### **Asbestos Abatement**

Following completion of the asbestos survey and the permitting and notification process, AIS will proceed with asbestos abatement of the Non-IS structures. Asbestos abatement will be completed using standard industry practices that include SCAQMD-approved abatement methods. Following completion of asbestos abatement activities, NV5 will conduct a visual post-abatement confirmation survey to ensure that the identified ACM has been removed. Post abatement air-clearance sampling will be conducted for areas where friable ACM has been abated.

### **Decontamination Procedures**

Following completion of ACM abatement and post-abatement verification activities, and applicable permitting and notifications, AIS will proceed with decontamination of the Non-IS structures. Building decontamination will follow the sequence below:

- Utility lockout/tag out and safe off verification. AIS personnel will walk all buildings and verify utility lock out tag out and perform safe off and utility disconnection.
- Cleaning of all vertical and horizontal surfaces using SCAQMD-permitted HEPA Vacuums
- Removal of all loose and flakey paint from building surfaces using hand tools. Paint chips will be collected for disposal using the previously mentioned HEPA vacuums, and by hand, to ensure proper disposal. Collected paint chips will be transferred to on-site waste bins for disposal.
- Thorough wash down utilizing high pressure/low volume power washing on all surfaces
- Collection of all rinse waters and placement within designated dewatering bins to filter out bulk suspended solids and sludge from cleaning rinsate. The filtered water will then be transferred to the on-site Wastewater Treatment Plan (WWTP) for processing. Solids and sludges within the dewatering bin will then be transported offsite for disposal.
- Application of a lead barrier compound (LBC)/encapsulant on building surfaces to prepare for demolition. A specification sheet for the LBC material is attached to this memorandum for reference. It is the same material that was previously used for encapsulation of vertical concrete surfaces on Segment 1 of the Main Containment Building.

### **Deconstruction Procedures**

Following completion of decontamination and encapsulation activities, AIS will proceed with demolition of the Non-IS structures. Building demolition will follow the sequence below:

- AIS will demolish all buildings utilizing a combination of hand-wrecking (deconstruction using hand-held tools, torch cutting, etc.) selective dismantling of components and machine-wrecking utilizing excavators with bucket thumbs and or shear attachments.
- Water sprayers will be used for dust suppression during demolition/deconstruction activities. Work will be stopped during periods of elevated winds as defined in the Title V permit (sustained winds in excess of 12 miles per hour (mph)/wind gusts in excess of 20 mph).
- Process all debris and segregate in applicable waste streams for disposal and or recycling. Stockpiles of waste materials and recyclable materials will be covered with plastic when active loading is not occurring.
- Obtain bulk samples of waste streams scheduled for disposal and analyze for characterization and applicable disposal
- Load out waste and transport to applicable disposal and/or recycling facilities
- Upon completion of transportation and disposal of waste items, perform a final rinse down of slab on grade within building footprint and adjacent areas as needed
- A thorough wash down utilizing high pressure/low volume power washing on all surfaces
- Collection of all rinse waters and placement within designated dewatering bins to filter out bulk suspended solids and sludge from cleaning. The filtered water will then be transferred to the on-site Wastewater Treatment Plan (WWTP) for processing. Solids and sludges within the bin will then be transported offsite for disposal.
- Following completion of demolition activities, remaining concrete floor slab surfaces will be coated with LBC or asphalt.

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### **Site Security and Compliance Considerations**

To assure that Site security and permit compliance will be maintained throughout the decontamination and deconstruction process, AIS will complete the following activities:

- Install chain-link fencing to match existing Site perimeter fencing at locations where Non-IS buildings are located along the building perimeter (Garage, Engineering Building, Material Storage Building, North Yard Scale House).
- Maintain electrical power to site compliance equipment (weather station, perimeter ambient air stations, wheel wash, stormwater sump pumps, and Full Enclosure Unit (FEU) negative pressure monitoring (manometer) and associated communication equipment. Alternative compliance equipment or procedures may be submitted by the VERT for agency consideration and approval if necessary, to complete the proposed decontamination and deconstruction activities.

### **Permit Compliance**

Decontamination and demolition/deconstruction of the Non-IS buildings will be conducted in general accordance with the methods and procedures defined in the Closure Implementation Plan (CIP) followed previously during Phase I closure activities with the following clarifications.

Requirements for enclosures, temporary enclosures, and real-time dust monitoring during decontamination and deconstruction activities at the Site are listed in Attachments 14 and 15 of the CIP. These attachments were incorporated into Exide's Title V permit as part of their Rule 1420.1 Compliance Plan for Closure Activities.

The CIP was prepared to address the activities associated with Phase I Closure. Phase I Closure was defined in the Closure Plan as the decontamination and deconstruction of the facility's RCRA units. These units were primarily located within the large containment building in the north yard, the wastewater treatment plant, and a few isolated structures throughout the southern and western yards of the facility. The other structures located throughout the facility (the Non-IS buildings) are identified in the Closure Plan as "non-regulated areas."

These non-regulated areas and buildings were defined in Chapter 12 of the Closure Plan as:

- BESS Building
- Engineering Building
- Product Storage Warehouse
- Chemical Storage Warehouse
- Employee Facilities Building
- Water Softener Building
- Garage/Mobile Maintenance Building
- Machine Shop
- Maintenance Storage Area
- Blue Lead Warehouse
- Scale House, and
- Cooling Tower

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During Phase I closure, the roofs of these non-regulated areas were to be washed, but their interior decontamination and eventual deconstruction were not included in the Closure Plan.

As there is no requirement for the use of a temporary enclosure or negative air system during the decontamination or deconstruction of the non-regulated areas in the approved Closure Plan or SCAQMD Rule 1420.1, the decontamination and deconstruction of these buildings will be done without a temporary enclosure or negative air filtration system. Rather the decontamination and deconstruction activities will be completed using standard industry practices previously described above.

While real-time air monitoring is not required during decontamination or deconstruction of the Non-IS Buildings/non-regulated areas, ambient air monitoring will still be conducted at the facilities five perimeter sampling stations, and visual monitoring for dust will be conducted by field staff and oversight personnel. If concentrations of lead or arsenic are detected at ambient monitoring locations in excess of permitted levels, decontamination/deconstruction activities will be suspended until additional dust mitigation measures can be employed. If deemed appropriate by project stakeholders, real-time air monitoring may also be conducted on an as-needed basis.

#### **CEQA Compliance**

Based on the review of the Closure Plan, Draft EIR, and CIP, it appears that decontamination of the 12 non-IS structures without use of a negative air enclosure can commence without further CEQA analysis. However, as demolition of these structures was not previously analyzed, additional CEQA analysis may be required for this component of the work. The project could move forward without additional CEQA review, if per the EIR, the non-IS buildings are decontaminated, and then following decontamination, a demolition permit is obtained from the City of Vernon. A demolition permit is a ministerial action, not subject to CEQA.

Nonetheless, it is believed the best path forward would be the preparation of an EIR addendum. Section 15164 of the CEQA Guidelines states that an addendum to a previously certified EIR should be prepared if only minor technical changes to a project are proposed that do not involve new significant effects or a substantial increase in the severity of previously identified significant effects. Based on our understanding of the proposed action (decontamination and demolition of the non-regulated structures), and the anticipated lack of new significant impacts as compared to what was identified, an addendum to the adopted EIR appears to be the appropriate document under CEQA. Furthermore, an addendum need not be circulated for public review, but the decision-making body shall consider the addendum prior to deciding on the project.

#### **POST NON-IS BUILDING DECONSTRUCTION PLAN**

Following the completion of all Site Non-IS Building decontamination/demolition activities and Site Closure Building decontamination/deconstruction activities, the VERT will pave the Site with a layer of asphalt pavement in order to provide a long-term dust mitigation and stormwater control for the Site. Details regarding the asphalt paving will be presented for review and approval in a future work plan.

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**SCHEDULE AND DOCUMENTATION OF COMPLETION**

VERT has authorized NV5 and AIS to commence with pre-decontamination/deconstruction activities. VERT will direct AIS to begin implementation of the decontamination and demolition measures described in this work plan upon approval from US EPA. The Resident Engineer will document completion of these mitigation actions and submit a report to US EPA and DTSC upon completion. It is anticipated that the decontamination and deconstruction activities described above will be completed within approximately 12 to 14 months.

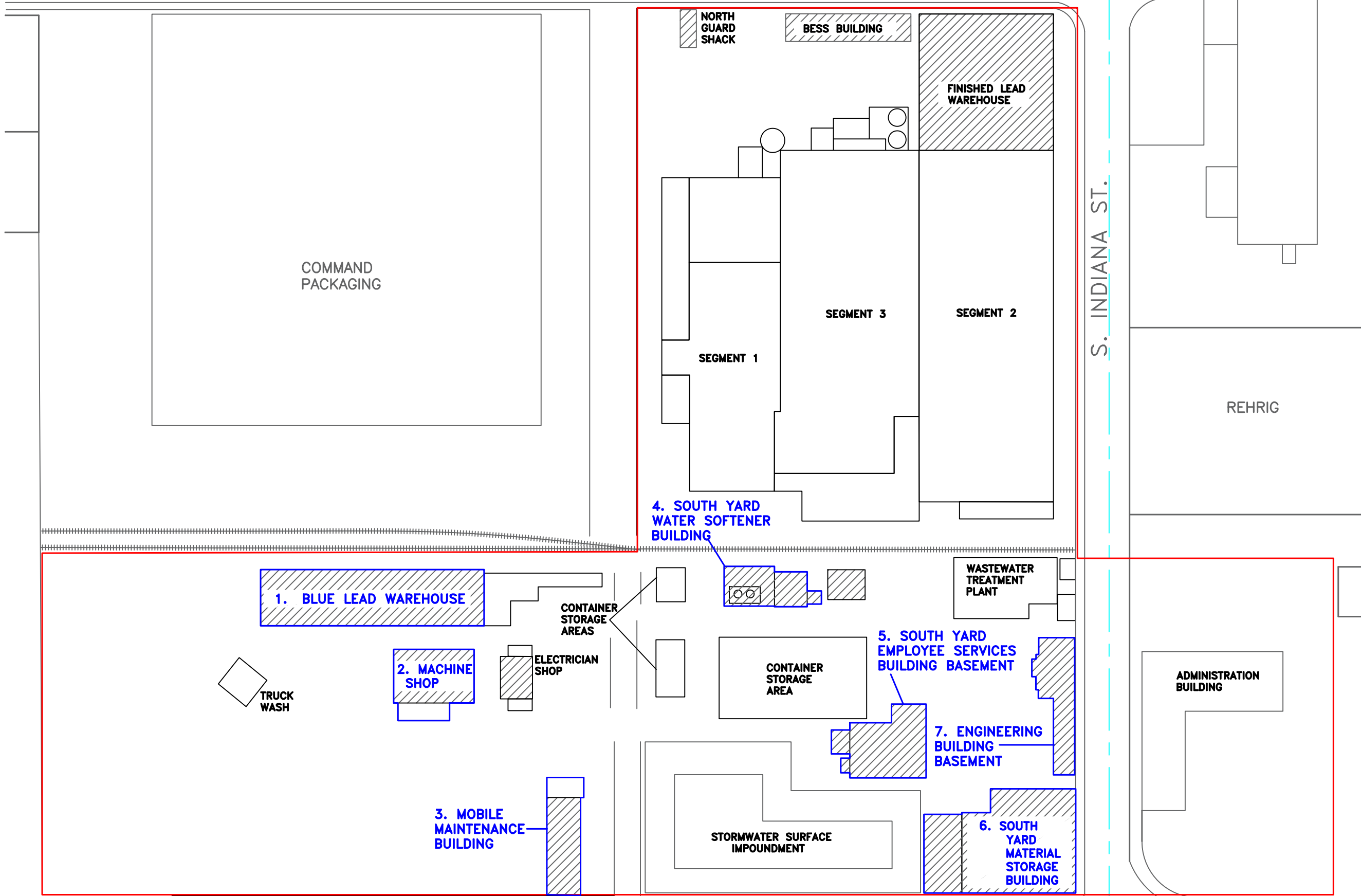
Attachments:

Figure 1 – Site Plan

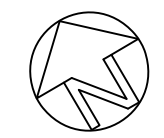
Attachment 1 -Notification of Requirement to Perform Interim Measures

Attachment 2 – LBC Specification Sheet

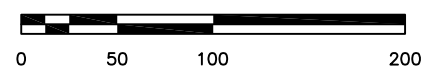
E. 26th ST.



- LEGEND:**
- Site Boundary
  - Interim Measure Order Action Buildings
  - Non-ISD Building



Approximate Scale: (Feet)



**FIGURE 1: SITE PLAN**

SITE:  
Former Exide Facility  
2700 South Indian Street  
Vernon, California

PROJ. NO.: VERT-20-9944

DRAWN: BP	APPROVED: EF
APPX. SCALE: 1" = 100'	DATE: Nov. 2020



3777 Long Beach Blvd. Annex Bldg. Long Beach CA 90807  
P: (562) 495-5777 ♦ F: (562) 495-5877 ♦ altaenvirom.com

BANDINI BLVD.

This figure was created in color. Significant information may be lost if copied in black and white.



**Jared Blumenfeld**  
Secretary for  
Environmental Protection



## Department of Toxic Substances Control

Meredith Williams, Ph.D.  
Director  
8800 Cal Center Drive  
Sacramento, California 95826-3200



**Gavin Newsom**  
Governor

July 3, 2020

Ms. Grace Yeh  
Exide Technologies  
2700 S. Indiana Street  
Vernon, CA 90058

### NOTIFICATION OF REQUIREMENT TO PERFORM INTERIM MEASURES, EXIDE TECHNOLOGIES, LLC, VERNON, CALIFORNIA, EPA ID. NO. CAD097854541

Dear Ms. Yeh:

The Department of Toxic Substances Control (DTSC) has determined that there is an identifiable, immediate, and potential threat to human health and the environment from accumulated dust at various locations throughout the Exide Technologies, LLC (Exide) facility located at 2700 South Indiana Street in Vernon. On November 21, 2019, DTSC sampled dust on various surfaces (shelves, counters, floors, windowpanes, stored equipment, and girders) at seven locations at the Exide Facility. Samples were collected within and near several buildings located on the South and West Yards; the sample locations are shown on the attached Figure 1. DTSC received the sample results on April 21, 2020. Sample information and laboratory results are presented on Tables 1 and 2, also attached.

Lead concentrations in the dust samples collected ranged from 10,500 milligrams per kilogram (mg/kg) to 48,800 mg/kg, which is well above the Industrial California Human Health Screening Level (CHHSL) of 320 mg/kg for lead. Other metals, including arsenic, barium, cadmium, and chromium, also were detected above Industrial CHHSLs. The results of this sampling are confirmation that an identifiable, immediate, and potential threat to human health through inhalation and/or dermal contact exists, representing a danger to on-site workers at the facility. A potential for off-site migration threatening human health and the surrounding environment exists if the contaminated dust is not removed prior to any future man-made or natural disturbances affecting the Exide facility. Hence, DTSC hereby notifies Exide of its obligation to perform interim measures to mitigate this threat, as required by the 2002 Corrective Action Consent Order (P3-01/02-010) (CACO).



Ms. Grace Yeh

July 3, 2020

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Exide is required to submit an Interim Measures Work Plan (Work Plan) within 30 days from the date of this notification for DTSC approval. (CACO, § 5.4.) The Work Plan must be prepared consistent with Attachment 3 of the CACO. (See, CACO § 5.0.)

Should you have any questions regarding this letter, please contact me at 916-255-3777 or [Peter.Ruttan@dtsc.ca.gov](mailto:Peter.Ruttan@dtsc.ca.gov). Questions from Exide's legal counsel must be directed to DTSC's legal counsel, Senior Staff Counsel Peter Thyberg. Mr. Thyberg can be reached at (916) 255-3246, or [Peter.Thyberg@dtsc.ca.gov](mailto:Peter.Thyberg@dtsc.ca.gov).

Sincerely,



Peter Ruttan, P.G.  
Senior Engineering Geologist, Supervisor  
Exide-Corrective Action/Data Management

Attachments:

Figure 1: Sample and Site Location Map  
Table 1: On-Site Sample Information  
Table 2: On-Site Sample Results  
Laboratory Report

cc:(via e-mail)

Keith Scott, Exide  
Jully Sieglaff, Exide  
Lacey Chitwood, Exide  
Melissa Floyd, Exide  
Tom Goslin, Weil, Gotshal & Manges  
Judith Praitis, Sidley Austin

Grant Cope, DTSC  
Su Patel, DTSC  
Matt Wetter, DTSC  
Dan Gamon, DTSC  
Kevin Shipp, DTSC  
Peter Thyberg, DTSC  
Shukla Roy-Semmen, DTSC  
Todd Wallbom, DTSC  
Dennis Ragen, AGO  
Margarita Padilla, AGO  
Anthony Austin, AGO  
Heather Leslie, AGO

Figure 1: Sample and Site Location Map



Table 1: On-Site Sample Information

<b>Sample Date</b>	<b>Sample ID</b>	<b>Location Description</b>	<b>Sample Type</b>
11/21/2019	DTSC-01-DS-ON	Blue Lead Warehouse West Yard	dust
11/21/2019	DTSC-03-DS-ON	Machine Shop Interior West Yard	dust
11/21/2019	DTSC-04-DS-ON	Mobile Maintenance Bldg.	dust
11/21/2019	DTSC-05-DS-ON	South Yard Water Softener Bldg.	dust
11/21/2019	DTSC-06-DS-ON	South Yard Employee Services Bldg. Basement	dust
11/21/2019	DTSC-07-DS-ON	South Yard Material Storage Bldg.	dust
11/21/2019	DTSC-09-DS-ON	Engineering Bldg. Basement	dust

Table 2: On-Site Sample Results Summary

ECL No.	BD01261-A			BD01262-A			BD01263-A			BD01264-A			BD01265-A			Method Blank		Reporting Limit
Collector's No.	DTSC-01-DS-ON			DTSC-03-DS-ON			DTSC-04-DS-ON			DTSC-05-DS-ON			DTSC-06-DS-ON					
Digestion Date	3/5/2020			3/5/2020			3/5/2020			3/5/2020			3/5/2020			3/5/2020		
Analysis Date	3/11/2020			3/11/2020			3/11/2020			3/11/2020			3/11/2020			3/11/2020		
Matrix Type	Dust			Dust			Dust			Dust			Dust			Sand		
Units (mg/kg)	Amount	D <sub>f</sub>	Q	Amount	D <sub>f</sub>	Q	Amount	D <sub>f</sub>	Q	Amount	D <sub>f</sub>	Q	Amount	D <sub>f</sub>	Q	Amount	Q	
Antimony-Sb	448	250		830	500		142	50		238	250		550	500		ND		0.2
Arsenic-As	120	50		239	100		38	50		72	50		115	100		ND		0.2
Barium-Ba	308	50		471	100		421	50		315	50		356	100		ND		0.2
Beryllium-Be	ND	50		ND	100		ND	50		ND	50		ND	100		ND		0.04
Cadmium-Cd	43	50		94	100		16	50		127	50		25	100		ND		0.2
Chromium-Cr	150	50		1,200	100		79	50		132	50		199	100		ND		0.2
Cobalt-Co	38	50		46	100		15	50		30	50		ND	100		ND		0.2
Copper-Cu	1,045	50		1,090	100		436	50		525	50		519	100		ND		0.2
Lead-Pb	19,600	1,000		38,000	2,000		10,500	1,000		14,100	1,000		37,400	2,000		ND		0.2
Molybdenum-Mo	57	50		132	100		17	50		85	50		ND	100		ND		0.2
Nickel-Ni	288	50		1,140	100		73	50		102	50		124	100		ND		0.2
Selenium-Se	ND	50		ND	100		ND	50		ND	50		ND	100		ND		0.2
Silver-Ag	ND	50		ND	100		ND	50		ND	50		ND	100		ND		0.2
Thallium-Tl	ND	50		ND	100		ND	50		ND	50		ND	100		ND		0.2
Vanadium-V	26	50		37	100		35	50		18	50		25	100		ND		0.2
Zinc-Zn	29,800	1,000		8,450	500		7,700	250		32,100	1,000		5,600	500		ND		0.2

Table 2: Sample Results Summary

ECL No.	BD01266-A			BD01267-A						Reporting Limit
Collector's No.	DTSC-07-DS-ON			DTSC-09-DS-ON						
Digestion Date	3/5/2020			3/5/2020						
Analysis Date	3/11/2020			3/11/2020						
Matrix Type	Dust			Dust						
Units (mg/kg)	Amount	D <sub>f</sub>	Q	Amount	D <sub>f</sub>	Q	Amount	D <sub>f</sub>	Q	
Antimony-Sb	550	500		1,750	500					0.2
Arsenic-As	151	100		314	100					0.2
Barium-Ba	569	100		310	100					0.2
Beryllium-Be	ND	100		ND	100					0.04
Cadmium-Cd	30	100		68	100					0.2
Chromium-Cr	129	100		110	100					0.2
Cobalt-Co	27	100		ND	100					0.2
Copper-Cu	462	100		661	100					0.2
Lead-Pb	30,000	2,000		48,800	2,000					0.2
Molybdenum-Mo	ND	100		ND	100					0.2
Nickel-Ni	134	100		123	100					0.2
Selenium-Se	ND	100		ND	100					0.2
Silver-Ag	ND	100		39	100					0.2
Thallium-Tl	ND	100		ND	100					0.2
Vanadium-V	24	100		31	100					0.2
Zinc-Zn	7,700	500		5,350	500					0.2

## Laboratory Report:



California Environmental Protection Agency  
Department of Toxic Substances Control  
Environmental Chemistry Laboratory  
757 S. Raymond Ave., Suite 105, Pasadena, CA 91105  
Telephone: (626) 304-7801

**Authorization No.:** 19SC0064-S  
**ECL No(s):** BD01261-BD01267

**Requestor's Name:** Dan Gamon  
**Address:** 8800 Cal Center Drive, Sacramento, CA 95826-3200

**Sampling Location:** Exide Technologies  
**Address:** 2700 South Indiana Street, Vernon, CA 90058

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The results listed within this report pertain only to the samples tested in the laboratory. These results have been reviewed for technical correctness and completeness. This report was reviewed and approved for release.

Report Reviewed by:

Mario Vinoya  
Research Scientist II

3/17/2020  
Date

Report Approved by:

Scott Giatpaiboon  
Research Scientist II

04/16/2020  
Date

Authorization No.: 19SC0064-S

ECL No(s): BD01261-BD01267

Sample(s) History:

Turn-Around Time (TAT):	<u>Priority 3 (45 Days)</u>		
Date(s) Collected:	<u>11/21/2019</u>		
Date(s) Received:	<u>11/22/2019</u>		
Date(s) Extracted/Digested:	<u>3/5/2020</u>	Test Method:	<u>04.3050.00</u>
Date(s) Analyzed:	<u>3/11/2020</u>	Test Method:	<u>04.6010.00</u>

Case Narrative:

- 1. Initial calibration and continuing calibration criteria were met?  Yes  No
- 2. Initial and Continuing Calibration blank criteria were met?  Yes  No
- 3. QC parameters were within control limits?  Yes  No
- 4. Sample holding time was met?  Yes  No

Comments:

If any of the above answer is "NO" please explain in detail.

<sup>3</sup> MS and/or MSD recoveries for antimony (Sb), barium (Ba), lead (Pb), and zinc (Zn) in sample BD01266-A were outside of the control limits. However, dilution test results for antimony (Sb), barium (Ba), and zinc (Zn) were within the control limits. Post Spike result for lead (Pb) was within the control limit.

Sample Prepared by:

*Hae Lee* for 4/11/2020  
 Hae Lee Date

Research Scientist I

Sample Analyzed by:

*Hae Lee* for 4/11/2020  
 Hae Lee Date

Research Scientist I



**Acronym Definitions**

µg/kg	Micrograms per kilogram; parts per billion (ppb)
µg/L	Micrograms per liter; parts per billion (ppb)
D <sub>f</sub>	Dilution Factor
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
MB	Method Blank
mg/kg	Milligrams per kilogram; parts per million (ppm)
mg/L	Milligrams per liter; parts per million (ppm)
MS	Matrix Spike
MSD	Matrix Spike Duplicate
ND	Not Detected; value at a level below the quantitation limit
PS	Post Spike
Q	Qualifier Flag
QC	Quality Control
QL	Quantitation Limit = Reporting Limit x Dilution Factor
RPD	Relative Percent Difference
RT	Retention Time
STLC	Soluble Threshold Limit Concentration
TCLP	Toxicity Characteristic Leaching Procedure
TPH	Total Petroleum Hydrocarbon
TTLIC	Total Threshold Limit Concentration
WET	Waste Extraction Test

**Qualifier Definitions**

B	Analyte found in MB
J	Estimated value
M	Spike recovery below control limit
M2	Spike recovery above control limit
NC	Not Calculated
P	Post Spike recovery below control limit
P2	Post Spike recovery above control limit
R	Relative Percent Difference (RPD) exceeded control limits

*Laboratory Report - Metals*

Authorization No.: 19SC0064-S

ECL No(s): BD01261-BD01267

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ECL No.	BD01261-A			BD01262-A			BD01263-A			BD01264-A			BD01265-A			Method Blank		Reporting Limit
Collector's No.	DTSC-01-DS-ON			DTSC-03-DS-ON			DTSC-04-DS-ON			DTSC-05-DS-ON			DTSC-06-DS-ON					
Digestion Date	3/5/2020			3/5/2020			3/5/2020			3/5/2020			3/5/2020			3/5/2020		
Analysis Date	3/11/2020			3/11/2020			3/11/2020			3/11/2020			3/11/2020			3/11/2020		
Matrix Type	Dust			Dust			Dust			Dust			Dust			Sand		
Units (mg/kg)	Amount	D <sub>f</sub>	Q	Amount	D <sub>f</sub>	Q	Amount	D <sub>f</sub>	Q	Amount	D <sub>f</sub>	Q	Amount	D <sub>f</sub>	Q	Amount	Q	
Antimony-Sb	448	250		830	500		142	50.0		238	250		550	500		ND		0.2
Arsenic-As	120	50.0		239	100		38.2	50.0		72.0	50.0		115	100		ND		0.2
Barium-Ba	308	50.0		471	100		421	50.0		315	50.0		356	100		ND		0.2
Beryllium-Be	ND	50.0		ND	100		ND	50.0		ND	50.0		ND	100		ND		0.04
Cadmium-Cd	43.0	50.0		93.7	100		15.8	50.0		127	50.0		25.4	100		ND		0.2
Chromium-Cr	150	50.0		1.20E+03	100		78.5	50.0		132	50.0		199	100		ND		0.2
Cobalt-Co	37.8	50.0		46.3	100		15.3	50.0		30.4	50.0		ND	100		ND		0.2
Copper-Cu	1.05E+03	50.0		1.09E+03	100		436	50.0		525	50.0		519	100		ND		0.2
Lead-Pb	1.96E+04	1000		3.80E+04	2000		1.05E+04	1000		1.41E+04	1000		3.74E+04	2000		ND		0.2
Molybdenum-Mo	56.5	50.0		132	100		16.8	50.0		84.5	50.0		ND	100		ND		0.2
Nickel-Ni	288	50.0		1.14E+03	100		73.0	50.0		102	50.0		124	100		ND		0.2
Selenium-Se	ND	50.0		ND	100		ND	50.0		ND	50.0		ND	100		ND		0.2
Silver-Ag	ND	50.0		ND	100		ND	50.0		ND	50.0		ND	100		ND		0.2
Thallium-Tl	ND	50.0		ND	100		ND	50.0		ND	50.0		ND	100		ND		0.2
Vanadium-V	26.1	50.0		36.6	100		34.6	50.0		18.4	50.0		25.3	100		ND		0.2
Zinc-Zn	2.98E+04	1000		8.45E+03	500		7.70E+03	250		3.21E+04	1000		5.60E+03	500		ND		0.2



Laboratory Report - Metals

Authorization No.: 19SC0064-S

ECL No(s): BD01261-BD01267

Page 6 of 22

Quality Control Parameter	Laboratory Control Sample (LCS)											
	Sand											
Digestion Date	3/5/2020											
Analysis Date	3/11/2020											
Matrix Type	Sand											
	LCS				LCS Duplicate				RPD		Control Limits	
	Spike Added	Amount Recovered	Recovery		Spike Added	Amount Recovered	Recovery		RPD		Recovery	RPD
Units (mg/kg)			%	Q			%	Q	%	Q	%	%
Antimony-Sb	150	148	98.3		150	147	98.0		0.3		80-120%	0-20
Arsenic-As	1000	960	96.0		1000	965	96.5		0.5		80-120%	0-20
Barium-Ba	1000	1.01E+03	101		1000	1.01E+03	101		0.5		80-120%	0-20
Beryllium-Be	200	199	99.5		200	200	99.8		0.3		80-120%	0-20
Cadmium-Cd	1000	985	98.5		1000	985	98.5		0.0		80-120%	0-20
Chromium-Cr	1000	1.01E+03	101		1000	1.02E+03	102		0.5		80-120%	0-20
Cobalt-Co	1000	1.04E+03	104		1000	1.05E+03	105		0.5		80-120%	0-20
Copper-Cu	1000	990	99.0		1000	990	99.0		0.0		80-120%	0-20
Lead-Pb	1000	1.02E+03	102		1000	1.03E+03	103		0.5		80-120%	0-20
Molybdenum-Mo	1000	1.02E+03	102		1000	1.02E+03	102		0.5		80-120%	0-20
Nickel-Ni	1000	1.05E+03	105		1000	1.05E+03	105		0.5		80-120%	0-20
Selenium-Se	1000	980	98.0		1000	980	98.0		0.0		80-120%	0-20
Silver-Ag	150	147	98.0		150	148	98.3		0.3		80-120%	0-20
Thallium-Tl	1000	995	99.5		1000	995	99.5		0.0		80-120%	0-20
Vanadium-V	1000	1.00E+03	100		1000	1.00E+03	100		0.0		80-120%	0-20
Zinc-Zn	1000	1.00E+03	100		1000	1.00E+03	100		0.0		80-120%	0-20

Authorization No.: 19SC0064-S

ECL No(s): BD01261-BD01267

Quality Control Parameter	Sample Duplicate Analysis						
Digestion Date	3/5/2020						
Analysis Date	3/11/2020						
Matrix Type	Dust						
ECL No.	BD01267-A		Duplicate		RPD		Control Limits
Units (mg/kg)	Amount	D <sub>f</sub>	Amount	D <sub>f</sub>	%	Q	%
Antimony-Sb	1.75E+03	500	1.88E+03	500	6.9		0-20
Arsenic-As	314	100	346	100	9.7		0-20
Barium-Ba	310	100	299	100	3.6		0-20
Beryllium-Be	ND	100	ND	100	-	NC	0-20
Cadmium-Cd	68.1	100	66.2	100	2.8		0-20
Chromium-Cr	110	100	92.4	100	17.4		0-20
Cobalt-Co	ND	100	ND	100	-	NC	0-20
Copper-Cu	661	100	634	100	4.2		0-20
Lead-Pb	4.88E+04	2000	5.96E+04	2000	19.9		0-20
Molybdenum-Mo	ND	100	ND	100	-	NC	0-20
Nickel-Ni	123	100	118	100	4.1		0-20
Selenium-Se	ND	100	ND	100	-	NC	0-20
Silver-Ag	39.3	100	ND	100	-	NC	0-20
Thallium-Tl	ND	100	ND	100	-	NC	0-20
Vanadium-V	31.1	100	28.9	100	7.3		0-20
Zinc-Zn	5.35E+03	500	5.10E+03	500	4.8		0-20

Quality Control Parameter	Matrix Spike/Matrix Spike Duplicate (MS/MSD)														
Digestion Date	3/5/2020														
Analysis Date	3/11/2020														
Matrix Type	Dust														
ECL No.	BD01266-A	Matrix Spike (MS)					Matrix Spike Duplicate (MSD)					RPD		Control Limits	
		Spike Added	Amount Recovered	Recovery			Spike Added	Amount Recovered	Recovery					Recovery	RPD
Units (mg/kg)	Amount			%	D <sub>f</sub>	Q			%	D <sub>f</sub>	Q	%	%		
Antimony-Sb	550	150	800	167	500	M <sup>2</sup>	150	720	113	500		38.1	R	75-125	0-20
Arsenic-As	151	1000	1.07E+03	91.9	100		1000	1.03E+03	87.9	100		4.4		75-125	0-20
Barium-Ba	569	1000	1.18E+03	61.1	100	M	1000	1.12E+03	55.1	100	M	10.3		75-125	0-20
Beryllium-Be	ND	200	188	94.0	100		200	183	91.5	100		2.7		75-125	0-20
Cadmium-Cd	29.9	1000	989	95.9	100		1000	957	92.7	100		3.4		75-125	0-20
Chromium-Cr	129	1000	1.05E+03	92.1	100		1000	1.03E+03	90.1	100		2.2		75-125	0-20
Cobalt-Co	26.5	1000	972	94.6	100		1000	937	91.1	100		3.8		75-125	0-20
Copper-Cu	462	1000	1.48E+03	101.8	100		1000	1.43E+03	96.8	100		5.0		75-125	0-20
Lead-Pb	3.00E+04	1000	2.88E+04	-120	2000	M	1000	2.96E+04	-40.0	2000	M	100	R	75-125	0-20
Molybdenum-Mo	ND	1000	966	97.5	100		1000	945	94.5	100		3.1		75-125	0-20
Nickel-Ni	134	1000	1.08E+03	93.6	100		1000	958	89.6	100		4.4		75-125	0-20
Selenium-Se	ND	1000	866	94.6	100		1000	1.08E+03	91.8	100		3.0		75-125	0-20
Silver-Ag	ND	150	ND	98.0	100		150	884	96.0	100		2.1		75-125	0-20
Thallium-Tl	ND	1000	900	88.6	100		1000	ND	85.7	100		3.3		75-125	0-20
Vanadium-V	24.3	1000	954	97.0	100		1000	902	93.8	100		3.4		75-125	0-20
Zinc-Zn	7.70E+03	1000	8.48E+03	85.0	500		1000	944	60.0	500	M	34.5	R	75-125	0-20

Authorization No.: 19SC0064-S

ECL No(s): BD01261-BD01267

Quality Control Parameter	Dilution Test ( $D_f = 5$ )				
Digestion Date	3/5/2020				
Analysis Date	3/11/2020				
Matrix Type	Dust				
ECL No.	BD01266-A	Diluted	RPD		Control Limits
Units (mg/kg)	Amount	Amount	%	Q	%
Antimony-Sb	550	575	4.4		0-20
Arsenic-As					0-20
Barium-Ba	580	603	3.8		0-20
Beryllium-Be					0-20
Cadmium-Cd					0-20
Chromium-Cr					0-20
Cobalt-Co					0-20
Copper-Cu					0-20
Lead-Pb					0-20
Molybdenum-Mo					0-20
Nickel-Ni					0-20
Selenium-Se					0-20
Silver-Ag					0-20
Thallium-Tl					0-20
Vanadium-V					0-20
Zinc-Zn	7.70E+03	8.15E+03	5.7		0-20

Authorization No.: 19SC0064-S

ECL No(s): BD01261-BD01267

Quality Control Parameter	Post Digestion Spike						
	Dust						
Digestion Date	3/5/2020						
Analysis Date	3/11/2020						
Matrix Type	Dust						
ECL No.	BD01266-A	Spike Added	Amount Recovered	Recovery			Control Limits
Units (mg/kg)				%	D <sub>f</sub>	Q	%
Antimony-Sb							
Arsenic-As							
Barium-Ba							
Beryllium-Be							
Cadmium-Cd							
Chromium-Cr							
Cobalt-Co							
Copper-Cu							
Lead-Pb	3.00E+04	4.00E+04	6.78E+04	94.5	2000		75-120
Molybdenum-Mo							
Nickel-Ni							
Selenium-Se							
Silver-Ag							
Thallium-Tl							
Vanadium-V							
Zinc-Zn							



**Environmental Chemistry Laboratory (ECL)**  
**Review of Requests, Proposals, and Contracts Checklist**

<i>General Information</i>	
Preliminary ARF No.: <u>19 XX 0064-S</u>	Date of Contact: <u>5 / 4 / 2018</u>
Requestor's Name: <u>Dem Gannon</u>	Time of Contact: <u>10:30</u> (am/pm)
Site Name: <u>Exide, Vernon, CA</u>	
Communication Method: <input checked="" type="radio"/> Telephone <input type="radio"/> Email <input type="radio"/> In-Person	
<i>ARF Proposal</i>	
<input checked="" type="checkbox"/> Turn-Around-Time (TAT) Comments: <u>Level 2</u>	<input checked="" type="checkbox"/> Review / verify Project, Activity & MPC Codes
<input checked="" type="checkbox"/> Review / clarify Project Objective(s) Comments:	<input checked="" type="checkbox"/> Holding Time (HT)
<input checked="" type="checkbox"/> Review / clarify Test Method(s) Comments: <u>Contact requestor if it seems that most or all of sample will be used for analysis. They want to have sample leftover</u>	<input checked="" type="checkbox"/> Sample Homogenization Procedure for difficult and/or multiphase matrices (Circle one) With or <u>Without</u> extraneous material
<input checked="" type="checkbox"/> Review / clarify Quantitation Limit (RL or QL), if applicable for analyte(s) Comments:	
<input checked="" type="checkbox"/> Clarify if samples have already been sampled. Comments: <u>Refer to original 19XX0064 ARF checklist</u>	Sample Date: <u>N/A</u>
<input checked="" type="checkbox"/> Review / clarify ECL's requirements on sample containers <ul style="list-style-type: none"> <li>• Samples submitted for volatile chemicals (i.e. VOCs and GRO) are in separate designated containers without headspace</li> <li>• Samples submitted for organic analyses must not be collected in plastic containers.</li> <li>• Separate containers for non-volatile organic test methods and inorganic test methods.</li> </ul> Comments:	







State of California  
California Environmental Protection Agency

KMC 3/4/2020

Department of Toxic Substances Control  
Environmental Chemistry Laboratory

ENVIRONMENTAL CHEMISTRY LABORATORY SAMPLE ANALYSIS REQUEST		1. Authorization Number 19SC0064 -5	ECL No.: BDO1261 To BDO1267	2. Page 1 of 4		
3. Requestor: (to Receive Results) a. Name: Dan Gamon		4. Project Name (if applicable): EXIDE TECHNOLOGIES		5. TAT Level: 3		
b. Address: 8800 Cal Center Drive (street number) Sacramento, CA 95826-3200 (city, state, zip)						
c. Phone: (916) 255-3630 (area code first) d. Fax: (area code first)		7. Codes (select from drop down list or fill in if applicable)				
e. Email: daniel.gamon@dtsc.ca.gov		a. Unit SMRP-Exide				
6. Sampling Information: a. Date/Time Sampled: 11/21/19 (mm/dd/yy)		b. Project ID DTSC301864				
b. Location: EPA ID No. CAD097854541 (#:# AM/PM)		c. Activity ID 11037				
Site: Exide Technologies		d. MPC 63				
Address: 2700 South Indiana Street (street number) Vernon, CA 90058 (city, state, zip)		e. County 19-Los Angeles				
GPS-Lat: 34.005939 GPS-Long: -118.19482						
GPS-Alt: GPS-Depth:						
8. Samples:		f. Number of containers		g. Preservative / Field Information		
a. ID	b. Collector's No.	c. ECL No.	d. Matrix	e. Container Size	f. Number of containers	g. Preservative / Field Information
1	DTSC-01-DS-ON	BDO1261-A	Dust	8 oz clear glass jar	1	Collected 11/21/19 0835
2	DTSC-02-DS-ON		Dust	8 oz clear glass jar	1	
3	DTSC-03-DS-ON	BDO1262-A	Dust	8 oz clear glass jar	1	Collected 11/21/19 0900
4	DTSC-04-DS-ON	BDO1263-A	Dust	8 oz clear glass jar	1	collected 11/21/19 0915
5	DTSC-05-DS-ON	BDO1264-A	Dust	8 oz clear glass jar	1	Collected 11/21/19 0938
6	DTSC-06-DS-ON	BDO1265-A	Dust	8 oz clear glass jar	1	collected 11/21/19 1248
7	DTSC-07-DS-ON	BDO1266-A	Dust	8 oz clear glass jar	1	Collected 11/21/19 1306
8	DTSC-08-DS-ON		Dust	8 oz clear glass jar	1	
9	DTSC-09-DS-ON	BDO1267-A	Dust	8 oz clear glass jar	1	Collected 11/21/19 0815
9. Analysis Requested: Enter sample IDs and sample ID ranges separated by commas. For example, 1-3, 5-7, 9						
a. Inorganic Analysis		Sample(s) ID		b. Organic Analysis		Sample(s) ID
Metals lead		1,3-7,9				
Other Metals:						
c. TCLP Analysis		d. Other Analysis		Sample Storage and Retention		
				10-1,3,7,9		
				KMC		
				11/25/19		
e. Comments for Multiphasic Samples/Analysis Priority:						
10. Analysis Objective: Site Characterization						
11. Detection Limit Requirements: NA						
12. Supplemental Requests: Enter sample IDs as described in Item 9				13. ECL Lab Remarks:		
Desired Analysis		Sample(s) ID		ECL		
NA						
				Initials		
				Date		
14. Chain of Custody:						
	Name	Title	Signature	Inclusive Dates of Custody		
a.	Dan Gama	SR. Eng. Geologist	[Signature]	10/21/19	to	10/21/19
b.	Fed Ex	Shipper	7710 0671 6776	10/21/19	to	11/22/19
c.	Karen Cruz	Environmental Scientist	[Signature]	11/22/19	to	
d.					to	
e.					to	
f.					to	
g.					to	

FIELD

LAB

COC

KMC  
3/4/2020

BD01263-A

01/05/05  
08/15  
01/05/05  
08/15  
01/05/05  
08/15  
01/05/05  
08/15



BD01262-A

01/05/05  
08/15  
01/05/05  
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08/15



BD01261-A

01/05/05  
08/15  
01/05/05  
08/15  
01/05/05  
08/15  
01/05/05  
08/15



BD01267-A

01/05/05  
08/15  
01/05/05  
08/15  
01/05/05  
08/15  
01/05/05  
08/15



BD01265-A

Accession No. 11222019  
Collector's Name: Dan Gorman  
Site: 1000 S. St. George St. Q162A  
Date Collected: 11/10/19  
Collector's Address: 1000 S. St. George St.  
City: CA 90238



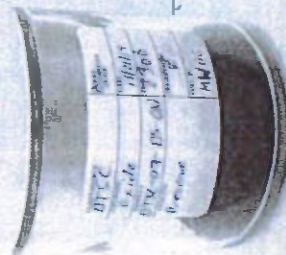
BD01264-A

Accession No. 11222019  
Collector's Name: Dan Gorman  
Site: 1000 S. St. George St. Q162A  
Date Collected: 11/10/19  
Collector's Address: 1000 S. St. George St.  
City: CA 90238



BD01266-A

Accession No. 11222019  
Collector's Name: Dan Gorman  
Site: 1000 S. St. George St. Q162A  
Date Collected: 11/10/19  
Collector's Address: 1000 S. St. George St.  
City: CA 90238



-WESTCOAST-



Book #: BK0553

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### Environmental Chemistry Laboratory - Pasadena Sample Receipt Checklist

Authorization Number and ECL Assigned Number (s):

19SC0064

BD01261-BD01275

Date Received: 11 / 22 / 19

Time Received: 10:30 AM

Recorded by: LARRY CRUZ

Samples and Containers	Yes	No	If No, specify
Sample temperature range: <u>20.5 - 22.7 °C</u>			
Custody seal present on samples?	<input checked="" type="checkbox"/>		
Sample containers received in good condition?	<input checked="" type="checkbox"/>		
Samples received in proper container?	<input checked="" type="checkbox"/>		
Sample IDs clearly labeled and legible?	<input checked="" type="checkbox"/>		
Cooling Packing Material <u>Ice</u> Cooling Pack <u>                    </u> Other (Specify) <u>                    </u> N/A <input checked="" type="checkbox"/>			

Record Review (ARF Checklist, ARF, SAR, etc.)	Yes	No	If No, specify
Do the ARF & SAR match? (i.e. project codes, requestor info, etc.)	<input checked="" type="checkbox"/>		
SAR received with samples?	<input checked="" type="checkbox"/>		
Requestor and Sampling information on SAR complete?	<input checked="" type="checkbox"/>		
Codes, Section 7, on SAR correct and complete?	<input checked="" type="checkbox"/>		
Collector's No. on SAR legible and match container?	<input checked="" type="checkbox"/>		
Matrix correctly identified on SAR?	<input checked="" type="checkbox"/>		
Container size correct?	<input checked="" type="checkbox"/>		
Number of containers correct?	<input checked="" type="checkbox"/>		
Samples received with proper preservation and information?	<input checked="" type="checkbox"/>		
Analysis correctly identified for the appropriate sample?	<input checked="" type="checkbox"/>		
Analysis Objective or requirement specified? (Section 10)	<input checked="" type="checkbox"/>		
Chain of custody correct and complete?	<input checked="" type="checkbox"/>		
Are additional analyses requested not in ARF? Yes <u>          </u> No <input checked="" type="checkbox"/> If Yes, contact supervisor or QAO			
Do samples need to be split? Yes <u>          </u> No <input checked="" type="checkbox"/> If Yes, refer to TSP on sample splitting.			

If sample may have insufficient amount, estimate weight:	
ECL#: <u>                    </u> weight of sample + container: <u>                    </u> comparable empty container: - <u>                    </u> estimated weight of sample: = <u>                    </u>	ECL#: <u>                    </u> weight of sample + container: <u>                    </u> comparable empty container: - <u>                    </u> estimated weight of sample: = <u>                    </u>
ECL#: <u>                    </u> weight of sample + container: <u>                    </u> comparable empty container: - <u>                    </u> estimated weight of sample: = <u>                    </u>	ECL#: <u>                    </u> weight of sample + container: <u>                    </u> comparable empty container: - <u>                    </u> estimated weight of sample: = <u>                    </u>

ECL 11/25/19

Supplemental Request Review (if necessary)	Yes	No	If No, specify
Supplemental request identified for sample? (Section 12)			
Requestor initial and date for supplemental request?			

Book #: BK0553

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### Environmental Chemistry Laboratory - Pasadena Sample Receipt Checklist

#### Additional Sample Amount Estimation Worksheet

ECL#: \_\_\_\_\_  
 weight of sample + container: \_\_\_\_\_  
 comparable empty container: - \_\_\_\_\_  
 estimated weight of sample: = \_\_\_\_\_

ECL#: \_\_\_\_\_  
 weight of sample + container: \_\_\_\_\_  
 comparable empty container: - \_\_\_\_\_  
 estimated weight of sample: = \_\_\_\_\_

ECL#: \_\_\_\_\_  
 weight of sample + container: \_\_\_\_\_  
 comparable empty container: - \_\_\_\_\_  
 estimated weight of sample: = \_\_\_\_\_

ECL#: \_\_\_\_\_  
 weight of sample + container: \_\_\_\_\_  
 comparable empty container: - \_\_\_\_\_  
 estimated weight of sample: = \_\_\_\_\_

ECL#: \_\_\_\_\_  
 weight of sample + container: \_\_\_\_\_  
 comparable empty container: - \_\_\_\_\_  
 estimated weight of sample: = \_\_\_\_\_

ECL#: \_\_\_\_\_  
 weight of sample + container: \_\_\_\_\_  
 comparable empty container: - \_\_\_\_\_  
 estimated weight of sample: = \_\_\_\_\_

ECL#: \_\_\_\_\_  
 weight of sample + container: \_\_\_\_\_  
 comparable empty container: - \_\_\_\_\_  
 estimated weight of sample: = \_\_\_\_\_

ECL#: \_\_\_\_\_  
 weight of sample + container: \_\_\_\_\_  
 comparable empty container: - \_\_\_\_\_  
 estimated weight of sample: = \_\_\_\_\_

ECL#: \_\_\_\_\_  
 weight of sample + container: \_\_\_\_\_  
 comparable empty container: - \_\_\_\_\_  
 estimated weight of sample: = \_\_\_\_\_

ECL#: \_\_\_\_\_  
 weight of sample + container: \_\_\_\_\_  
 comparable empty container: - \_\_\_\_\_  
 estimated weight of sample: = \_\_\_\_\_

ECL#: \_\_\_\_\_  
 weight of sample + container: \_\_\_\_\_  
 comparable empty container: - \_\_\_\_\_  
 estimated weight of sample: = \_\_\_\_\_

ECL#: \_\_\_\_\_  
 weight of sample + container: \_\_\_\_\_  
 comparable empty container: - \_\_\_\_\_  
 estimated weight of sample: = \_\_\_\_\_

ECL#: \_\_\_\_\_  
 weight of sample + container: \_\_\_\_\_  
 comparable empty container: - \_\_\_\_\_  
 estimated weight of sample: = \_\_\_\_\_

ECL#: \_\_\_\_\_  
 weight of sample + container: \_\_\_\_\_  
 comparable empty container: - \_\_\_\_\_  
 estimated weight of sample: = \_\_\_\_\_

*YAC 11/5/15*



**lmc@DTSC**

---

**From:** Wetter, Matthew@DTSC  
**Sent:** Monday, November 25, 2019 3:28 PM  
**To:** lmc@DTSC; Gamon, Daniel@DTSC  
**Cc:** Fernandez, Cesar@DTSC  
**Subject:** RE: Collector's No.

And changing the SAR is fine on our end.

Matt Wetter, PE, QEP  
Desk: (916) 255-6629  
Cell: (916) 701-3313

**From:** Wetter, Matthew@DTSC  
**Sent:** Monday, November 25, 2019 3:27 PM  
**To:** lmc@DTSC <lmc@dtsc.ca.gov>; Gamon, Daniel@DTSC <Daniel.Gamon@dtsc.ca.gov>  
**Cc:** Fernandez, Cesar@DTSC <Cesar.Fernandez@dtsc.ca.gov>  
**Subject:** RE: Collector's No.

Yes, DTSC-03-PF-ON is dust and if you can fill that in it'd be great.  
DTSC-04-SL-ON and DTSC-05-SL-ON are slag (ie a hunk of metal) which is why they are in bubble wrap, to prevent breaking the jar.

**Thanks,**  
Matt Wetter, PE, QEP  
Desk: (916) 255-6629  
Cell: (916) 701-3313

**From:** lmc@DTSC <lmc@dtsc.ca.gov>  
**Sent:** Monday, November 25, 2019 2:50 PM  
**To:** Gamon, Daniel@DTSC <Daniel.Gamon@dtsc.ca.gov>; Wetter, Matthew@DTSC <Matthew.Wetter@dtsc.ca.gov>  
**Cc:** Fernandez, Cesar@DTSC <Cesar.Fernandez@dtsc.ca.gov>  
**Subject:** RE: Collector's No.

Hi Matt and Daniel,

It would be better on our end to change the SAR to match the collector's number currently on the label.

One other question we have 3 samples that do not have matrices. One, DTSC-03-PF-ON, appears to be dust and I can fill that in if you both agree. However, DTSC-04-SL-ON and DTSC-05-SL-ON are both in bubble and we cannot determine the matrices. Can you let us know what matrices each one is?

Thank you,

**Karen M. Cruz**  
Environmental Scientist  
(626) 639-0507  
Cal-EPA, Department of Toxic Substances Control  
Environmental Chemistry Laboratory – Pasadena  
757 S. Raymond Ave. Suite 105, Pasadena, CA 91105

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**From:** Gamon, Daniel@DTSC <[Daniel.Gamon@dtsc.ca.gov](mailto:Daniel.Gamon@dtsc.ca.gov)>  
**Sent:** Monday, November 25, 2019 2:39 PM  
**To:** Wetter, Matthew@DTSC <[Matthew.Wetter@dtsc.ca.gov](mailto:Matthew.Wetter@dtsc.ca.gov)>; lmc@DTSC <[lmc@dtsc.ca.gov](mailto:lmc@dtsc.ca.gov)>  
**Cc:** Fernandez, Cesar@DTSC <[Cesar.Fernandez@dtsc.ca.gov](mailto:Cesar.Fernandez@dtsc.ca.gov)>  
**Subject:** RE: Collector's No.

Either way is fine here. I can also update our field notes in Survey 123 to keep the label ID as it is currently.

**From:** Wetter, Matthew@DTSC <[Matthew.Wetter@dtsc.ca.gov](mailto:Matthew.Wetter@dtsc.ca.gov)>  
**Sent:** Monday, November 25, 2019 2:35 PM  
**To:** lmc@DTSC <[lmc@dtsc.ca.gov](mailto:lmc@dtsc.ca.gov)>  
**Cc:** Gamon, Daniel@DTSC <[Daniel.Gamon@dtsc.ca.gov](mailto:Daniel.Gamon@dtsc.ca.gov)>; Fernandez, Cesar@DTSC <[Cesar.Fernandez@dtsc.ca.gov](mailto:Cesar.Fernandez@dtsc.ca.gov)>  
**Subject:** RE: Collector's No.

Not really preferred because then we will have (another) gap in our sample numbering.  
But if it is a real hassle on your end we will survive either way.

Matt Wetter, PE, QEP  
Desk: (916) 255-6629  
Cell: (916) 701-3313

**From:** lmc@DTSC <[lmc@dtsc.ca.gov](mailto:lmc@dtsc.ca.gov)>  
**Sent:** Monday, November 25, 2019 2:32 PM  
**To:** Wetter, Matthew@DTSC <[Matthew.Wetter@dtsc.ca.gov](mailto:Matthew.Wetter@dtsc.ca.gov)>  
**Cc:** Gamon, Daniel@DTSC <[Daniel.Gamon@dtsc.ca.gov](mailto:Daniel.Gamon@dtsc.ca.gov)>; Fernandez, Cesar@DTSC <[Cesar.Fernandez@dtsc.ca.gov](mailto:Cesar.Fernandez@dtsc.ca.gov)>  
**Subject:** RE: Collector's No.

Hi Matt,

Great. It would be easier to rename the SAR to DTSC-09-PF-ON so that they match and the label would not be affected would you like us to do this instead?

Thank you,

**Karen M. Cruz**  
Environmental Scientist  
(626) 639-0507  
Cal-EPA, Department of Toxic Substances Control  
Environmental Chemistry Laboratory – Pasadena  
[757 S. Raymond Ave. Suite 105, Pasadena, CA 91105](http://757.S.Raymond.Ave.Suite.105.Pasadena.CA.91105)

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**From:** Wetter, Matthew@DTSC <[Matthew.Wetter@dtsc.ca.gov](mailto:Matthew.Wetter@dtsc.ca.gov)>  
**Sent:** Monday, November 25, 2019 2:28 PM  
**To:** lmc@DTSC <[lmc@dtsc.ca.gov](mailto:lmc@dtsc.ca.gov)>  
**Cc:** Gamon, Daniel@DTSC <[Daniel.Gamon@dtsc.ca.gov](mailto:Daniel.Gamon@dtsc.ca.gov)>; Fernandez, Cesar@DTSC <[Cesar.Fernandez@dtsc.ca.gov](mailto:Cesar.Fernandez@dtsc.ca.gov)>  
**Subject:** RE: Collector's No.

Hi Karen,  
Thanks for the follow up.  
The sample jar labeled DTSC-09-PF-ON at 14:30 should really be DTSC-01-PF-ON.  
We intended to line out samples DTSC-06-PF-ON and DTSC-07-PF-ON. So you should not have a corresponding jar for them.  
I confirmed this w/ Dan as well.  
Thanks,

Matt Wetter, PE, QEP  
Desk: (916) 255-6629  
Cell: (916) 701-3313

**From:** lmc@DTSC <[lmc@dtsc.ca.gov](mailto:lmc@dtsc.ca.gov)>  
**Sent:** Monday, November 25, 2019 1:56 PM  
**To:** Wetter, Matthew@DTSC <[Matthew.Wetter@dtsc.ca.gov](mailto:Matthew.Wetter@dtsc.ca.gov)>  
**Cc:** Gamon, Daniel@DTSC <[Daniel.Gamon@dtsc.ca.gov](mailto:Daniel.Gamon@dtsc.ca.gov)>; Fernandez, Cesar@DTSC <[Cesar.Fernandez@dtsc.ca.gov](mailto:Cesar.Fernandez@dtsc.ca.gov)>  
**Subject:** Collector's No.

Hi Matt,

I attached the image of the label of the sample that we are not sure on the collector's number. I have also attached another image of the sample itself. The collector's number on the SAR is DTSC-01-PF-ON. If you could please let us know the correct number that would be great.

If you have any questions let me know.

Thank you,  
**Karen M. Cruz**  
Environmental Scientist  
(626) 639-0507  
Cal-EPA, Department of Toxic Substances Control  
Environmental Chemistry Laboratory – Pasadena  
[757 S. Raymond Ave. Suite 105, Pasadena, CA 91105](https://www.dtsc.ca.gov/About-DTSC/Contact-Us/Pasadena-Office)

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11/13/2019

FedEx Ship Manager - Print Your Label(s)

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ENDE TECHNOLOGIES  
2700 SOUTH INDIANA STREET  
VERNON, CA 90058

SHIP DATE: 13NOV19  
ACTWT: 50.00 LB  
QAD: 714032MET4160

UNITED STATES US

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DEPT OF TOXIC SUBSTANCES  
757 S. RAYMOND AVENUE #105

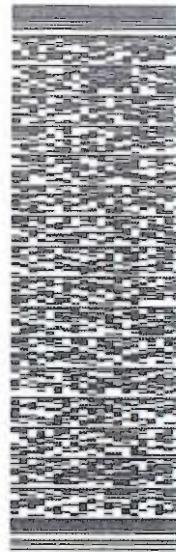
PASADENA CA 91105

PO (926) 838-0286

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1. Select the 'Print' button to print 1 copy of each label.
2. The Return Shipment instructions, which provide your recipient with information on the returns process, will be printed with the label(s).
3. After printing, select your next step by clicking one of the displayed buttons.

Note: To review or print individual labels, select the Label button under each label image above.

Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com. FedEx will not be responsible for any claim in excess of \$100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of \$100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is \$500. e.g. jewelry, precious metals, negotiable instruments and other items listed in our Service Guide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

## LBC

### Professional Lead Encapsulant/Sealant (Type III)

#### Product Description

5801-White, 5800-Antique Linen

LBC Lead Barrier Compound (Type III - Interior/Exterior) is a thermoplastic-elastomeric water based copolymer blended specifically to form a barrier between lead-based paint and the environment. It is a high-solids coating formulated to offer unparalleled coverage, economics and aesthetics while preserving historic and architectural detail. LBC contains Bitrex®, a bitter-tasting ingredient to discourage oral contact with lead paint. LBC Complies with all EPA and HUD requirements for lead-based paint encapsulants and is recognized as a permanent method for abatement of lead-based paint. LBC meets all Federal, State and Local standards for lead based paint encapsulants. LBC has been independently tested at David Litter Laboratories, and was found to meet/surpass the ASTM E-1795 Standard for Lead-Based Paint Encapsulants for both indoor and outdoor use. LBC is certified for use in all 50 states.

#### Application Information

##### SURFACE PREPARATION

Warning! If you scrape, sand, or remove old paint from any surface, you may release lead dust. LEAD IS TOXIC. EXPOSURE TO LEAD DUST CAN CAUSE SERIOUS ILLNESS, SUCH AS BRAIN DAMAGE, ESPECIALLY IN CHILDREN. PREGNANT WOMEN SHOULD ALSO AVOID EXPOSURE. Wear a NIOSH approved respirator to control lead exposure. Carefully clean up with a wet mop and HEPA vacuum. Before you start, find out how to protect yourself and your family by contacting the U.S. EPA/Lead Information Hotline at 1-800-424-LEAD (5323) or log on to [www.epa.gov/lead](http://www.epa.gov/lead).

Consult all related Local, State and Federal regulations regarding work practices and personal protection to be used prior to surface preparation. Note: Some States require a surface assessment by a licensed lead inspector before application. Contact your State Department of Health, or Fiberlock for more information. Use MSHA/NIOSH approved or equivalent respiratory protection suitable for concentrations and types of air contaminants encountered. Mix thoroughly, preferably with an electric drill mounted device designed for blending liquid coatings. Clear liquid present when container is opened is an integral part of the product and must be mixed in completely. LBC is supplied in a tintable white base, and may be tinted to light colors with two ounces or less of universal liquid colorant (per gallon). Field tinting by the end user or an unauthorized distributor, or the addition of more than two ounces of universal colorant will void all warranties. Medium or deep-base colors may be available from Fiberlock; please call for details.

Prior to application of LBC, inspect all surfaces to ensure they are clean, dry and free of all contaminants including: dust, rust, grease, oil, mildew, glue size, calcimine, wax, soap, loose paint, or any other surface contaminant which may affect adhesion. Use a vacuum with a HEPA filter specifically designed to capture hazardous dust and waste or wipe surfaces with a damp cloth. Patch and repair irregularities in surfaces with appropriate patching compound. For high gloss or newly painted surfaces wet scour with Fiberlock's LeadSafe Wipes or other

approved surface preparation treatment. Use a coarse scouring pad or similar tool, and/or liquid de-glossing agents to eliminate any gloss where necessary. Rinse de-glossing agents as directed by manufacturer. Wear proper personal protection for any cleaning product used as determined by the manufacturer. For detailed surface preparation and application instruction, please refer to LBC Specification.

##### SURFACE PRIMING

Most surfaces do not require a primer coat. However a primer is recommended for treating the following conditions:  
 Prime unpainted metal surfaces with a 100% acrylic rust inhibitive primer.  
 Prime water damaged surfaces with at 100% acrylic stain blocking primer.  
 Prime unpainted wood and drywall with a 100% acrylic universal primer.  
 Prime unpainted brick, masonry or block with a masonry conditioner.  
 Prime chalky surfaces with a chalk resistant primer.

##### APPLICATION TOOLS

Apply Fiberlock LBC with brush, roller or airless spray equipment.  
 Brush: Synthetic, nylon or polyester bristle  
 Roller: Synthetic Fiber 3/8"-1/2" nap roller  
 Spray Settings:  
 Pressure: 1300-2000 P.S.I.  
 Tips: .015 to .021 tips

##### PRODUCT APPLICATION

Fiberlock LBC must be applied when air and surface temperatures are above 45°F at time of application and for 12 hours thereafter. 14 wet mils are required to achieve the required minimum dry film thickness of 7 dry mils. Always use a wet mil gauge to measure coating thickness during application. Apply a minimum of 2 liberal coats when using a brush or roller.

##### DRYING TIME @ 70°F 50% R.H.

To Touch - 1-2 Hours  
 Recoat - 8-16 Hours

#### Properties

##### Product Specifications

<b>Solids by Weight ± 2%:</b>	59.0%
<b>Solids by Volume ± 2%:</b>	45.0%
<b>Viscosity at 70°F:</b>	95-120 Kreb Units
<b>Specular Gloss:</b>	5.5° ± 1 @ 60°
<b>Flash Point:</b>	Non-combustible
<b>Shelf Life:</b>	24 Months Min.
	(Original Sealed Containers)
<b>Calculated VOC:</b>	88 grams/liter

LBC complies with the requirements for LEED® EQ Credit 4.2, low-emitting materials: paints and coatings.

##### Coverage

<b>Smooth Surfaces:</b>	120 ft <sup>2</sup> /gal
<b>Porous Surfaces:</b>	80-120 ft <sup>2</sup> /gal

##### Drying Times (@ 70 - 77°F, 50% R.H.)

<b>To Touch:</b>	1-2 hours
<b>To Recoat:</b>	8-16 hours
<b>Minimum Application Temp:</b>	45°F (7.2°C)

##### Available Package Sizes

<b>5 gallon containers</b>	
<b>Weight Per Gallon ± .5 lbs:</b>	11.24 lbs/gal

##### Product Testing

<b>Meets Standard:</b>	ASTM E-1795
<b>Certified For Use:</b>	All 50 States



## Application Information

### COVERAGE

120 sq. ft. per gallon @ 14 wet mils

### CLEAN UP

Clean all tools and drippings with warm soapy water before LBC dries. Use a HEPA approved vacuum specifically designed to collect any hazardous dust and/or waste generated. Dispose of all waste according to all current Local, State and Federal regulations.

### PRECAUTIONS

Product is sensitive to heat and time. Store in a dry place at temperatures between 40°F (4.5°C) and 90°F (32°C). Do not store or apply at temperatures in excess of 100°F. Rotate stock often. Use product in a well ventilated area. If respiratory irritation develops increase ventilation and/or wear respiratory protection. Use a disposable spray-mist/dust respirator rated for filtering aerosol mist to avoid oral contact with bitter tasting, anti-ingestant ingredient when spraying. When applying with a sprayer, wear a NIOSH approved respirator with any R, P,N or HE filter. Avoid contact with eyes and skin. Wash hands after use. LBC Type III will not protect occupants from ingestion of the encapsulated lead-based paint, if surface is damaged, broken or abraded. Surfaces coated with LBC Type III must be inspected routinely. Damaged surfaces should be repaired and re-encapsulated immediately to prevent exposure to the lead hazard. Not recommended for use on friction or impact surfaces, or movable closures such as door jambs and window jambs. Residents may be present during brush or roller application but not in the immediate work area (i.e., same room). Residents should not be present during spray application for worksite safety reasons. Residents may return once application has ceased and LBC III is dry to the touch.

### CAUTION!

#### KEEP OUT OF REACH OF CHILDREN.

Do not take internally. Close container after each use.

Keep from freezing.

Store between 40°F (4.5°C) and 90°F (32°C)

24 hour Emergency "CHEM-TEL" - 800.255.3924

### WARRANTY

Fiberlock Technologies, Inc., warrants LBC for a maximum of twenty (20) years from the date the product is applied to form an effective barrier from the hazards of the encapsulated lead-based paint as prescribed in Fiberlock's latest product literature. The warranty described in this paragraph, expressed or implied, is including but not limited to the implied warranties of the salability and fitness for a particular purpose. User shall determine the suitability of LBC's use and assume any and all risks and liabilities that may arise in connection with the application of LBC. This warranty is extended only to the purchaser of LBC and does not apply to any damages which are a direct result of improper surface preparation and/or application, including, but not limited to:

1. The failure to properly apply LBC to a sound surface, which has been cleaned of foreign matter and dry at the time of application.
2. The failure to apply LBC during non-freezing temperatures appropriate for the product application.
3. The failure to apply LBC in full accordance with Fiberlock Technologies written application instructions and guidelines.

This warranty does not extend to, nor shall Fiberlock Technologies be liable for any damage resulting from any abuse of the encapsulated surface by tenants or occupants, improper maintenance, water damage, or other conditions beyond Fiberlock Technologies' control. The sole and only liability under this warranty shall be, at Fiberlock Technologies' option, either to replace the product if proved defective or to refund the purchase price paid. The purchaser of this product must notify Fiberlock at 150 Dascomb Road, Andover, Massachusetts 01810 (978-623-9987) within 45 days to advise of any suspected manufacturing defects. This warranty gives the purchaser specific legal rights and possible additional rights which may vary from State to State.

#### IMPORTANT INFORMATION FOR MASSACHUSETTS RESIDENTS

The Commonwealth of Massachusetts permits encapsulation as a form of abatement on any interior surfaces.

For exterior surfaces in Massachusetts, when seeking compliance with regulations for lead poisoning prevention and control in residential housing and child-occupied facilities, all painted surfaces must be certified by a licensed inspector as intact and compliant prior to using LBC. When used for nonresidential structures, or when not seeking compliance for exterior surfaces, Massachusetts does not require this inspection before encapsulation.

## For Technical Information call 800.342.3755

These suggestions and data are based on information we believe to be reliable. They are offered in good faith, but without guarantee, as conditions and methods of use of this product are beyond our control. Neither Fiberlock Technologies, Inc., nor its agents shall be responsible for the use or results of use of this product or any injury, loss or damage, direct or consequential. We recommend that the prospective user determine the suitability of this product for each specific project and for the health and safety of personnel working in the area.

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