SENATE ENVIRONMENTAL QUALITY COMMITTEE
OVERSIGHT HEARING

Oversight of the Department of Toxic Substances Control:
Hazardous Waste Management Program

January 15, 2014
9:30 a.m.
California State Capitol, Room 3191

Over the last year, concerns have been raised by the media, advocacy organizations, some California communities, Members of the Legislature, and from the Department of Toxic Substances Control (DTSC) itself, about some historic deficiencies of DTSC's Hazardous Waste Management Program to adequately and effectively implement its statutory responsibilities for hazardous waste management. This has called into question whether Californians are sufficiently protected from the risks associated with this waste stream.

Oversight by the Senate Environmental Quality Committee will identify and evaluate the gaps or failings within DTSC's Hazardous Waste Management Program. DTSC has been asked to specifically address the following:

- What are the issues that have been found within the program where improvement is needed?
- What has DTSC done to begin to address those issues?
- What are the short and long-term future plans to strengthen this program to ensure adequate protection of public health and the environment?
- What is DTSC going to do to prevent future problems with this program?
- In specific instances what are changes that DTSC is making to illustrate changes?
- Are there statutory changes that could further strengthen California's management of hazardous waste?

BACKGROUND

What Is Hazardous Waste?

Hazardous waste is waste with properties that make it potentially dangerous or harmful to human health or the environment.

The universe of hazardous wastes is large and diverse. Hazardous wastes can be liquids, solids, or contained gases. They can be the by-products of manufacturing processes, discarded used materials, or discarded unused commercial products, such as cleaning fluids (solvents) or pesticides.

Many types of businesses generate hazardous waste. For example, dry cleaners, automobile repair shops, hospitals, exterminators, and photo processing centers may all generate hazardous waste. Some hazardous waste generators are larger companies such as chemical manufacturers, electroplating companies, and oil refineries.

How Much Hazardous Waste Is Generated In California?

In California, more than 100,000 privately and publicly owned facilities generate two million tons of more than 800 types of hazardous wastes per year.

How Many Hazardous Waste Generators Are In Operation In California?

There are more than 110,000 hazardous waste generators in California.

How Many Hazardous Waste Permitted Facilities Are In Operation In California?

There are currently a total of 126 permitted hazardous waste facilities in California. Ninety-one facilities are operating and 34 facilities hold post-closure permits. There is currently one facility operating under interim status.

Resource Conservation and Recovery Act (RCRA)

In the United States, the treatment, storage and disposal of hazardous waste is regulated under RCRA. The requirements of RCRA apply to all the companies that generate hazardous waste as well as those companies that store or dispose of hazardous waste in the United States. Hazardous wastes are defined under RCRA in 40 CFR 261 where they are divided into two major categories: characteristic wastes and listed wastes.

- Characteristic hazardous wastes are materials that are known or tested to exhibit one or more of the following four hazardous traits:
    - ignitability (i.e., flammable)
    - reactivity
    - corrosivity
    - toxicity

- Listed hazardous wastes are materials specifically listed by regulatory authorities as hazardous wastes which are from non-specific sources, specific sources, or discarded chemical products.

In the United States any facility that treats, stores or disposes of hazardous waste is regulated by US EPA under RCRA and must obtain a permit for doing so. Generators and transporters of hazardous waste must meet specific requirements for handling, managing, and tracking waste.

In addition to these federal requirements, states may develop more stringent requirements that are broader in scope than the federal regulations. Furthermore, RCRA allows states to develop regulatory programs that are at least as stringent as RCRA and, after review by US EPA, the states may take over responsibility for the implementation of the requirements under RCRA. California and many other states take advantage of this authority, implementing their own hazardous waste programs that are at least as stringent.

Hazardous Waste Control Act

Prior to the federal enactment of RCRA, in 1972 California established the Hazardous Waste Control Act (HWCA) that created the California Hazardous Waste Control Program within the Department of Health Services (DHS). That law became the model for RCRA.

California's program was broader and more comprehensive than the federal system, regulating wastes and activities not covered by the federal program. The drafters of the early RCRA program intended to provide a "floor" of regulation with the knowledge and expectation that states like California would enact more comprehensive waste management requirements in order to address their own regional or state needs.

California's HWCA was followed by emergency regulations in 1973 that clarified and defined the hazardous waste program:

- Included were definitions of what was a waste and what was hazardous as well as what was necessary for appropriate handling, processing and disposal of hazardous and extremely hazardous waste in a manner that would protect the public, livestock, and wildlife from hazards to health and safety.
- The early regulations also established a tracking system for the handling and transportation of hazardous waste from the point of waste generation to the point of ultimate disposition, as well as a system of fees to cover the costs of operating the hazardous waste management program.
- Advancing the newly developing awareness of hazardous waste management issues, the program established a technical reference center, for public and private use, dealing with all aspects of hazardous waste management.

Final regulations were adopted the following year.

History of DTSC's Hazardous Waste Management Program

Hazardous waste management was originally created as a unit of the Vector and Waste Management Branch with four staff within DHS.

In 1972, the enactment of HWCA established the California Hazardous Waste Control Program within DHS.

One of the early tasks for the program was to survey existing hazardous waste generation in order to determine the need for new or expanded facilities to meet future waste management demands. This was a large responsibility in that there were nearly 10,000 large waste generators in California that produced nearly 5 million tons (or 400,000,000 gallons) of hazardous waste annually. Included in these waste streams were some 22,000 different substances.

The facility permitting program was mandated by AB 1593 (Lockyer, 1977), which took effect in 1978. At that time, it was estimated that there were 1,300 major facilities in the state and as many as 6,000 small operations that would need to be permitted. From its inception, the permitting program was designed to protect public health and the environment through the issuance of operating permits for facilities which treat, store, or dispose of hazardous wastes. The permit

program provided a mechanism for in-depth inspections and a permit review of each hazardous waste facility at least every ten years.

During 1980, the Hazardous Material Management Section was elevated to Branch status and in 1981 the Branch was reorganized creating the Toxic Substances Control Program (TSCP).

AB 1593 (Lockyer) gave TSCP clear inspection authority, including the right to enter and inspect hazardous waste facilities, collect and test waste samples, and to audit and review records required to be kept by facility operators.

The Surveillance and Enforcement (S&E) program, established in 1976, by 1981 had grown to 22 inspectors from its initial field staff of six. Inspectors monitored facilities that generated, transported, treated, stored or disposed of hazardous wastes.

The purpose of field inspections was to ensure that hazardous waste generators, transporters and facility operators were complying with the laws and regulations. When the program began to take shape, it was estimated that the regulated community included 6,500 major generators, 440 waste transporters, 1,300 major on-site treatment, storage and disposal facilities, and 67 landfills.

During the 1990s major organizational changes took place within California's environmental regulatory programs. In 1991, the Governor's Reorganization Plan created the California Environmental Protection Agency. Under this order, the Toxic Substances Control Program under DHS became the new DTSC.

Today, DTSC's Hazardous Waste Management Program has 191.5 staff:

a. Enforcement & Emergency Response = 102
    - Inspectors & Enforcement staff = 70
    - Emergency Response staff = 7
    - State CUPA staff (Imperial & Trinity Counties) = 13
    - Managers & Support staff = 12
b. Permitting staff = 27.5
c. Policy & Program Support staff = 59
d. Executive Administration staff = 3

HAZARDOUS WASTE MANAGEMENT PROGRAM TODAY

Permitting. Each hazardous waste management facility that treats, stores, handles and/or disposes of hazardous waste is required to have a permit or other form of authorization from DTSC.

The permit defines, in great detail, the requirements and restrictions under which the facility may operate, either by describing the conditions in the permit language itself, or by referencing the operation plan submitted by the facility as part of the permit application.

Because California regulates some wastes and some activities that are not regulated under the federal RCRA, DTSC created a "tiered permitting" system to provide appropriate levels of authorization. There are five tiers of permits available in California. The type of permit required depends on the wastes being managed and the activities being conducted.

Full permit tiers, include two types:

- RCRA-equivalent permit: for wastes and activities regulated under RCRA;
- California-only "full" permit: for wastes and activities that do not require a permit under RCRA, but that are not eligible for one of the lower tiers;

Standardized permit tiers (for wastes and activities not regulated under RCRA), include three types:

- Permit by Rule (PBR): for generator treatment of specified wastes by specified methods;
- Conditional Authorization (CA): for generator treatment of specified wastes by specified methods; more limited than PBR;
- Conditional Exemption (CE): for generator treatment of specified wastes by specified methods; more limited than CA.

Compliance And Enforcement. The Enforcement and Emergency Response Program (EERP) monitors hazardous waste transfer, storage, treatment and disposal facilities for illegal activity; including electronic manifest surveillance and monitoring of registered hazardous waste haulers; and takes appropriate enforcement action against hazardous waste handlers that violate hazardous waste requirements found through routine inspections, complaint investigations, and focused enforcement initiatives. EERP also provides compliance assistance.

Transporter Database And Links. To operate in California, all hazardous waste

transporters must be registered with DTSC and meet operating and manifesting requirements. DTSC's Hazardous Waste Management Program has available a searchable registered transporter database, fact sheets, and information on consolidated manifesting and requirements for transporters of Hazardous Wastes of Concern (explosives, poisons and poisonous gases).

Tracking. Existing law requires that most hazardous waste be transported from hazardous waste generators to permitted recycling, treatment, storage, or disposal facilities (TSDF) by registered hazardous waste transporters, and that most shipments must be accompanied by a hazardous waste manifest.

The current hazardous waste manifest system is a set of forms, reports, and procedures designed to seamlessly track hazardous waste from the time it leaves the generator facility where it was produced, until it reaches the off-site waste management facility that will store, treat, or dispose of the hazardous waste. US EPA revised the Uniform Hazardous Waste Manifest in March 2005. The system allows the waste generator to verify that its waste has been properly delivered, and that no waste has been lost or unaccounted for in the process.

The key component of this system is the Uniform Hazardous Waste Manifest which is a form prepared by all generators who transport, or offer for transport, hazardous waste for off-site treatment, recycling, storage, or disposal. Currently, the manifest is a paper document containing multiple copies of a single form. When completed, it contains information on the type and quantity of the waste being transported, instructions for handling the waste, and signature lines for all parties involved in the disposal process. Each party that handles the waste signs the manifest and retains a copy for themselves. This ensures critical accountability in the transportation and disposal processes. Once the waste reaches its destination, the receiving facility returns a signed copy of the manifest to the generator, confirming that the waste has been received by the designated facility.

For more than a decade, US EPA has actively pursued adopting an alternative tracking approach for hazardous waste shipments to the current paper-based manifest tracking system. On October 5, 2012, the President signed the Hazardous Waste Electronic Manifest Establishment Act into law. The act mandates that US EPA establish and implement an information technology system designed to track hazardous waste shipments in lieu of the paper-based system. Once developed, users of the system will be able to create manifests electronically and transmit them through the system.

Management and Disposal. Different methods, based on the type of hazardous waste, are used to ensure protection of human health and the environment. These methods include reclamation and recovery (e.g., metals and solvent recovery, energy recovery); destruction or treatment prior to disposal at another site (e.g., incineration, chemical reduction, biological treatment, neutralization); and disposal (land treatment, landfills, surface impoundments, deep well injection).

Each of these methods may have different and varying permit requirements from multiple regulatory agencies.

2013 EVALUATION OF HAZARDOUS WASTE MANAGEMENT PROGRAM ISSUES

DTSC Audit. In February 2013, DTSC contracted with CPS HR Consulting to conduct a permitting process review and analysis. The objective of the study was to provide a review of the DTSC permit process to develop a standardized process with clear decision criteria and corresponding standards of performance.

The report came back with a series of recommendations that include improvements be made in:

- Permitting timeliness (noting that an increase in program staffing would be necessary to do so).
- Management practices to maintain a consistent, uniform management structure and organizational structure.
- Standardization of the permit process for new and renewal permits to make the process less complex to understand and implement.
- Changes in the renewal process to strengthen the criteria for approval and denial of permits.
- Data entry and validation of permitting activities.

DTSC notes that it is incorporating many of the audit recommendations into its strategic plan for program improvements.

The Senate Office of Oversight and Outcomes Review. Early in 2013, Consumer Watchdog, a consumer advocacy organization, released a report entitled Golden Wasteland, asserting that *"*We have some of the toughest environmental laws in the nation, and some of the weakest enforcement. The DTSC epitomizes this problem, allowing serial polluters to cut deals with the department out of court time and again instead of revoking their permits, letting polluters operate on

expired permits for years at a time, and levying wrist-slap penalties instead of applying maximum fines. The DTSC sits on its hands while hazardous waste management companies and large-scale generators of hazardous waste poison communities." The report outlines a range of permitted facilities in California and makes specific accusations against DTSC and its staff regarding the handling of permitting and enforcement at those sites.

In light of the serious nature of the assertions in this report, Senator de León submitted a letter to the Senate Office of Oversight and Outcomes (office) asking for a thorough review of each of the cases listed in that report.

The office is currently finishing its review. An early draft of the office's review document raises questions about the validity of the allegations and the office is asking consumer watchdog and DTSC to provide more information.

That final review document is due to be released by the office in the coming weeks.

DTSC Strategic Plan. In December of 2013, DTSC released an updated 2011 through 2016 strategic plan to serve as its guidance document for the goals of DTSC stating:

"The Strategic Plan is based on feedback received through an Environmental Scan that looked at the economic, social, and technological trends and activities and how they affect DTSC's ongoing activities. We also base the plan on a Strengths, Weaknesses, Opportunities, and Threats (SWOT) analysis and stakeholder feedback.

The Strategic Plan focuses our attention on a few key factors that affect the Department. These include the need to reduce hazardous chemicals in products, partner with green industry to foster safer technologies, the desire to improve DTSC's process to become more simplified and efficient, and a focus on communities disproportionately affected by toxic harms.

The DTSC Strategic Planning Process and the Performance Measurement System are essential components of the Performance Management Initiative and are crucial to driving work processes linked to measuring performance."