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# Independent Review Panel

DEPARTMENT OF TOXIC SUBSTANCES CONTROL



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## **DTSC Independent Review Panel Eighth Report to the Governor and the Legislature Pursuant to Health and Safety Code Section 57014**

**October 18, 2017**

### **Introduction**

The Department of Toxic Substances Control (DTSC) Independent Review Panel (IRP) submits this quarterly report in compliance with Health and Safety Code (HSC) section 57014, which became law in SB 83 (Chapter 24, Statutes of 2015). HSC section 57014(d) requires the IRP to make recommendations for improving the Department's programs. HSC section 57014(f) requires the Panel to report to the Governor and Legislature every 90 days on DTSC's progress in reducing permitting and enforcement backlogs, improving public outreach, and improving fiscal management.

The IRP concluded that DTSC's source reduction and consumer products programs also were important topics for review and recommendations in conformity with HSC section 57014(d) and that recommendations for those programs should be submitted in the quarterly reports required by HSC section 57014(f).

The IRP's work plan calls for the Panel to submit recommendations on source reduction and consumer products in its July 2017 report. However, the IRP decided at its June 14, 2017 meeting to submit them in a subsequent report because additional discussion was needed for program review.

The Panel previously submitted quarterly progress reports on January 28, 2016; April 21, 2016; July 26, 2016; October 24, 2016; January 20, 2017; April 21, 2017; and July 14, 2017. The first report addressed the following five DTSC topics: budget, permitting, enforcement, public outreach, and fiscal management. It offered initial recommendations and information requests on each of those items. The next five reports individually addressed DTSC's permitting, enforcement, public outreach, fiscal management, and site mitigation, in that order, with the second report also including initial recommendations and information requests on DTSC site mitigation. Most of them included program summaries, recommendations to the Governor and Legislature, recommendations for DTSC, suggested performance metrics, and information requests. The seventh and last report explained that the IRP had begun its review of the source reduction and consumer products programs, but was not yet ready to offer recommendations

for those programs. It promised to include them in the next quarterly report or a special, non-statutorily required report to be submitted prior to the October 2017 report.

The Panel devoted portions of its June 14, August 9, and September 11, 2017 meetings to DTSC's source reduction and consumer products activities. DTSC provided the Panel with presentations on both subjects, and stakeholders also made presentations and submitted written and verbal comments. In addition, the IRP surveyed a small cohort of stakeholders about DTSC programs, including source reduction and consumer products, in August 2016.

Using the information gathered, this report summarizes the two programs and, for each, offers recommendations for the Governor and Legislature, recommendations for DTSC, and suggested performance metrics. The report additionally makes an information request about the consumer products program.

## **Source Reduction and Consumer Products Summary**

The statutes pertaining to hazardous waste source reduction and safer consumer products in California are generally located in Article 11.9 and Article 14 of Chapter 6.5, Division 20, of the HSC. Article 11.9 is the Pollution Prevention and Hazardous Waste Source Reduction and Management Review Act. Article 14 is devoted to Green Chemistry. However, there are other articles in Chapter 6.5 that pertain to source reduction and/or consumer products, such as: Article 10.01, Management of Perchlorate; Article 10.1.1, Metal Containing Jewelry; Article 10.3, Electronic Waste; Article 10.4, Toxics in Packaging Prevention Act; Article 10.5, The Lead-Acid Battery Recycling Act of 2016; Article 10.5.1, Lead Wheel Weights; and Article 13.5, Motor Vehicle Brake Friction Materials.

DTSC's source reduction and consumer products programs are generally of more recent creation than the Department's other core programs, such as the Hazardous Waste Management Program and the Brownfields & Environmental Restoration Program, and have undergone more changes in recent years.

The roots of DTSC's pollution prevention program go back to AB 2948 (Chapter 1504, Statutes of 1986), which required the Toxic Substances Control Program of the Department of Health Services (DTSC's predecessor agency) to prepare and adopt a state hazardous waste management plan in conjunction with hazardous waste management plans adopted by counties and regional councils of governments. The statewide plan was never completed for a variety of reasons, but lessons learned from the implementation attempts formed the basis for significant policy changes. Whereas the AB 2948 planning process was intended to facilitate the siting of new hazardous waste facilities to ensure that California possessed adequate capacity, the failure of the process, along with continuing concerns about the insufficient number of hazardous waste incinerators and the inability to site new facilities, forced the development of strategies to reduce the amount of hazardous wastes generated.

The result was the Hazardous Waste Source Reduction and Management Review Act of 1989, which required facilities that generate more than 12 long tons of hazardous waste a year to prepare a source reduction review and plan as well as a hazardous waste management

performance report every four years and for DTSC to select two categories of generators by SIC Code every two years and review their plans to determine if they were prepared properly. DTSC also was required to disseminate information about source reduction and other hazardous waste management approaches to hazardous waste generators for their consideration and possible use. The act defined source reduction as one of the following: (1) an action that causes a net reduction in the generation of hazardous waste; or (2) an action taken before the hazardous waste is generated that results in a lessening of the properties that cause it to be classified as a hazardous waste. By definition, source reduction did not include actions taken after a hazardous waste is generated, actions that merely concentrate the constituents of a hazardous waste to reduce its volume or that dilute the waste to reduce its hazardous characteristics, actions that merely shift hazardous wastes from one environmental medium to another environmental medium, or treatment.

SB 1916 (Chapter 881, Statutes of 1998) amended the act nine years later. It sought to expand the state's hazardous waste source reduction activities beyond those directly associated with evaluation reviews and plans, and to add education, outreach, and other voluntary techniques. It also intended to maximize the use of DTSC's resources by cooperating with other entities. The measure created the California Source Reduction Advisory Committee. It required the Department to establish a technical assistance and outreach program to promote implementation of model source reduction measures in priority industry categories and to expand its source reduction program to provide training and resources to certified unified program agencies (CUPAs) as well as other third-party programs that provided technical assistance to generators in identifying and applying methods of source reduction. The measure deleted the biennial report requirement for DTSC and instead required the Department to prepare a work plan every other year, in consultation with the committee, to implement the act. SB 1916 also required DTSC, in consultation with the committee, to develop a low-cost voluntary program to reduce the generation of hazardous waste by large businesses. However, the measure also provided that, if DTSC found that it was not possible to implement such a low-cost program while achieving a significant environmental benefit, the Department would not be required to implement it, as long as the committee concurred.

AB 913 (Chapter 578, Statutes of 2011) amended the act 13 years later to require DTSC to develop a California Green Business Program. Its purpose was to support and assist local government programs that provided for the voluntary certification of small businesses that adopt environmentally preferable business practices. AB 913 essentially codified a somewhat informal, collaborative network that began in the San Francisco Bay Area in the early 1990s and spread statewide. DTSC had begun to assist it in the late 1990s.

The next major change took place the following year as the result of a budget trailer bill. SB 1018 (Chapter 39, Statutes of 2012) essentially made source reduction a subset of pollution prevention, while at the same time reducing un-utilized and under-utilized source reduction activities, at least partially to address the state's fiscal crisis of that time.

The new emphasis on pollution prevention was reflected by a renamed act. It became what it is called today: the Pollution Prevention and Hazardous Waste Source Reduction and Management Review Act. The measure defined pollution prevention to mean the reduction of chemical sources that have adverse impacts on public health and the environment, including,

but not limited to, source reduction. It provided for a California Pollution Prevention Advisory Committee rather than the California Source Reduction Advisory Committee. The measure often substituted the term pollution prevention for the term source reduction in the previous version of the act. For example, whereas the act previously stated that it was the intent of the Legislature to expand the state's hazardous waste source reduction activities beyond those directly associated with source reduction evaluation reviews and plans, it now stated that it was the Legislature's intent to expand the state's *pollution prevention* [italics added] activities beyond those directly associated with source reduction evaluation reviews and plans.

However, SB 1018 made pollution prevention, including source reduction, contingent upon available funding and DTSC discretion. It explicitly stated that DTSC's duty to implement the act was contingent upon, and limited to, the availability of funding, although it did not eliminate the requirements for generators. The measure deleted the requirement that DTSC establish various source reduction technical assistance and outreach programs. SB 1018 instead "authorized" the Department to establish various pollution prevention programs for businesses. Support for the California Green Business Program was made discretionary. The measure deleted the requirement that DTSC select at least two categories of generators every two years for enforcement activities. Instead of requiring DTSC to prepare the draft work plan once every two years, the measure authorized the Department to prepare a plan on a periodic basis. Finally, SB 1018 repealed the requirement to develop a low-cost voluntary program to reduce the generation of hazardous waste by large businesses.

The Pollution Prevention and Green Technology page of the DTSC website currently provides links to a collection of unevenly maintained information for consumers and businesses, much of it from shortly after 2012 or earlier. Although pollution prevention no longer exists as a DTSC program from an organizational standpoint, no explanation is offered about the actual status of the program as a whole. The page arguably gives users the impression that pollution prevention still exists as a viable program. There is a link to a P2 Program Overview that displays information about the program's mission, objectives, and "what P2 can do for you." The overview offers a phone number for more information about the Office of Pollution Prevention and Green Technology, but there was no answer when the IRP dialed it. There is a link to a website section on the California Green Business Program, with no explanation that it no longer exists as a DTSC program. There is a link to the California Pollution Prevention Advisory Committee, but the link takes the user to an "Inactive Content" page.

The Pollution Prevention and Green Technology page has a helpful link to a page on the act's requirements for generators. That page explains that qualifying generators must continue to complete the required plans and reports, but that they are no longer required to submit them to DTSC. It notifies generators that they must still make the documents available to DTSC or the CUPA upon inspection. A link takes the user to another page with detailed guidelines to help generators prepare the documents.

The Pollution Prevention and Green Technology page of the DTSC website also has links to pages that are devoted to the hodgepodge of statutory requirements to protect consumers from toxics in products or prevent pollution that, with one exception, are not located in Article 11.9 or Article 14 of Division 20, Chapter 6.5 of the HSC. (The exception is the healthy nail salon requirements in Article 14.) At times, it is difficult to determine from the website which of these

statutes are actively enforced. There is a page for the Toxics in Products Branch that offers links to reports and information on many of these efforts, but DTSC no longer has a Toxics in Products Branch. Staff members in the Hazardous Waste Management Program or the Safer Consumer Products (SCP) Program administer these programs, apparently depending on factors such as program history and individual staff expertise.

Even before the passing of AB 913 and SB 1018, the Legislature and DTSC were looking for other, newer approaches. The Legislature commissioned a report prepared by UC Centers for Occupational and Environmental Health entitled *Green Chemistry: Cornerstone to a Sustainable California*. The 2008 report identified several key gaps that it said impeded government's ability from protecting the public. There was a data gap pertaining to the health and environmental effects of the approximately 80,000 industrial chemicals used in the U.S., with only a small percentage of them adequately characterized. There was a safety gap in that the federal Toxic Substances Control Act (TSCA) and its regulatory framework were not sufficiently protecting the public. Finally, there was a technology gap amounting to insufficient incentives for investment in safer chemicals. CalEPA and DTSC launched their Green Chemistry Initiative (GCI) somewhat in parallel with the UC effort and the outcome was the California Green Chemistry Initiative Report in 2008. The report made six policy recommendations: (1) expand pollution prevention; (2) develop green chemistry workforce education and training, research, and development, and technology transfer; (3) create an online product ingredient network; (4) create an online toxics clearinghouse; (5) accelerate the quest for safer products; and (6) move toward a cradle-to cradle economy to leverage market forces to produce products that are "benign by design." The report endorsed the green chemistry concept, which DTSC Director Maureen Gorsen defined in her report transmittal letter as "a systematic scientific and engineering approach that seeks to reduce the use of hazardous chemicals and the generation of toxic wastes by changing how society designs, manufacturers, and uses chemicals in processes and products." She added, "Rather than managing wastes after end-of-product life (or 'cradle to grave'), green chemistry shifts our focus to designing chemicals, processes, and goods that have less or no adverse effects—throughout their lifecycle ('cradle to cradle')—on California's people and out environment."

That same year the Legislature passed the state's first green chemistry legislation: AB 1879 (Chapter 559, Statutes of 2008) and SB 509 (Chapter 560, Statutes of 2008). AB 1879 required DTSC to adopt regulations by January 1, 2011 to establish a process by which chemicals or chemical ingredients in consumer products could be identified and prioritized for consideration as being chemicals of concern. It further required the Department to establish a process by the same date whereby chemicals of concern in consumer products, and their potential alternatives, could be evaluated to determine how best to limit exposure or to reduce the level of hazard, and to specify actions that could taken after the analysis. The measure also required DTSC to establish a Green Ribbon Science Panel for advice and assistance. SB 509 required the Department to establish a Toxics Information Clearinghouse for the collection, maintenance, and distribution of specific hazard traits and environmental and toxicological end-point data. The measure also exempted certain drugs, dental restorative materials, medical devices, food, related packaging, pesticides, and mercury-containing lights (until 2012) from the program.

**[Paragraphs on Safer Consumer Products Program will be inserted here. They will cover: 2013 regulatory framework, redirecting resources from pollution prevention, implementation of the regulations (Candidate Chemicals List, initial proposed list of Priority Products, 2015-17 Priority Product Work Plan, Alternatives Analysis Guide, status of work/regulatory process on proposed Priority Products, preliminary findings on other products in Priority Product Work Plan, and next Priority Product Work Plan), CalSAFER, petition process and role of the Governor/Legislature, staffing/resources, strengths and uniqueness of program, limitations of program and problems to overcome, and plans for future performance metrics.]**

Since the redirecting of resources to the SCP Program in 2012, DTSC has re-engaged on source reduction/pollution prevention, this time with a new emphasis on environmental justice. In 2015, the Department requested and received a budget augmentation of \$840,000 and six positions for two years to implement a Community Protection and Hazardous Waste Reduction Initiative. DTSC proposed to select up to three pilot projects to reduce hazardous wastes that are generated in significant quantities, can pose substantial risks to human health in the environment, and are treated or disposed of in communities that are disproportionately burdened by multiple sources of pollution. DTSC also proposed to create a stakeholder advisory committee for the initiative that would be modeled after the inactive California Pollution Prevention Advisory Committee. For each of the pilot projects, DTSC proposed to produce a set a findings and recommendations by June 30, 2017.

DTSC designed the initiative to leverage its goal to reduce by 50 percent the hazardous waste generated in California and disposed into hazardous waste landfills by 2025, a goal the Department announced in 2013 when it approved the expansion of the landfill at the Kettleman Hills facility, one of the state's two hazardous waste landfills. (According to information DTSC provided the IRP at the Panel's June 14, 2017 meeting, hazardous waste generation in California trended downward from about 2.4 million tons in 2000 to about 1.8 million tons in 2015. However hazardous waste generation increased slightly between 2013 and 2015.)

DTSC and the committee ultimately selected four pilot project topics: contaminated soils, petroleum refinery wastes, organic solvent wastes, and lead-acid batteries. DTSC added the fourth topic after the Governor, on February 17, 2016, directed the Department to evaluate lead-acid batteries under the initiative and stated that the analysis could result in identifying lead-acid batteries as an SCP Program Priority Product. The methodology for the first three topics involved data gathering, identifying and evaluating one or more waste reduction proposals or treatment technologies, and developing various work products, including recommended cost-effective strategies to carry out identified reductions. The methodology for the lead-acid battery topic involved identifying and quantifying the impacts of all aspects of lead-acid battery manufacturing, handling, transportation, treatment or recycling operations, and illegal disposal. This work is expected to lead to proposed goals in the reduction of exposure to hazardous constituents, volume of spent lead-acid battery generation, or volume of wastes generated by recycling and treatment.

The IRP hopes the final report will offer promise that new waste reduction measures and technologies can impact the generation of hazardous waste. Since the current requirements for

generators to develop pollution prevention are not enforced, the state may need to consider mandatory waste reduction measures and technologies if they are found to be viable.

### **Recommendations for the Governor and Legislature to Improve Source Reduction Program**

1. Decreased hazardous waste generation and disposal in California will eventually be accelerated by successful implementation of the Safer Consumer Products and hazardous waste reduction efforts. The Governor's Office, the Legislature, and DTSC need to start examining future revenue sources to replace decreasing revenue.
2. CUPAs should have authority to inspect and require mandatory waste reduction plans be implemented.

### **Recommendations for the DTSC to Improve Source Reduction Program**

1. DTSC should publish plan and milestones for next step from pilot studies.

### **Recommended Goals and Performance Metrics for Source Reduction Program**

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### **Recommendations for the Governor and Legislature to Improve Safer Consumer Products Program**

1. The Safer Consumer Products (SCP) branch of the DTSC is a young program that will require appropriate resources to grow and function effectively and to its maximal capability. As the program develops, there will be a need for the legislature to periodically review the progress and provide necessary resources.
2. Provide clear authority to DTSC regarding decision making for the use of feasible alternate chemical substitutions to replace more toxic compounds in consumer products.
3. Fee to pay for SCP.

### **Recommendations for the DTSC to Improve Safer Consumer Products Program**

1. Because of the innovative nature of the SCP program, there is limited precedence that can be used as a guide. Therefore, it will be crucial to have clear action items to address

the strategic plan associated with the Vision and Mission of the branch. These reports should be provided periodically so that the program can be assessed and appropriate resources allocated.

2. Provide several set meetings in which stakeholders can come together and discuss the priority products list chosen and actions taken by the department so that there is transparency and less dissent. Although there is a mechanism for initial public engagement, these should be continuous so that the views of various stakeholders are considered throughout the process.
3. Provide standards for the 'Alternative Analysis' process so that there is consistency amongst the reports and provide a DTSC decision-making criteria that is justifiable, rigorous, and supportable by the data.
4. DTSC should evaluate in writing its compliance with its first SCP plan.
5. DTSC should have milestones and metrics for the SCP, including some way to track source reduction.
6. DTSC should publish a timeline for each product it identifies.

### **Recommended Goals and Performance Metrics for Safer Consumer Products Program**

1. The most objective and accurate performance metrics for the SCP program would be biomonitoring data showing a reduction in the environmental and biological burden of the priority products that have been replaced by safer chemicals. This information will not be readily available and may take several years to assimilate. Thus, the SCP program should consider more subjective assessments by conducting surveys that monitor the perception of the various stakeholders as to the success of the program.
2. The branch should compile a list of short-term and long-term goals and periodically assess how many of these goals have been achieved.

### **Information Requests to DTSC on the Safer Consumer Products Program**

1. Periodic reports on the activity and progress will allow the IRP, legislature, and stakeholders to review the program and provide feedback that will ensure the success of this branch of DTSC.

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