

CLOSURE PLAN

**EXIDE TECHNOLOGIES
VERNON, CALIFORNIA
(EPA ID NO. CAD 097 854 541)**

Prepared For:

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**CALIFORNIA DEPARTMENT OF
TOXIC SUBSTANCES CONTROL**

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EXECUTIVE SUMMARY

BACKGROUND

Exide owns an inactive battery recycling facility situated at 2717 South Indiana Street in Vernon, California. The facility began operations in 1922. During the early 1980s, the facility was the subject of a major modernization and reconstruction that resulted in the current site configuration. The facility was granted Interim Status on December 12, 1981. The facility submitted its first Resource Conservation and Recovery Act (RCRA) hazardous waste permit (“Part B”) application on November 8, 1988. Exide Technologies acquired the facility in September 2000 and last conducted recycling operations in March 2014. Exide withdrew its Part B application and provided notice of its intent to permanently close the facility on April 7, 2015. Exide is now proceeding with facility closure.

CLOSURE PLAN CONTENT

The Closure Plan addresses closure of former Interim Status (IS) hazardous waste management units (former IS units). Ninety-five (95) former IS units and their ancillary components at the facility will be closed. The former IS units include tanks, miscellaneous units, container storage areas, containment buildings, and a surface impoundment. The Closure Plan includes:

- Phase 1 (Closure): Phase 1 is a well-defined element that includes inventory removal; unit decontamination and removal; soil and soil gas sampling; and decontamination and deconstruction of buildings containing former IS units. Select units such as Surface Impoundment/Stormwater Pond, Pump Sump and Stormwater Management System; will remain operational through Phase 2 to manage and provide a location to clean closure-related vehicles exiting the Site.
- Phase 2 (Contingent Closure): Phase 2 addresses below grade impacts from former IS unit operations. The exact 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. Phase 2 may include soil removal, restoration, capping, or some combination of measures. The Phase 2 activities described in this document (with five feet of soil removal beneath all former IS units) are assumed as a reasonable worst case scenario and have been developed in consultation with the Department of Toxic Substances Control (DTSC) to build the Contingent Closure cost estimate.

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- **Post-Closure:** Occurs when hazardous soils have been remediated but remediation to residential standards (unrestricted clean closure) has not been achieved. If unrestricted clean closure is achieved, no post-closure care is necessary. Post-closure includes, but is not limited to, deed notices, inspections and reporting, maintaining a stabilized and secure site.
- **Contingent Post-Closure:** Occurs if closure performance standards (i.e., removal of hazardous waste) for IS units is not achieved. Contingent post-closure may include boundary markers, deed notices, inspections, maintenance, and monitoring (groundwater, soil pore-water, soil gas, and/or surface water sampling). The Contingent Post-Closure activities described in this document are assumed as a reasonable worst case scenario and have been developed in consultation with DTSC to build the Contingent Post-Closure cost estimate. The exact scope of Contingent Post-Closure will be dependent upon the nature and extent of contamination remaining in-place after Contingent Closure.

CLOSURE COMPARED TO CORRECTIVE ACTION

The Closure Plan addresses potential impacts from hazardous waste management units. The Closure Plan does not include other areas of the facility with impacts being addressed under Corrective Action as set forth in the Corrective Action Consent Order (CACO) Docket No. P3-01/02-010 (February 25, 2002). The Closure and Corrective Action (CA) processes are occurring concurrently, and in the future CA may influence Phase 2; however, Closure and CA are separate projects proceeding on separate paths with separate regulatory and technical requirements.

PHASE 1 CLOSURE ELEMENTS

Construction permits from and notifications to SCAQMD, Water Resources Control Board, Los Angeles County, City of Vernon, and Cal/OSHA will be completed as required prior to the start of regulated work.

Air Pollution Control Equipment - Exide will continue to operate air pollution control equipment as necessary to maintain negative pressure in the former North Yard manufacturing area (Total Enclosure Building) through de-skinning of the former buildings. Temporary enclosures with negative pressure will be utilized during closure of features outside the Total Enclosure Building. These measures, and others, are designed to reduce fugitive emissions and maintain compliance with applicable air quality standards during closure.

Inventory Removal - Hazardous material and waste (“inventory”) stored/contained in the former IS units which is solid will be removed and sent off-site for disposal at a landfill or recycling at a secondary lead smelter. Liquid remaining within units will be sent off-site for disposal or treated in the on-site Wastewater Treatment Plant (WWTP). DTSC staff identified Alternative 3, mechanical removal of lead from kettles, as the preferred alternative. Alternative 3 was selected because it will result in the least amount of significant environmental impacts based on analysis presented in the Environmental Impact Report.

Unit Cleaning and Removal – All former IS tanks and miscellaneous units will be cleaned and removed by the completion of Phase 1, except for the Surface Impoundment/Stormwater Pond, Pump Sump and Stormwater Management System, and select sumps at topographic low points (maintained to collect stormwater runoff and excess water generated during the cleaning process) and the West Yard Truck Wash (maintained to clean vehicles before they leave the Site). The interior and exterior of units and ancillary equipment will be cleaned by HEPA vacuuming and/or pressure washing. Those former IS Units not removed during Phase 1 will be also cleaned at the end of Phase 1 to remove accumulated sediment, but will remain operational for Phase 2 (for environmental management purposes only). At the end of Phase 2, these units will be re-cleaned and removed.

Disposition of Removed Units and Components – Removed former IS units and ancillary components will be sent for re-use at another Exide facility, recycled (scrap metal), or disposed. Units and components destined for reuse at another Exide facility will be cleaned and sampled to demonstrate performance standards in Appendix BB are met. Units, equipment and scrap metal destined for recycling shall be sampled and proven to meet performance standards in Appendix BB. Units and ancillary components destined for disposal shall be cleaned to remove waste and waste residues, characterized for disposal purposes and sent to an appropriately permitted disposal facility.

Building Deconstruction - The areas and buildings containing former IS units and the Finished Lead Building will be decontaminated by HEPA vacuuming and pressure washing. The interior and exterior roof, walls (both sides) and floor will be decontaminated. Concrete floors will be removed. The Reverb Furnace Feed Room, Blast Furnace Feed Room, RMPS Building, Smelter Building, Baghouse Building, and Desulfurization Building will be gutted and deconstructed to up to five feet below grade dependent on sampling results generated during Phase 1. Concrete walls, non-metallic debris and equipment foundations will be characterized and disposed off-site. Metal debris will be sampled to confirm it meets the performance standards in Appendix BB and recycled.

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Air Monitoring - Ambient air monitoring will be performed daily (24 hrs/day) during closure for lead and arsenic. Real-time particulate (dust) monitoring will be conducted during working hours downwind and potentially upwind of the work area to track and gauge the trends in particulate dust generation as work progresses. The Contractor performing the decontamination and deconstruction activities will be required to conduct monitoring of their personnel and establish appropriate levels of personal protective equipment which comply with Cal/OSHA standards.

Water Management - Stormwater within the facility will be collected in the stormwater management system (manholes, piping, sumps, trench drains, pumps, Surface Impoundment and curbing) during Phase 1 and 2. Depending on the timing of CA and receipt of all required permits and approvals for direct discharge of stormwater, it may also be necessary to continue to collect and treat stormwater after completion of Phase 2. Stormwater will be treated in the existing or temporary WWTP and discharged to the LA County Sanitation District until approval for direct discharge is received.

Wastewater generated during closure, including stormwater, will be treated in the on-site WWTP and discharged to the LA County Sanitation District. During the later portions of Phase 1 and Phase 2, a temporary WWTP will be used to treat wastewater prior to discharge as the existing WWTP will be closed.

PHASE 2 CLOSURE ELEMENTS

Phase 2 (Contingent Closure) Plan – The scope of Phase 2 is expected to involve the removal of underlying contaminated soil. Excavation of contaminated soil will be conducted dependent on sampling results generated during Phase 1. For cost estimating purposes, a Contingent Closure scenario has been developed which assumes that removal of floors and pavement will be required beneath all secondary containment areas, containment buildings, the Container Storage Area and Smelter Building units and that the removal depth will be 5 feet, dependent on the sampling results generated during Phase 1. The Phase 2 Closure also assumes that not all soils at or above hazardous levels can be removed with a 5-foot deep excavation and a RCRA cap will be required.

Using the results of the Phase 1 sampling, Exide will prepare a Phase 2 Contingent Closure Plan. The Phase 2 Contingent Closure Plan will identify the vertical and horizontal limits of removal, procedures for confirmatory sampling, erosion and sediment control measures, and Site restoration and stormwater management plan. The Phase 2 Contingent Closure Plan will be subject to DTSC, review and approval. If the Phase 2 Contingent Closure Plan includes closure with waste in-place, Exide will also be required to prepare and submit a post-closure permit application and assorted

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supporting documents, including water quality monitoring plan and inspection and maintenance plan. None of the former IS units will remain on-site following Phase 2 closure.

SCHEDULE

Implementation of Phase 1 will begin within 30 days of approval of the Closure Plan. DTSC approval of the Closure Plan is required prior to implementation along with input from AQMD, Cal/OSHA and City of Vernon. The estimated timeframe for Phase 1 Closure activities is approximately 34 months.

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. 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.