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Executive Summary Draft Environmental Impact Report Closure Plan Exide Technologies Battery Recycling Facility

Prepared by California Environmental Protection Agency,
Department of Toxic Substances Control
With Anchor QEA, LLC

EXECUTIVE SUMMARY

This Draft Environmental Impact Report (DEIR) was prepared in compliance with the California Environmental Quality Act (CEQA) to assist the California Environmental Protection Agency's (CalEPA's) Department of Toxic Substances Control (DTSC) in considering the approval of a proposed Closure Plan of a hazardous waste treatment and storage facility owned and operated by Exide Technologies, Inc. (Exide), a secondary lead smelter. Exide has requested DTSC's approval of a Closure Plan for the facility at 2700 South Indiana Street in Vernon, California, which was previously operating under Interim Status authorization under California Code of Regulations (CCR) Title 22, Section 66265, et. seq.

Under the proposed Project, Exide would permanently close the facility and implement a DTSC-approved Closure Plan that would include dismantling operations and remediating contamination at the facility. The Closure Plan would outline a multi-year approach for removal and decontamination of contaminated equipment, structures, and soils at the site in three phases. The proposed Project assumes compliance with a number of corrective and regulatory actions aimed at reducing environmental hazards.

DTSC has principal responsibility for making a determination on the Closure Plan approval request and is the Lead Agency under CEQA (California Public Resources Code [PRC] Section 21151.1) and CEQA Guidelines for Implementation (CCR Title 14, Section 15081.5) for preparation and approval of the DEIR.

For the proposed Project, DTSC aims to accomplish the following as part of this DEIR:

- Describe the proposed Project and regulatory background
- Identify any significant environmental effects associated with the proposed Project
- Provide a discussion of alternatives and feasible mitigation measures for environmental resources where significant impacts are identified

Proposed Project

The Exide Facility is located in Los Angeles County at 2700 South Indiana Street in Vernon, California (Figure ES-1). The Exide Facility and adjacent areas are located in the City of Vernon's (City's) M-2 heavy industrial/warehousing zone and surrounded by industrial uses.

Exide submitted its draft Closure Plan for the facility to DTSC on May 15, 2015. DTSC issued a Notice of Deficiency on June 17, 2015, and Exide submitted a revised draft Closure Plan on July 28, 2015. This DEIR analyzes the potential environmental impacts associated with Exide's proposed July 28, 2015 Closure Plan (proposed Project). DTSC is evaluating this DEIR to support making a decision to approve, disapprove, or modify the Closure Plan. The proposed Project is described in detail in Section 2 of the DEIR.

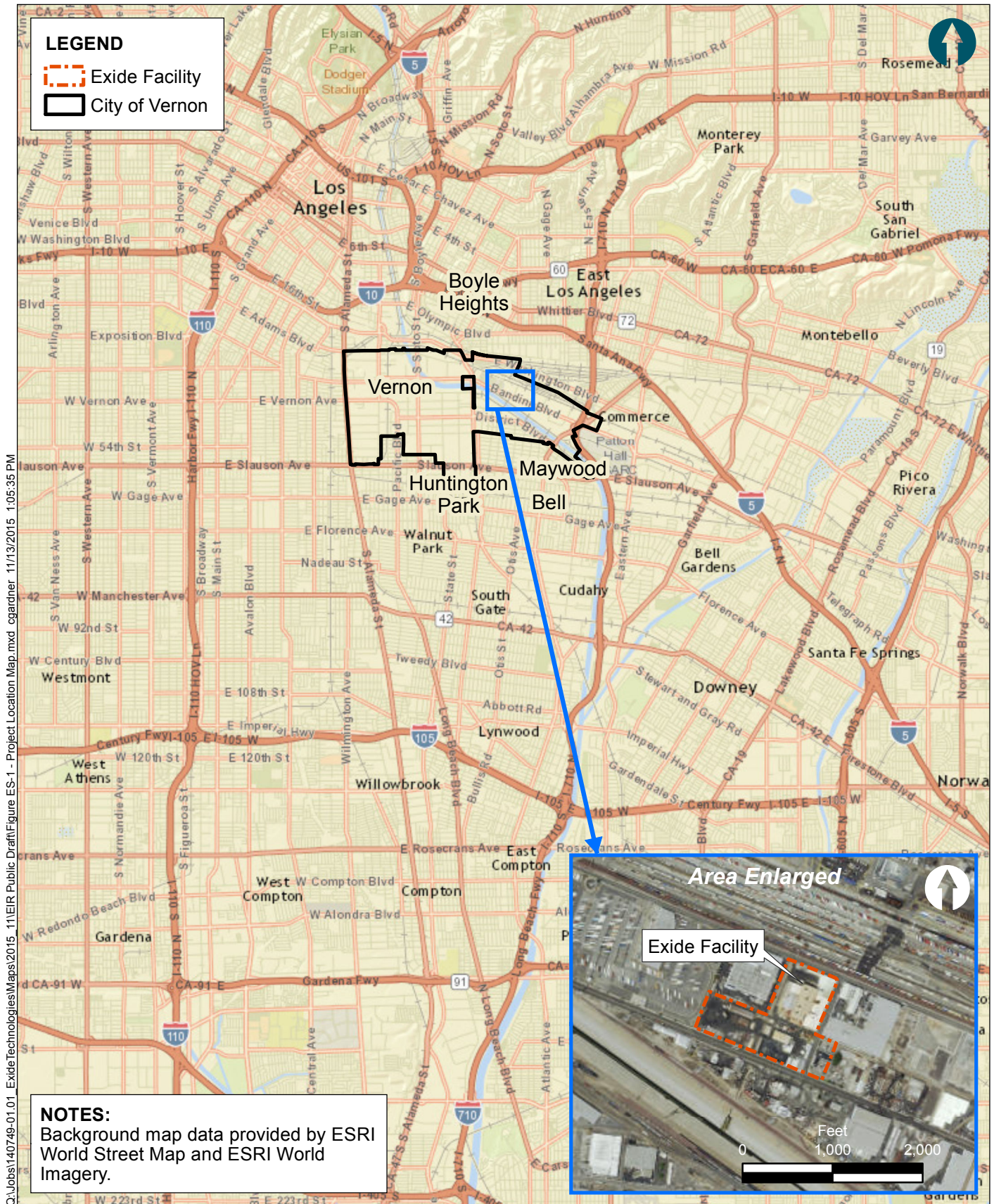


Figure ES-1

Project Site and Vicinity
Closure of the Exide Technologies Recycling Facility
Draft EIR
California Department of Toxic Substances Control

The Exide Facility has been used for a variety of metal fabrication and metal recovery operations since 1922, with its primary use since the late 1970s for lead battery recycling. Most recently, the Exide Facility has been used as a secondary lead recycling facility that recovered lead from automotive batteries and other lead-bearing materials received from off-site and on-site locations. Exide received spent (used) lead-acid batteries and other lead-bearing materials and recycled them to recover lead and polypropylene. The sulfuric acid in the batteries was recycled and used in the on-site wastewater treatment system, and the polypropylene was sent to an off-site facility for recycling.

Under the Resource Conservation and Recovery Act (RCRA), a facility in existence before 1980 was granted “interim status” provided that it met certain requirements, such as the filing of a Part A permit application. Gould Inc., the facility’s owner at the time, filed a RCRA Part A application on November 19, 1980, and the Department of Health Services (DTSC’s predecessor) issued an Interim Status Document on December 18, 1981. Part B of a RCRA application typically contains more detailed, site-specific information regarding the facility description, design, and structure; geologic and hydrologic information about the facility’s vicinity; hazardous waste treatment and storage activities; management practices; employee training; safety precautions; and emergency response plans. GNB, Inc. (which was later called GNB Technologies, Inc.), the facility’s owner at the time, filed an initial Part B application on November 8, 1988. The Part B permit application was then revised a number of times, as detailed in Figure ES-2. Section 2.3 of this DEIR presents a full permitting overview.

1988	<ul style="list-style-type: none"> November: GNB submitted Part B (Operation Plan) to DHS for approval
1991	<ul style="list-style-type: none"> February: GNB submitted revised Parts A and B to DHS for approval
1992	<ul style="list-style-type: none"> May: DHS requested that GNB resubmit a revised Part B Application June: GNB submitted Part B Application, Revision 2 to DTSC for approval
1993	<ul style="list-style-type: none"> April: DTSC issued NOP of an EIR for RCRA Part B Application November: GNB submitted Part B Application, Revision 3
1997	<ul style="list-style-type: none"> October: DTSC terminated preparation of the EIR for GNB's Part B Application
1998	<ul style="list-style-type: none"> October: GNB submitted Part B Application, Revision 4
1999	<ul style="list-style-type: none"> August: GNB submitted Interim Status Modification/Temporary Authorization Application for Supplemental Environmental Projects December: DTSC approved Class 2 Interim Status Modification for Supplemental Environmental Projects and Negative Declaration
2000	<ul style="list-style-type: none"> June: DTSC approved Class 2 Interim Status Modification for WWTP Replacement Project and Negative Declaration November: GNB requested a Class 1 Interim Status Modification for ownership change from GNB Technologies to Exide Corporation November: GNB submitted Part B Application, Revision 5
2001	<ul style="list-style-type: none"> January: DTSC granted conditional approval of Class 1 Interim Status Modification for ownership change from GNB Technologies to Exide Corporation October: Exide Corporation requested a Class 1 Interim Status Modification for company name change from Exide Corporation to Exide Technologies November: DTSC granted conditional approval of Class 1 Interim Status Modification for company name change from Exide Corporation to Exide Technologies
2002	<ul style="list-style-type: none"> May: Exide submitted Part B Application, Revision 5a
2006	<ul style="list-style-type: none"> April: Exide submitted Part B Application, Revision 5b May: Exide submitted Supplement for Part B Application, Revision 5b June: Exide submitted Supplement No. 2 for Part B Application, Revision 5b June: DTSC issued technical completeness determination for Part B Application June: DTSC released Draft EIR and Draft Permit for public review
2010	<ul style="list-style-type: none"> April: Exide submitted Part B Application, Revision 6a July: Exide submitted Part B Application, Revision 6b
2011	<ul style="list-style-type: none"> September: Exide submitted Part B Application, Revision 7a October: DTSC issued NOP of EIR for RCRA Part B Application
2014	<ul style="list-style-type: none"> August: Exide submitted Part B Application, Revision 7b October: Exide submitted Supplement to Part B Application
2015	<ul style="list-style-type: none"> April: Exide submitted Request to Withdraw Part B Application May: DTSC issued NOP of EIR for closure of Exide Facility

Figure ES-2

Facility RCRA Permit History
Closure of the Exide Technologies Recycling Facility
Draft EIR
California Department of Toxic Substances Control

The facility has been subject to a number of regulatory actions since 1990. California Health and Safety Code (H&SC) Section 25187(b) gives authority to DTSC to issue an order requiring corrective action whenever DTSC determines that there is or has been a release of hazardous waste or constituents in the environment from a hazardous waste facility. A RCRA Facility Assessment (RFA) is the first step in a process to determine if future cleanup, or corrective action, is necessary. An RFA was conducted at the Exide Facility in 1990, which identified contamination from past operations at the site. Based on the RFA, DTSC ordered the next stage in the corrective action process—a RCRA Facility Investigation (RFI), which is a site characterization used to ascertain the nature and extent of contamination from releases identified during the RFA. Based on the results of the RFI, DTSC prepared a Corrective Action Consent Order (CACO, or “Consent Order”). The CACO, signed February 25, 2002, details the steps required by DTSC to determine the extent of any impacts at the Exide Facility and the steps necessary to determine the most appropriate corrective action remedies.

Exide is currently implementing corrective action activities in accordance with the 2002 Order. A *Revised Comprehensive RCRA Facility Investigation (RFI) Work Plan* (RFI Work Plan; AGC 2013) was submitted on March 26, 2013, which supersedes a previous “phased” approach to site investigation work. Implementation of the RFI Work Plan began in January 2014, following DTSC’s approval of the plan. A summary of corrective action activities conducted at the Exide Facility is provided in Section 2.4.1 of this DEIR.

The facility has also been the subject of South Coast Air Quality Management District (SCAQMD) oversight. Most recently, SCAQMD and Exide entered into a Stipulated Order for Abatement in January 2014, which outlined changes to be conducted at the Exide Facility to meet air quality standards. As part of the Stipulated Order, the Exide Facility suspended operations in March 2014 to install new equipment to meet SCAQMD rules on arsenic emissions.

Operations were expected to resume in the spring of 2015 in order to begin stack testing of new equipment installed to comply with SCAQMD rules. In March 2015, however, Exide was required to cease operations and permanently close its facility pursuant to a Stipulation and Order between DTSC and Exide (2015 Amendment), and a Non-Prosecution

Agreement (NPA) reached with the U.S. Department of Justice (DOJ). As ordered by the 2015 Amendment, Exide withdrew its permit application and notified DTSC of its intent to close the facility permanently by implementing a DTSC-approved Closure Plan. Under the 2015 Amendment and CCR Title 22, Chapter 15, Article 7, Section 66265.112, DTSC must approve a Closure Plan for the facility before Exide can begin closing it. Under Section 66265.112(d)(5), DTSC must provide the draft Closure Plan for public review and solicit public input before making a final decision.

Exide submitted its draft Closure Plan to DTSC on May 15, 2015. DTSC issued a Notice of Deficiency on June 17, 2015, and Exide submitted a revised draft Closure Plan on July 28, 2015, which is analyzed in this DEIR (the proposed Project). DTSC will solicit public input on the draft Closure Plan before making a final decision. The draft Closure Plan will be released for public review simultaneously with the DEIR, and includes Exide's proposed Closure Plan and DTSC's proposed revisions. DTSC's proposed revisions are discussed in detail in Section 2.2.7 and summarized under *Issues to be Resolved* in this Executive Summary. DTSC will issue a final Closure Plan based on agency and public comments on the draft Closure Plan and this DEIR. The final Closure Plan will be released in conjunction with the Final EIR.

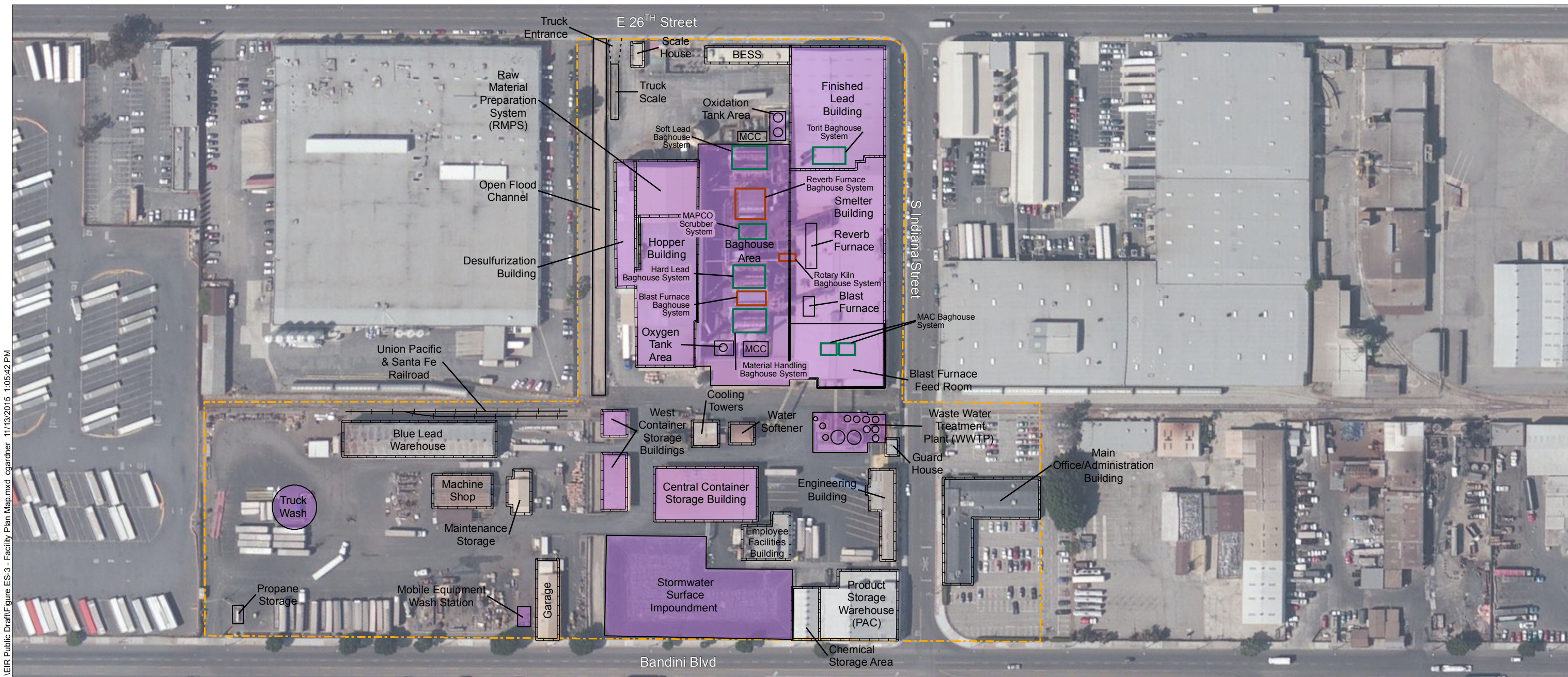
This DEIR was prepared in compliance with CEQA to identify potentially significant impacts associated with Exide's draft Closure Plan. Under the proposed Project, Exide would permanently close the facility and implement a Closure Plan that would include dismantling operations and a cleanup of the facility. Exide's draft Closure Plan outlines a multi-year approach for removal and decontamination of equipment, structures, and soils at the site during three phases, as follows:

- **Phase 1** will generally include decontamination and removal of all hazardous waste units and contaminated equipment; soil, soil gas, and surface sampling; and decontamination and deconstruction (to grade) of buildings containing former RCRA Interim Status units as shown in Figure ES-3. Phase 1 activities are expected to require 19 to 24 months to complete.
- **Phase 2** will generally include addressing below-grade impacts from hazardous waste unit operations. The scope of Phase 2 is dependent on the sampling data generated during Phase 1 and may be influenced by data generated during the RFI and

corrective action process. It would include additional subsurface sampling to characterize the potential contamination under the equipment and structures, and removal of contaminated concrete floor and pavement; soil beneath the former equipment, buildings, structures, and pavement; and restoration activities. The Phase 2 option developed for the purposes of this CEQA evaluation is presumed to represent a conservative scenario in which, based on the available information, it is the largest scope of the proposed Project that could be expected to be implemented. This conservative analysis assumes up to 5 feet of soil excavation and removal will be performed beneath all former RCRA Interim Status units, and a multimedia cap with long-term care and maintenance requirements will be constructed over nearly all of the closed unit areas. Phase 2 implementation is expected to begin 6 to 12 weeks following completion of Phase 1 closure, depending on DTSC requirements and approval of the Phase 2 Contingent Closure Plan. The duration of Phase 2 will be established after the scope of the required work is known, and it is expected that it will be on the order of 12 to 24 months.

- **Phase 3 (Post-closure)** would include post-closure and contingent post-closure work to implement long-term inspections, monitoring, and maintenance of the site. Because Phase 3 is contingent on the results of Phases 1 and 2, the details of Phase 3 activities are not known at this time and potential Phase 3 activities are analyzed at a programmatic level in this document.

Q:\Jobs\140749-01.01_ExideTechnologies\Maps\2015_11\11EIR Public Draft\Figure ES-3 - Facility Plan Map.mxd cgarner 11/13/2015 1:05:42 PM



LEGEND

Exide Facility

Union Pacific & Santa Fe Railroad

Facility Building

Facility Structure

Facility Structure/Building Identified for Closure

Emissions Control Equipment¹

Not Operating

Operating

NOTES:

1. Emissions control equipment locations are approximate.

2. Background orthoimagery provided by ESRI World Imagery.

0 75 150 225 300

Feet



Figure ES-3
Facility Plan Map
Closure of the Exide Technologies Recycling Facility
Draft EIR
California Department of Toxic Substances Control

Exide developed construction schedules for Phase 1. Phases 2 and 3 include contingent work elements based on Phase 1's subsurface soil and soil gas sampling results. Therefore, this DEIR includes both project-specific (Phase 1) and programmatic (elements of Phase 2 and Phase 3 [post-closure]) analyses to assess the closure process. As construction plans and details become available for Phases 2 and 3, DTSC will determine the level of analysis required to comply with CEQA.

It should be noted that the facility's closure and corrective action processes are occurring concurrently. Closure does not affect Exide's obligations to complete corrective actions; however, the results from some corrective actions may inform the approach in Phase 2 of the closure process. Closure and corrective action are separate but interrelated projects, proceeding on separate paths, with separate regulatory and technical requirements. At some point it will become prudent to integrate the closure and corrective action processes because the closure and cleanup performance standards are similar for each process. For example, in Phase 2, integrated cleanup goals and closure performance standards will be developed and engineering and institutional controls will be designed. These measures will be tailored to mitigate adverse risk to human health and the environment posed by the site-wide nature and extent of any remaining hazardous waste constituents or chemicals of concern.

Project Objectives

Pursuant to the CEQA Guidelines and CCR Title 14, Section 15124, a "statement of the objectives sought by the proposed project" is to be provided as part of the project description in an EIR. The purpose of the proposed Project is to achieve facility closure and related remediation of site hazards. Exide is requesting approval of a Closure Plan to perform closure of its hazardous waste units in accordance with H&SC Division 20, Chapter 6.5, and CCR Title 22, Division 4.5.

To achieve facility closure in accordance with all federal and state regulations, the following objectives must be accomplished:

- Decontaminate and remove all contaminated equipment, structures, and soils and comply with requirements identified in federal, state, and local hazardous waste and air quality regulations

- Control, minimize, or eliminate, to the extent necessary to protect human health and the environment, post-closure escape of hazardous waste, hazardous constituents, leachate, contaminated rainfall or run-off, or waste decomposition products to the ground or surface waters or to the atmosphere
- Minimize or eliminate the need for further site maintenance
- Implement construction, management, and long-term monitoring programs to protect public health and ensure all closure standards are met

Summary of Project Alternatives

CEQA Guidelines (CCR Section 15126) require that a DEIR consider a range of reasonable alternatives to the project or to the location of the project that would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project. The alternatives considered in this DEIR are:

- Alternative 1: No Project
- Alternative 2: Use of Rail to Transport Hazardous Construction Waste
- Alternative 3: Mechanical Removal of Lead from Kettles
- Alternative 4: Water Jet Cutting to Remove Lead from Kettles

A complete evaluation of these alternatives—including their ability to meet the objectives of the proposed Project and their ability to avoid or substantially reduce significant environmental impacts—is provided in Section 6 of this DEIR.

Alternative 1: No Project

The No Project Alternative assumes that Exide ceases operation at the facility but that the closure process is not implemented. The Exide Facility would remain non-operational with access limited to site maintenance and security. All buildings and equipment would remain and no construction would occur at the site. The No Project Alternative assumes that the corrective action process would continue, as discussed in Section 2.4 of this DEIR.

The No Project Alternative would result in significant unavoidable impacts related to hazards and hazardous materials, land use, and water quality and hydrology, and no impacts related to other resource areas analyzed under CEQA.

While this alternative is not legally consistent with state laws and regulations, it has been carried forward for analysis in Section 6 consistent with the requirements of CEQA to fully consider the potential impacts of the No Project Alternative. Impacts of the No Project Alternative are assessed in Section 6.4.1.

Alternative 2: Use of Rail to Transport Hazardous Construction Waste

In this alternative, Exide would use rail transport for movement of contaminated construction waste and soil, rather than trucks. All other closure activities would otherwise occur in the same manner as described for the proposed Project. As with the proposed Project, this alternative would include transportation of hazardous waste material to a permitted RCRA hazardous waste landfill (operated by U.S. Ecology, Inc., and located in Beatty, Nevada) for disposal.

While precise transport routes under Alternative 2 are currently unknown, transport of hazardous material between California and Nevada would most likely occur via the Union Pacific Class 1 freight lines crossing between southern California and Nevada. BNSF Class 1 freight lines would likely also be used for transport within southern California. Within southern California, both Union Pacific and BNSF routes take trains in proximity to residential areas. Several Class II and Class III railroads would likely be used for transport within Nevada, and potentially for connections within southern California.

Under Alternative 2, contaminated construction waste and soil would be loaded in trains on the existing rail spur. Under the proposed Project, trucks would be backed into a covered building, lined, filled, and sealed under negative pressure so there is little chance of contamination during the material handling process and any dust generated during loading would be captured and filtered through emissions equipment. Rail cars, however, could not be filled in this manner and would have to be loaded along the existing rail spur, potentially increasing the chance of accidental release of hazardous materials on site. Dust emissions during loading would also be a concern under Alternative 2.

For most resource topics analyzed under CEQA, Alternative 2 would result in similar or identical impacts to the proposed Project. Potential impacts associated with traffic and transportation would be reduced, although the significance determinations for these impacts

would remain identical to the proposed Project. For hazards and hazardous materials, Alternative 2 may reduce the potential for impacts from transport of waste over long distances, but potential impacts within southern California are likely to be similar to trucks, as rail corridors in the area are also within proximity to residential areas. In addition, this alternative would increase the potential for impacts during material loading; however, these changes would not alter the significance determinations compared to the proposed Project. Impacts of Alternative 2 are assessed in Section 6.4.2.

Alternative 3: Mechanical Removal of Lead from Kettles

When the Exide Facility ceased operations in 2014, solidified lead remained within 13 kettles in the Smelter Building. As part of closure, Exide must remove the lead in the kettles before it can decommission the kettles. Exide has overhead cranes capable of lifting six of the kettles that have less than 12 tons of lead. These kettles, along with loose pieces of solidified lead that can be removed by hand, will be removed and transported to an off-site recycling facility during closure. The seven remaining kettles are too heavy for the existing overhead cranes to remove and the floor of the Smelter Building cannot support a larger crane. As part of the proposed Project, Exide proposes to re-melt the hardened lead in these seven remaining kettles to remove the lead from the facility.

Under Alternative 3, air demolition units and/or backhoe equipment with a spade-shaped tool would be used to cut small pieces of lead from the larger mass of lead in the remaining seven kettles. Because lead is malleable, it must be sliced, as it will not break. This method of removal is time-consuming: cutting a 1-ton piece of lead would require 8 working hours; cutting lead within a kettle containing an approximately 100-ton lead heel (Unit 92) would require approximately 100 eight-hour shifts, or 20 weeks to remove the 100-ton lead heel. This method would also require personnel to conduct confined space entry into the kettle to manually move the pieces into a skip or barrel to lift the pieces out of the kettle.

For most resource topics analyzed under CEQA, Alternative 3 would result in similar or identical impacts as the proposed Project. Potential impacts associated with hazards and hazardous materials would be increased as workers would be exposed to hazardous materials, although the general significance determinations for this impact would remain identical to the proposed Project. Impacts of Alternative 3 are assessed in Section 6.4.3.

Alternative 4: Water Jet Cutting to Remove Lead from Kettles

When the Exide Facility ceased operations in 2014, solidified lead remained within 13 kettles in the Smelter Building. As part of closure, Exide must remove the lead in the kettles before it can decommission the kettles. Exide has overhead cranes capable of lifting six of the kettles that have less than 12 tons of lead. These kettles, along with loose pieces of solidified lead that can be removed by hand, will be removed and transported to an off-site recycling facility during closure. The seven remaining kettles are too heavy for the existing overhead cranes to remove and the floor of the Smelter Building cannot support a larger crane. As part of the proposed Project, Exide proposes to re-melt the hardened lead in these seven remaining kettles to remove the lead from the facility.

Under Alternative 4, a water jet would be used to cut small pieces of lead from the larger mass in the seven remaining kettles. The smaller pieces would then be manually removed from the kettles and loaded on trucks to be transported to hazardous waste disposal facilities. “Water jet” is the generic term used to describe equipment that uses a high-pressure stream of water for cutting or cleaning purposes. A typical water jet cutting system uses approximately 150 gallons of water per minute with a pump capacity designed at 20,000 to 40,000 pounds per square inch. Water jets can cut virtually any material up to 6 inches thick, depending on the hardness of the material. Water jet cutting can use the force of water alone to cut material or an abrasive can be added to the water to create more friction to cut through harder materials (Frampton 2015).

Under this alternative, a specialized robotic device with high-pressure spray heads would be designed and built over a period of several months to access and cut the solid lead. An abrasive, likely garnet, would be added to cut through the lead. Water jet cutting is not as effective when cutting curved surfaces and will not differentiate between materials; therefore, it would be used to cut lead pieces out of the center of the kettle but would leave an edge of lead around the circumference of the kettle to ensure the kettle does not collapse. Water jet cutting would require approximately 50 eight-hour shifts, or 10 weeks to implement, plus mobilization and demobilization.

Because cutting lead will result in particles of lead in the waste stream, water containing lead grit particles resulting from the cutting process must be controlled and collected for

treatment. The amount of water to be collected and treated is approximately 9,000 gallons per hour (or 72,000 gallons per day, 360,000 gallons per week). The existing Wastewater Treatment Plant is not designed to collect and convey water from such an operation and may not be able to handle this volume of wastewater if there are concurrent water treatment needs on site, or in the case of a maximum storm event. Therefore, holding tanks and a water treatment system would need to be designed and mobilized to the site.

For most resource topics analyzed under CEQA, Alternative 4 would result in similar or identical impacts compared to the proposed Project. Potential impacts associated with hazards and hazardous materials, and public services and utilities would be increased, although the significance determinations for these impacts would remain identical to the proposed Project. Impacts of Alternative 4 are assessed in Section 6.4.4.

Summary of Known Controversial Issues

DTSC held a public scoping meeting on June 18, 2015, to solicit input on the scope of this DEIR and the Notice of Preparation (NOP) published on May 28, 2015. The general public, local and state agencies, and local jurisdictions provided comments. The comments received are summarized in Appendix B. Recurring themes from the comments included the following:

- **Transportation of Waste from the Exide Facility** – Commenters expressed concern about the truck routes for removal of waste from the Exide Facility, the containment of waste during removal, monitoring of trucks during waste removal, and the potential use of rail to transport waste from the facility. Sections 3.7 (Hazards and Hazardous Materials) and 3.11 (Traffic and Transportation) address the potential impacts from transportation of hazardous material and other wastes from the facility.
- **Protection of Public Health During Closure** – Commenters expressed concern that air and water quality be monitored, fugitive dust be controlled, and the public be protected from exposure to hazardous waste during closure activities. Sections 3.2 (Air Quality), 3.7 (Hazards and Hazardous Materials), and 3.12 (Water Quality and Hydrology) address air and water quality and exposure to hazardous waste during closure activities. Section 2 describes the closure activities and the engineering controls that would be used to control fugitive dust during closure activities.

- **Regulatory Oversight of Closure Activities** – Commenters expressed concern that closure activities receive appropriate oversight by regulatory agencies and third parties. Section 1.3 describes regulatory agency roles and responsibilities; the roles of specific agencies and applicable regulations are described by individual resource area in Section 3.
- **Community Outreach Regarding Closure Activities** – Commenters noted the importance of consistent communication and outreach from DTSC during the CEQA and closure processes. Section 1.3.4 describes the communication and outreach conducted during preparation of this document. Section 1.3.4 also discusses the Advisory Group in which DTSC participates separate from the CEQA process.
- **Interaction of Closure and Corrective Actions Processes** – Commenters requested clarification of the relationship between the Exide Facility closure process and the ongoing corrective action process and associated investigations. Throughout this DEIR, DTSC has distinguished between closure activities and corrective actions. Section 2 describes the closure activities and Section 2.4 describes the ongoing cleanup activities and corrective actions that are not part of the facility closure process.

Issues to be Resolved

DTSC prepared this DEIR using available technical information related to Exide's July 2015 draft Closure Plan and potential alternatives to the proposed Project. As required by CEQA, DTSC must evaluate the information in this DEIR, including the proposed mitigation measures and potentially feasible alternatives, before deciding whether to approve the proposed Project or an alternative.

As discussed previously and in more detail in Section 2.2.7, this DEIR analyzes Exide's July 2015 draft Closure Plan. DTSC will revise Exide's Closure Plan based on agency and public comments received on the draft Closure Plan and this DEIR, which will be reflected in the Final EIR and the Final Closure Plan for the facility.

DTSC's comments on Exide's July 2015 draft Closure Plan are generally technical in nature, but a number of them include changes that may affect construction planning or result in new

information. Such changes—and information on how the changes were included in this DEIR or will be analyzed in subsequent documents—are summarized as follows:

- This DEIR analyzes Exide’s proposal to re-fire a number of kettles containing greater than 12 tons of solidified lead. While under consideration, DTSC has not yet approved Exide’s proposal to re-fire the kettles.
 - This DEIR includes mechanical removal and water jet cutting as alternatives to analyze the environmental effects of other potential lead removal options. Refer to Section 6 of this DEIR for a full alternatives analysis.
- Exide may submit an application to modify the Closure Plan to include creation of a new on-site landfill unit, as part of closure in accordance with 22 CCR 66270.42(c), that will cap material in place.
 - Assuming such a change is made, DTSC will analyze it as part of the supplemental CEQA analysis required when Phase 2 construction plans are available.
- DTSC will require Exide to replace the current topographic map in conjunction with the 2006 topographic survey with a new survey to show all of the recent enhancements, well installations, upgrades, and modifications performed at the facility since 2006. The new survey shall follow all of the requirements of 22 CCR 66270.14(b)(18), and will be submitted to DTSC within 45 days of approval of the Closure Plan and before any deconstruction occurs.
 - If the survey has the potential to change any environmental findings in regards to the analysis presented in this DEIR for Phase 1, DTSC will prepare a subsequent environmental analysis as needed. In addition, the new survey will be analyzed as part of the supplemental CEQA analysis required when Phase 2 construction planning is available.
- DTSC will require Exide to perform a site-wide Health Risk Assessment (HRA) prior to Phase 2 to estimate the excess cancer risk and hazard index posed by the site considering the site-wide nature and extent of any remaining hazardous waste constituents or chemicals of concern remaining in all media, and the engineering and institutional controls planned to be implemented.
 - DTSC will include the HRA results and analyze them as part of the supplemental CEQA analysis required when Phase 2 construction planning is available.
- Additional units and buildings may be added to Exide’s draft Closure Plan prior to final approval by DTSC, including Unit 12 and Container Storage Areas 1, 2, and 3.

- The DEIR will be revised as appropriate in the Final EIR to reflect any potential changes; however, such changes would likely not affect any significance findings because the modeling completed for air quality and greenhouse gas (GHG) emissions is conservative.
- The concrete crusher will not be used.
 - Concrete crushing is not assumed in the DEIR analysis.
- The transportation route restrictions have been modified.
 - DTSC's routes are included in the DEIR as project conditions.
- DTSC made modifications to the stormwater system deconstruction process.
 - The DEIR will be revised as appropriate in the Final EIR as appropriate to reflect any potential changes; however, such changes would likely not affect any significance findings.
- DTSC will require that Exide prepare a Compliance Plan for closure activities and utilize toxic air contaminants monitors, per proposed revisions to Rule 1420.1.
 - As a regulatory action, the DEIR assumes compliance with Rule 1420.1 and any subsequent revisions.

Summary of Impacts and Mitigation

Anticipated environmental effects associated with the proposed Project are evaluated in Sections 3 and 4 of this DEIR. Feasible mitigation measures that could minimize significant adverse impacts are identified. Significant environmental impacts, mitigation measures, and residual impacts are detailed in Section 3 and summarized in Table ES-1.

Summary of Cumulative Impacts

For this DEIR, other area projects with a potential to contribute to cumulative impacts were identified and analyzed using a list of closely related projects that would be constructed in the cumulative geographic scope listed in Table 4.1-1. Table 4.1-1 includes a list of past, present, and probable future projects producing related or cumulative impacts. In consideration of these projects, cumulative analyses for each environmental issue potentially affected by the proposed Project are presented in Section 4. For a number of the resource areas—namely air quality, GHG emissions, noise, and traffic and transportation—this cumulative impact analysis also included projected future growth as a factor.

Implementation of the proposed Project, cumulatively combined with other related past, present, or probable future projects, may result in substantial cumulative adverse impacts related to air quality, GHG emissions, and geology and soils. Implementation of the proposed Project, cumulatively combined with other related past, present, or probable future projects, would not result in substantial cumulative adverse effects to other resource areas analyzed under CEQA.

Table ES-1
Summary of Proposed Project Impacts and Proposed Mitigation Measures

	Impact Determination	Mitigation Measures	Impact Determination after Mitigation
Aesthetics			
A-1: Would the proposed Project have a substantial adverse effect on a scenic vista?	No impact	None	No impact
A-2: Would the proposed Project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic resources within a state scenic highway?	No impact	None	No impact
A-3: Would the proposed Project substantially degrade the existing visual character or quality of the site and its surroundings?	Less than significant impact	None	Less than significant impact
A-4: Would the proposed Project create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area?	Less than significant impact	None	Less than significant impact
Air Quality			
AQ-1: Would the proposed Project emissions exceed any of the SCAQMD daily thresholds of significance in Table 3.2-5?	Significant	MM-AQ-1 MM-AQ-2	Significant and unavoidable
AQ-2: Would the proposed Project construction result in offsite ambient air pollutant concentrations that exceed any of the SCAQMD thresholds of significance shown in Table 3.2-5?	Significant	MM-AQ-1 MM-AQ-2	Significant and unavoidable
AQ-3: Would the proposed Project emissions expose the public to significant levels of TAC if impacts exceed any of the SCAQMD thresholds of significance in Table 3.2-5?	Less than significant impact	None	Less than significant impact
AQ-4: Would the proposed Project emissions create an objectionable odor at the nearest sensitive receptor pursuant to SCAQMD Rule 402, per thresholds of significance in Table 3.2-5?	Less than significant impact	None	Less than significant impact
AQ-5: Would the proposed Project conflict with or obstruct implementation of an applicable AQMP or not conform to the most recent adopted SIP?	No impact	None	No impact

	Impact Determination	Mitigation Measures	Impact Determination after Mitigation
Greenhouse Gas Emissions			
GHG-1: Would the proposed Project GHG emissions, directly or indirectly, exceed the SCAQMD 10,000 mty CO ₂ e threshold?	Significant	MM-AQ-2	Significant and unavoidable
GHG-2: Would the proposed Project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions and climate change impacts?	Less than significant impact	None	Less than significant impact
Biological Resources			
BIO-1: Would the proposed Project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, regulations, or by the CDFW and USFWS?	No impact	None	No impact
BIO-2: Would the proposed Project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies or regulations, or by the CDFW and USFWS?	No impact	None	No impact
BIO-3: Would the proposed Project have a substantial adverse effect on federally protected wetlands, as defined by Section 404 of the CWA (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	No impact	None	No impact
BIO-4: Would the proposed Project interfere substantially with the movement of any native resident, migratory fish, or wildlife species or with established native resident or migratory wildlife corridors or impede the use of native wildlife nursery sites?	No impact	None	No impact
BIO-5: Would the proposed Project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	No impact	None	No impact
BIO-6: Would the proposed Project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	No impact	None	No impact
Cultural and Historic Resources			
CHR-1: Would the proposed Project directly or indirectly destroy a unique paleontological resource, site, or unique geologic feature?	No impact	None	No impact

	Impact Determination	Mitigation Measures	Impact Determination after Mitigation
CHR-2: Would the proposed Project cause a substantial adverse change in the significance of a historical resource?	Less than significant impact	None	Less than significant impact
CHR-3: Would the proposed Project cause a substantial adverse change in the significance of an archaeological resource?	Significant	MM-CHR-1	Less than significant impact
CHR-4: Would the proposed Project disturb any human remains, including those interred outside formal cemeteries?	Significant	MM-CHR-2	Less than significant impact
Geology and Soils			
GS-1: Would the proposed Project expose people or structures to potential substantial adverse effects including the risk of loss, injury, or death?	Significant	None available	Significant and unavoidable
GS-2: Would the proposed Project result in substantial soil erosion or the loss of topsoil?	Less than significant impact	None	Less than significant impact
GS-3: Would the proposed Project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the proposed Project?	Less than significant impact	None	Less than significant impact
GS-4: Would the proposed Project be located on expansive soil, creating substantial risks to life or property?	Less than significant impact	None	Less than significant impact
GS-5: Would the proposed Project be sited on soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	No impact	None	No impact
Hazards and Hazardous Materials			
HAZ-1: Would the proposed Project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	Less than significant impact	None	Less than significant impact
HAZ-2: Would the proposed Project create a significant hazard to the public or the environment through the transport, use, or disposal of hazardous materials?	Less than significant impact	None	Less than significant impact

	Impact Determination	Mitigation Measures	Impact Determination after Mitigation
HAZ-3: Would the proposed Project result in hazardous emissions or handling of hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?	Less than significant impact	None	Less than significant impact
HAZ-4: Would the proposed Project be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	Less than significant impact	None	Less than significant impact
HAZ-5: For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the proposed Project result in a safety hazard for people residing or working in the study area?	No impact	None	No impact
HAZ-6: For a project within the vicinity of a private airstrip, would the proposed Project result in a safety hazard for people residing or working in the study area?	No impact	None	No impact
HAZ-7: Would the proposed Project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	No impact	None	No impact
HAZ-8: Would the proposed Project expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	No impact	None	No impact
Land Use			
LU-1: Would the proposed Project physically divide an established community?	No impact	None	No impact
LU-2: Would the proposed Project conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the proposed Project (including, but not limited to, the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	Less than significant impact	None	Less than significant impact
Noise and Vibration			
NV-1: Expose people to, or generate, noise levels in excess of standards established in the City of Vernon's General Plan or in Section 12.08.440 of LACMC	Significant	MM-NV-1 MM-NV-2 MM-NV-3	Less than significant impact

	Impact Determination	Mitigation Measures	Impact Determination after Mitigation
NV-2: Expose people to, or generate, ground-borne vibration levels in excess of the Caltrans vibration damage potential threshold criteria	Less than significant impact	None	Less than significant impact
NV-3: Create a substantial permanent increase in ambient noise levels in the study area above levels existing without the proposed Project	No impact	None	No impact
NV-4: Create a substantial temporary or periodic increase in ambient noise levels in the study area above levels existing without the proposed Project	Significant	MM-NV-1 MM-NV-2	Less than significant impact
NV-5: Expose people residing or working on the proposed Project site to excessive noise levels as a result of activities at a public airport or private airstrip	No impact	None	No impact
Public Services and Utilities			
PSU-1: Would the proposed Project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered government facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for fire protection?	Less than significant impact	None	Less than significant impact
PSU-2: Would the proposed Project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered government facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for police protection?	Less than significant impact	None	Less than significant impact
PSU-3: Would the proposed Project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered government facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for schools?	No impact	None	No impact

	Impact Determination	Mitigation Measures	Impact Determination after Mitigation
PSU-4: Would the proposed Project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered government facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for other public facilities?	No impact	None	No impact
PSU-5: Would the proposed Project exceed wastewater treatment requirements of the applicable RWQCB or exceed available capacity to treat wastewater by the wastewater treatment provider?	No impact	None	No impact
PSU-6: Would the proposed Project generate solid non-hazardous waste in excess of permitted landfill capacity?	No impact	None	No impact
PSU-7: Would the proposed Project exceed the capacity of existing distribution systems or require or result in the construction of new facilities for the generation or transmission of electrical power that would have significant environmental effects?	No impact	None	No impact
PSU-8: Would the proposed Project require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	Less than significant impact	None	Less than significant impact
Traffic and Transportation			
TT-1: Would the proposed Project construction result in a short-term, temporary increase in truck and auto traffic?	Less than significant impact	None	Less than significant impact
TT-2: Would long-term vehicular traffic associated with the proposed Project significantly impact the V/C ratio or LOS?	No impact	None	No impact
TT-3: Would an increase in on-site employees due to proposed Project operations increase public transit use?	Less than significant impact	None	Less than significant impact
TT-4: Would the proposed Project conflict with adopted policies, plans, or programs supporting alternative transportation?	No impact	None	No impact

	Impact Determination	Mitigation Measures	Impact Determination after Mitigation
Water Quality and Hydrology			
WQH-1: Would the proposed Project violate any water quality standards or waste discharge requirements?	Less than significant impact	None	Less than significant impact
WQH-2: Would the proposed Project substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level?	No impact	None	No impact
WQH-3: Would the proposed Project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation on- or off-site?	Less than significant impact	None	Less than significant impact
WQH-4: Would the proposed Project create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	Less than significant impact	None	Less than significant impact
WQH-5: Would the proposed Project otherwise substantially degrade water quality?	No impact	None	No impact
WQH-6: Would the proposed Project place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	No impact	None	No impact
WQH-7: Would the proposed Project place structures within a 100-year flood hazard area that would impede or redirect flood flows?	No impact	None	No impact
WQH-8: Would the proposed Project expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam?	Less than significant impact	None	Less than significant impact
WQH-9: Would the proposed Project contribute to hazards from inundation by seiche, tsunami, or mudflow?	No impact	None	No impact