



ASSEMBLY COMMITTEE ON  
ENVIRONMENTAL SAFETY AND TOXIC MATERIALS

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**Keeping Communities Safe:  
Oversight of Toxic Waste Facility Closure Plans**

**To:** Members of the Assembly Committee on Environmental Safety & Toxic Materials, Assemblymember Garcia, Speaker-Elect Rendon, and Assemblymember Santiago

**From:** Assemblymember Luis Alejo, Chair

**Subject:** Department of Toxic Substances Control Regulatory Oversight of Hazardous Waste Facility Closure Plans

**Date:** January 26, 2016

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**Introduction**

Assemblymember Luis Alejo (D-Salinas) and the Assembly Environmental Safety and Toxic Materials Committee will be holding an informational hearing on the California Department of Toxic Substances Control's (DTSC's) regulatory oversight of hazardous waste facility closure plans. In particular, the Committee will examine the closure process of Exide Technologies' battery recycling plant in the City of Vernon.

**Current Law on Closure Plans**

Under current law, pursuant to Health & Safety Code (H&S) § 25245, *et seq.*, DTSC is required to adopt standards and regulations that do the following:

1. Specify adequate financial assurances to be provided by the owner or operator of a hazardous waste facility that can cover the costs of operation and the cost of closure and subsequent post closure maintenance; and,
2. Provide that every hazardous waste facility can be closed and maintained for at least 30 years. (H&S § 25245 (a))

In addition, each owner or operator of a hazardous waste facility, when applying for a hazardous waste facility permit, must submit a hazardous waste closure plan and post closure plan to DTSC and to the regional water quality control board. Closure plans must include the estimated cost of post closure maintenance, adhere to DTSC's post closure planning regulations, and include plans for monitoring water quality post closure. The closure plan must include a description of how and when each hazardous waste

management unit at the facility will be closed and a description of how and when final closure of the facility will be conducted. (H&S § 25246)

DTSC's regulations on hazardous waste closure plans, adopted pursuant to the aforementioned statute, further clarify that an owner or operator of a hazardous waste facility must have a closure plan contingent upon application for permit to operate. Under these regulations, an owner or operator of a hazardous waste management facility undergoing closure is required to control, minimize or eliminate 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, and comply with the closure requirements. (Article 7 of Chapter 15 of Title 22 of the California Code of Regulations)

### **Hazardous Waste Facilities in California**

DTSC is responsible for the review of Resource Conservation and Recovery Act (RCRA) and non-RCRA hazardous waste permit applications to ensure the safe design and operation of hazardous waste facilities; review and approve closure plans; provide closure oversight of approved closure plans, and more.

There are currently 118 DTSC permitted hazardous waste facilities in California. These facilities include: 44 storage sites, 43 treatment facilities, 3 disposal sites, and 28 post-closure sites (closed and going through final remediation). These facilities provide for the treatment, storage, or disposal of substances regulated as hazardous waste under federal and state law. A total of 1.82 billion pounds of California toxic waste were disposed of in these facilities in 2012, with 62% treated to the point where it no longer met toxic standards, and 38% placed in landfills.

### **Exide Technologies in Vernon**

Exide Technologies is one of the world's largest producers and distributors of batteries. The Exide Technologies (Exide) facility, located in the City of Vernon, California, recycled lead from used automotive batteries and other sources. The facility could process about 25,000 automotive and industrial batteries a day, providing a source of lead for new batteries.

For 33 years, Exide operated the Vernon facility without a full permit. During that time, inspectors documented more than 100 violations, including lead and acid leaks, an overflowing pond of toxic sludge, enormous cracks in the floor and hazardous levels of lead in the soil outside.

Over the course of decades of operation, the facility has polluted the soil beneath it with high levels of lead, arsenic, cadmium and other toxic metals. It also has contaminated groundwater, released battery acid onto roads and contaminated homes and yards in surrounding communities with lead emissions. The facility had been allowed to operate on "interim status," a temporary designation intended to give companies time to qualify for permits and meet legal standards for safe handling and disposal of toxic materials, as well as time for DTSC to review and approved full permit applications.

Leading up to the 2015 closure of the facility, in March 2013, the South Coast Air Quality Management District (SCAQMD) reported that arsenic emissions from the Vernon Exide facility created an elevated risk of cancer for as many as 110,000 people in an area stretching from Boyle Heights to Huntington Park. SCAQMD had cited the plant 41 times since 2003, often for excessive lead emissions.

In the spring of 2014, DTSC ordered Exide to suspend operations. Ultimately, DTSC reached an agreement with Exide, requiring the company to set aside \$7.7 million to replace leaking wastewater pipes and further reduce its arsenic emissions. It was also required to offer blood tests to 250,000 people who might have been affected by the emissions.

On March 12, 2015, Exide reached an agreement with federal officials that allowed the company to avoid facing criminal prosecution for illegal storage and transportation of hazardous waste in exchange for shutting down, demolishing and cleaning the 15-acre battery recycling plant.

### **Legislative Responses to Exide**

In response to the years-long issues with the embattled Exide facility, in 2015 the Legislature introduced multiple bills directed at hazardous waste facility permitting. Those bills included:

- AB 1075 (Alejo), Chapter 460, Statutes of 2015, which establishes standards for repeat serious hazardous waste facility violations and specifies the enforcement or permit revocation action to be taken by DTSC. The provisions of this bill went into effect January 1, 2016.
- SB 673 (Lara), Chapter 611, Statutes of 2015, which revises DTSC's permitting process and public participation requirements for hazardous waste facilities. Specifically, the bill requires, among other things, DTSC, by July 1, 2018, to adopt criteria for use in determining whether to issue a new or modified hazardous waste facilities permit or a renewal of a hazardous waste facilities permit, and to develop and implement programmatic reforms designed to improve the protectiveness, timeliness, legal defensibility, and enforceability of the DTSC's permitting program. The provisions of this bill went into effect January 1, 2016.
- SB 654 (De León), which would codify the permitting process for hazardous waste facilities permitted by DTSC. This bill is still moving through the Legislature.

In addition, the Senate Environmental Quality Committee held an oversight hearing on DTSC's Permitting Program in April 2015.

Lastly, the FY 2015-16 Budget Act created a three-person, independent review panel<sup>i</sup> to oversee DTSC's permitting, enforcement, and fiscal management. The panel will report on DTSC's performance, specifically related to permitting, enforcement backlog reductions, and meeting legislative mandates. The Assembly Speaker, the Senate Rules Committee, and the Governor appointed a community representative, a toxic materials expert, and a local government management expert to the panel. The panel has been meeting since December 2015 and is expected to report recommendations on DTSC reform soon.

### **Exide Facility Closure Plan**

On December 8, 2015, DTSC issued a public notice on a draft closure plan<sup>ii</sup>, opening up a 60-day public comment period. Based upon comments received, DTSC can revise the proposed plans. DTSC will subsequently adopt a final closure plan.

DTSC is working with a technical advisor and the Exide Technologies Advisory Group on the best option for the removal of lead in the facility's kettles. There are 13 kettles weighing 3 tons each, with varying amounts of lead. Removing the lead from those kettles without restarting the facility is the greatest challenge to the Exide facility closure plan. There are currently three options for lead removal under consideration:

1. Manual demolition: This would require a person inside the kettle using high pressure air to cut lead;
2. Water cutting: This would require a person inside the kettle using high pressure water to cut the lead; or,
3. Re-melting: This would use existing natural gas burners to heat and pump lead out of kettles.

Each of these options carries different risks to the persons employed with the lead removal; risks to the environment; and different time frames for completion. For example, while the first option presents the least risk to the environment and surrounding communities, it has great risk for the individual(s) doing the removal and would take ~ 63 weeks to complete.

The total estimated cost of the closure plan is \$38 million<sup>iii</sup>. State and federal officials say the agreement with Exide requires the company to pay the full cost of cleanup, even if it exceeds \$50 million.

The Exide facility closure process is expected to extend through 2018.

### **Why Getting Closure Right Matters: Lead**

Lead has been listed under California's Proposition 65 since 1987 as a substance that can cause reproductive damage and birth defects and has been on the list of chemicals known to cause cancer since 1992. According to the Office of Environmental Health Hazard Assessment, lead has multiple toxic effects on the human body. Even at low levels, lead may cause a range of health effects including behavioral problems and learning disabilities. Children six years old and younger are most at risk because this is when the brain is developing.

There is no level of lead exposure that has been proven safe, either for children or for adults. Both the U.S. Centers for Disease Control and Prevention (CDC) and the California Department of Health Services consider any blood lead level more than 5 µg/dl (micrograms of lead per deciliter of blood) to be unsafe for children and for pregnant or nursing women; the CDC recommends public health actions be initiated for blood lead levels that exceed 5 µg/dl.

### **Scope of Contamination**

On August 21, 2015, DTSC announced it will begin the cleanup of residential properties contaminated with lead in an expanded testing area near the Exide battery recycling plant. The initial assessment area included 219 homes.

DTSC's preliminary results from a soil investigation show that properties located between 1.3 and 1.7 miles away from the facility may potentially be affected by Exide's lead contamination<sup>iv</sup>. This area includes up to 5,000 - 10,000 residential properties.

## **Responsible Party**

DTSC will hold Exide Technologies accountable for its lead contamination. DTSC will also identify and pursue others who may be responsible for the lead contamination. DTSC will work collaboratively with federal, state and local agencies to leverage expertise and resources to recover the costs of the cleanup which may also involve the remediation of lead based paint.

## **Outreach and Community Engagement Plan**

DTSC has developed an Outreach and Community Engagement Plan (Plan) which describes planned and ongoing actions for lead sampling and cleanup in the residential areas surrounding the former Exide facility and for the closure of this facility through June 2016<sup>v</sup>.

According to DTSC, the Plan has three goals: 1) Inform affected communities about lead sampling and cleanup activities associated with Exide and the closure of the Exide facility; 2) Collaborate closely with communities, local governments, nonprofit organizations, legislative offices, and other agencies on engagement strategies; and, 3) Protect public health by ensuring that information is made available to communities and that resources are allocated appropriately.

In addition to the Plan, DTSC and SCAQMD jointly created the Exide Technologies Advisory Group in May 2015 to create a forum for the diverse interests of the community to discuss their needs and concerns related to the oversight of closure and cleanup work on and around the Exide facility.

To date, 2,800 residents in the area of investigation have been notified for DTSC's Sampling for Lead in Soil.

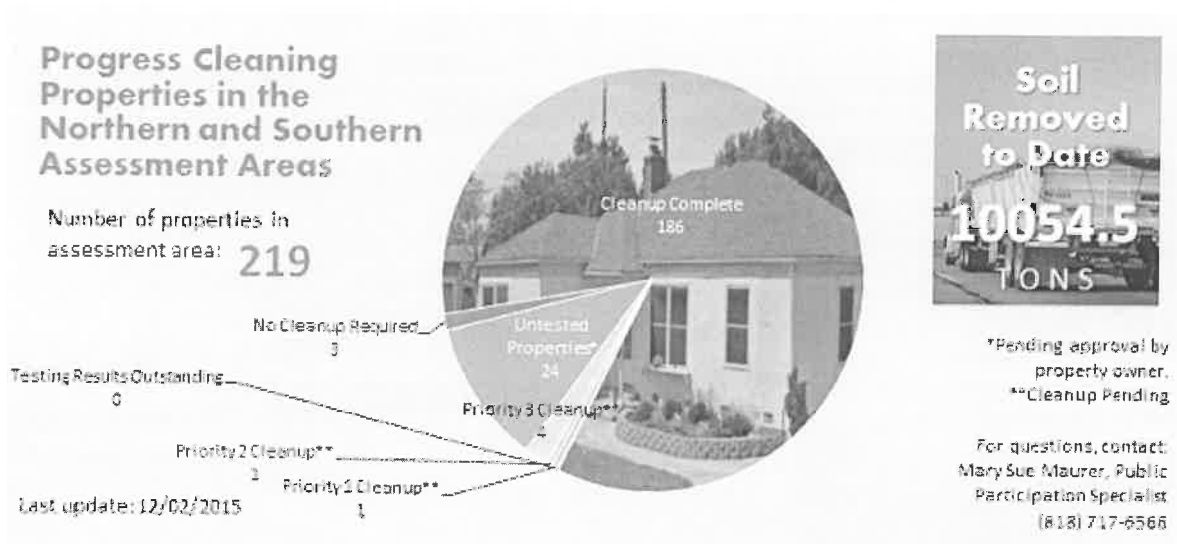
Also, in October 2015, Los Angeles County approved \$2 million to fund a public health outreach campaign to conduct soil testing at 1,000 homes over the next two months and dispatch community outreach workers to neighborhoods around the Exide facility.

## **Residential Cleanup**

As of October 2015, DTSC had taken polluted soil out of the ground at 174 properties in Maywood and Boyle Heights. Of those properties, the interiors of 44 the residences were also vacuumed with High Efficiency Particulate Air (HEPA) filters to remediate for contaminated soil that was likely carried indoors.

When lead contamination reaches a certain threshold (1,200 ppm), federal regulations permit DTSC to do emergency or immediate action on a site. In the areas surrounding Exide, DTSC had identified 219 homes that required action; of those, two homes had lead levels that met the US EPA's threshold. Los Angeles County health officials say they believe about 1,000 homes could have lead levels in exceedance of 1,000 parts per million — California's threshold for hazardous waste.

Of the homes remediated so far, more than 9,800 tons of soil has been removed. Removing lead-contaminated soil from thousands of homes surrounding Exide could result in the most extensive cleanup of its kind in California and among the largest ever conducted in the nation.



### Funding Cleanup

Exide has already deposited \$9 million into an account for residential cleanup and will provide another down payment of \$5 million by March 2020 for residential cleanup.

DTSC has spent most of the \$9 million in residential cleanup money Exide placed in a trust fund and has developed a Sampling and Analysis Work Plan for an additional \$7 million in state funds it obtained for FY 15/16 to expand testing and cleanup.

DTSC is looking for funds to pay for the work while it seeks additional money from Exide and other responsible parties.

How long it will take depends on how many homes are found to be contaminated and whether officials can find the money to clean them. Cleaning each home costs about \$45,000, according to DTSC. If the cleanup grows to thousands of properties, it could cost hundreds of millions of dollars.

<sup>i</sup> <https://www.dtsc.ca.gov/GetInvolved/ReviewPanel/Independent-Review-Panel.cfm>

<sup>ii</sup> <http://dtsc.ca.gov/HazardousWaste/Projects/upload/CLOSURE-PLAN-MAIN-TEXT.pdf>

<sup>iii</sup>

[http://www.envirostor.dtsc.ca.gov/public/view\\_hwmp\\_document.asp?docurl=http://www.hwmpenvirostor.dtsc.ca.gov/regulators/site\\_documents/3046994864/Appendix%201%20%2D%20Closure%20Cost%20Estimate%2Epdf](http://www.envirostor.dtsc.ca.gov/public/view_hwmp_document.asp?docurl=http://www.hwmpenvirostor.dtsc.ca.gov/regulators/site_documents/3046994864/Appendix%201%20%2D%20Closure%20Cost%20Estimate%2Epdf)

<sup>iv</sup> <https://dtsc.ca.gov/HazardousWaste/Projects/upload/DRAFT-EXIDE-OPTION-1F.JPG>

<sup>v</sup> This plan does not capture activities associated with the 219 properties identified as the “Initial Assessment Area”. More information is available at DTSC’s website: [www.dtsc.ca.gov/exide](http://www.dtsc.ca.gov/exide)