



DTSC's Model Shop Program

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Outlines

- California Statutory basis for Pollution Prevention (P2)
- Past & Current DTSC P2 projects
- Challenges of implementing a Model Program
- Success Stories



California P2 Laws & Regulations

- Hazardous Waste Source Reduction and Management Review Act of 1989 (SB 14) [Also known as SB 14 or Hazardous Waste Source Reduction Act] for Generators of 12,000 kg hazardous waste or >12 kg extremely hazardous waste in a **calendar year** [SB14 documents-HSC §25244.15, §25244.19, §25244.20]
 - Implementing regulations (Title 22, California Code Of Regulations (CCR), Div. 4.5, Chapter 31)
 - **Statutory Enforcement penalties** - Up to \$1000/day
- Senate Bill 1916 of 1998 promoted source reduction implementation measures using education, outreach, and other effective voluntary techniques.
- Assembly Bill 721 of 2005. Implemented model shop program supporting statutorily authorized loan program for Metal Finishers
- Pollution Prevention and Hazardous Waste Source Reduction & Management Review Act- **Amended June 27, 2012.**

California P2 Laws & Regulations-cont'd

- Annual Waste Minimization Certification Statement on good faith efforts to reduce quantity and toxicity of HW for SQG [T22,CCR,66262.27(b)]
- Annual Waste Minimization Certification statement of program in place to reduce quantity and toxicity of HW for LQG [T22,CCR,66262.27 (a)]
- Biennial Report certification for description of the efforts undertaken during the year to reduce the volume and toxicity of waste generated, and of the changes in volume and toxicity of waste actually achieved during the year in comparison to previous years for LQG [T22, CCR, 66262.41(b)(6) &(7)]

California P2 Laws & Regulations-cont'd

- Certification by generator uses the Consolidated manifest that it has established a program to reduce the volume or quantity and toxicity of the hazardous waste to the degree, as determined by the generator, to be economically practicable [HSC § 25160.2(b)(4)(H)]
- Annual certification by generator treats onsite under Conditional authorization [HSC § 25200.3(c)(2) & § 25202.9]
- Annual certification by generator treats onsite under Permit by Rule (PBR) [T22, CCR, § 66262.45(c)]
- Annual Certification by generator who operates Transporter Treatment Unit (TTU) [T22, CCR, § 66262.45(b)]
- Annual certification as part of the facility's operating record [T22, CCR, § 66264.75(h)&(i)]
- Annual certification as part of permit conditions for onsite permitted facility [HSC§25202.9]
- *Pollution Prevention Plan Requirements for Permits Under federal NPDES Industrial Storm-water Regulations- California Water Code, sec.13263.2- P2 Plan*

HW P2 Laws & Regulations Goals

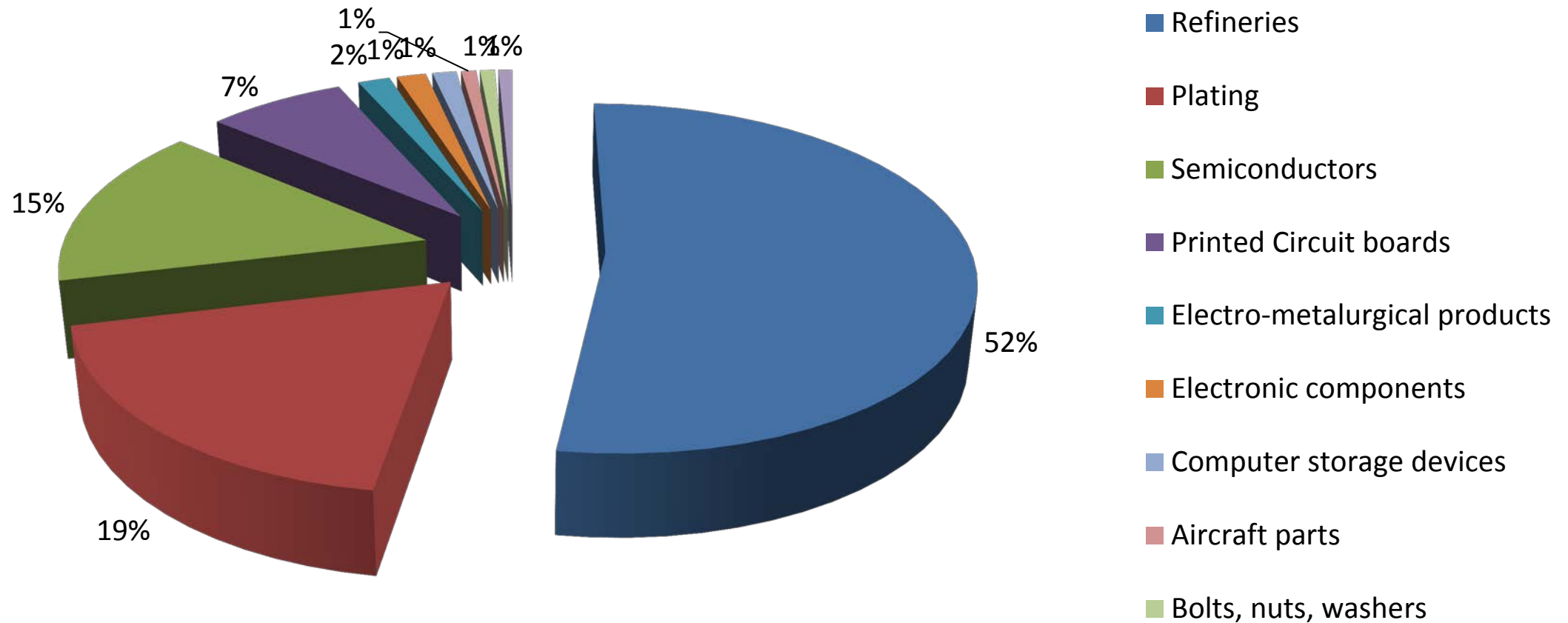
- Businesses are required to look at the processes that generated the most amount of waste, and implement measures to reduce at its source.
- Reduce the release to the environment of chemicals that have adverse and serious health or environmental effects, and
- Document hazardous waste information and make it available to communities and general public.
- DTSC to develop regulations, format, provide assistance, and a system to track source reduction information by generator categories

Examples of DTSC Past Pollution Prevention Projects

- **Recognition Programs**
 - Vehicle Service and Repair
 - Auto Body & Paint
 - Metal Finishing Model Shop
 - California Green Business
- **Marine Vessel Service and Repair (MVSR)**
- **Nail Salon Industry – Greener Alternatives Project**
- **Chemical Industry Challenge**
- **California Local Government Pollution Prevention Partnership**
- **SB14 Assessments Reports** [e.g., [Metal Finishing Industry](#) ; [California Plastics Industry](#) ; [California Pharmaceutical Industry](#) ; [California Semiconductor Industry](#) ; California Petroleum Refinery; [California Chemical Industry](#); California Petroleum Refinery]
- **SB14 Compliance Initiative**
- **Others (e.g., Border, Focused Industry, P2 Integration in DTSC Regulatory Activities, etc.)**



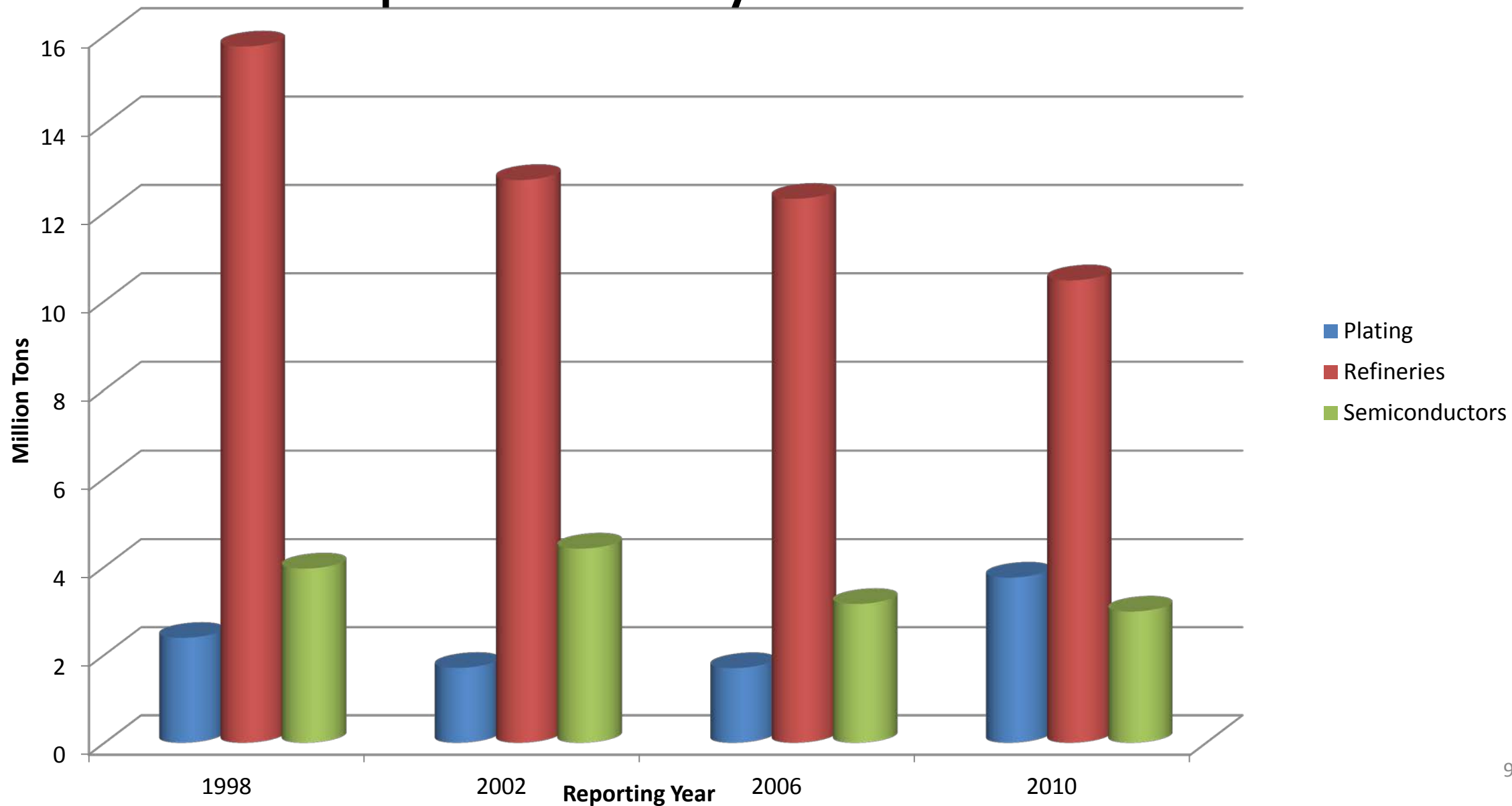
2010 Top 10 California Industry Sectors Hazardous Waste Generation



As of 1/30/12- Example of the data DTSC compiled from generators reporting their waste information on summary progress reports (SPR) Note- this is not inclusive of all waste generated in the state- only those required to report – largest generators.

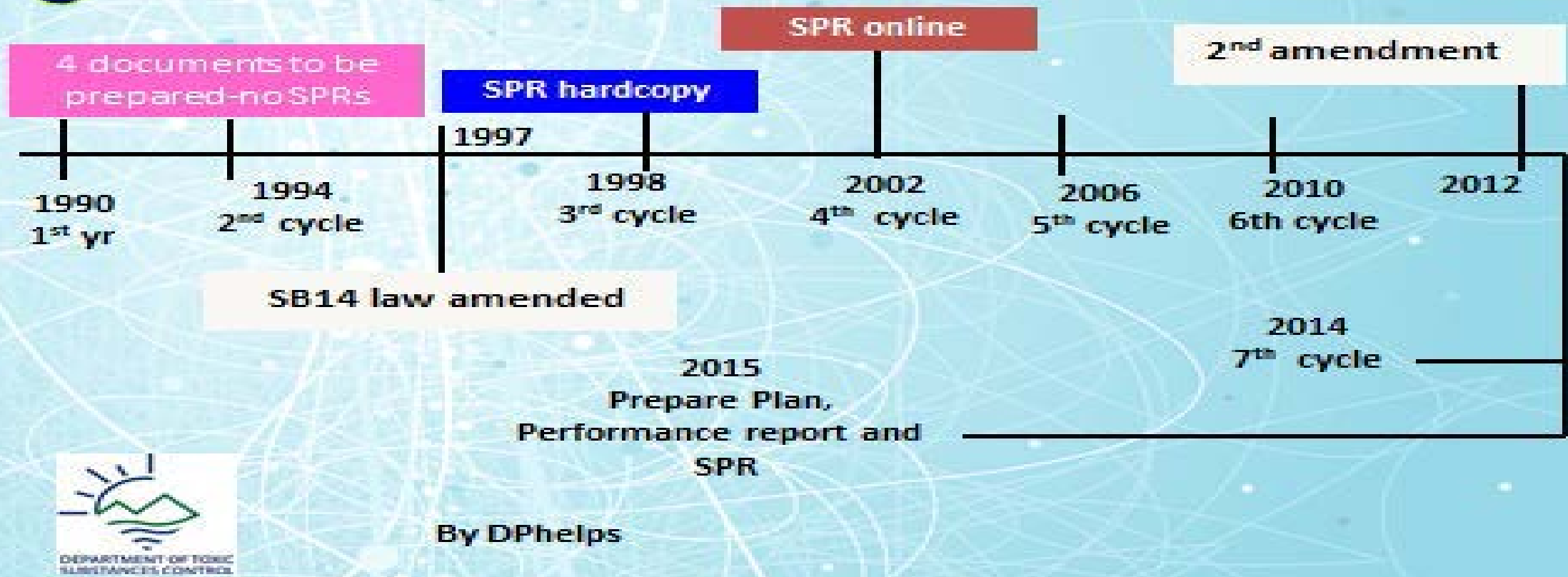


Top 3 Industry Sectors Trend





SB14 history (24 years) 1989-present



As of June 27, 2012, SB14 generators – all three SB14 documents (the Plan, the Performance Report and the Summary Progress Report), the law no longer requires generators to submit the Summary Progress Report to DTSC. However, the Summary Progress Report must be retained on site with the other documents.



HW Source Reduction Recognition Program

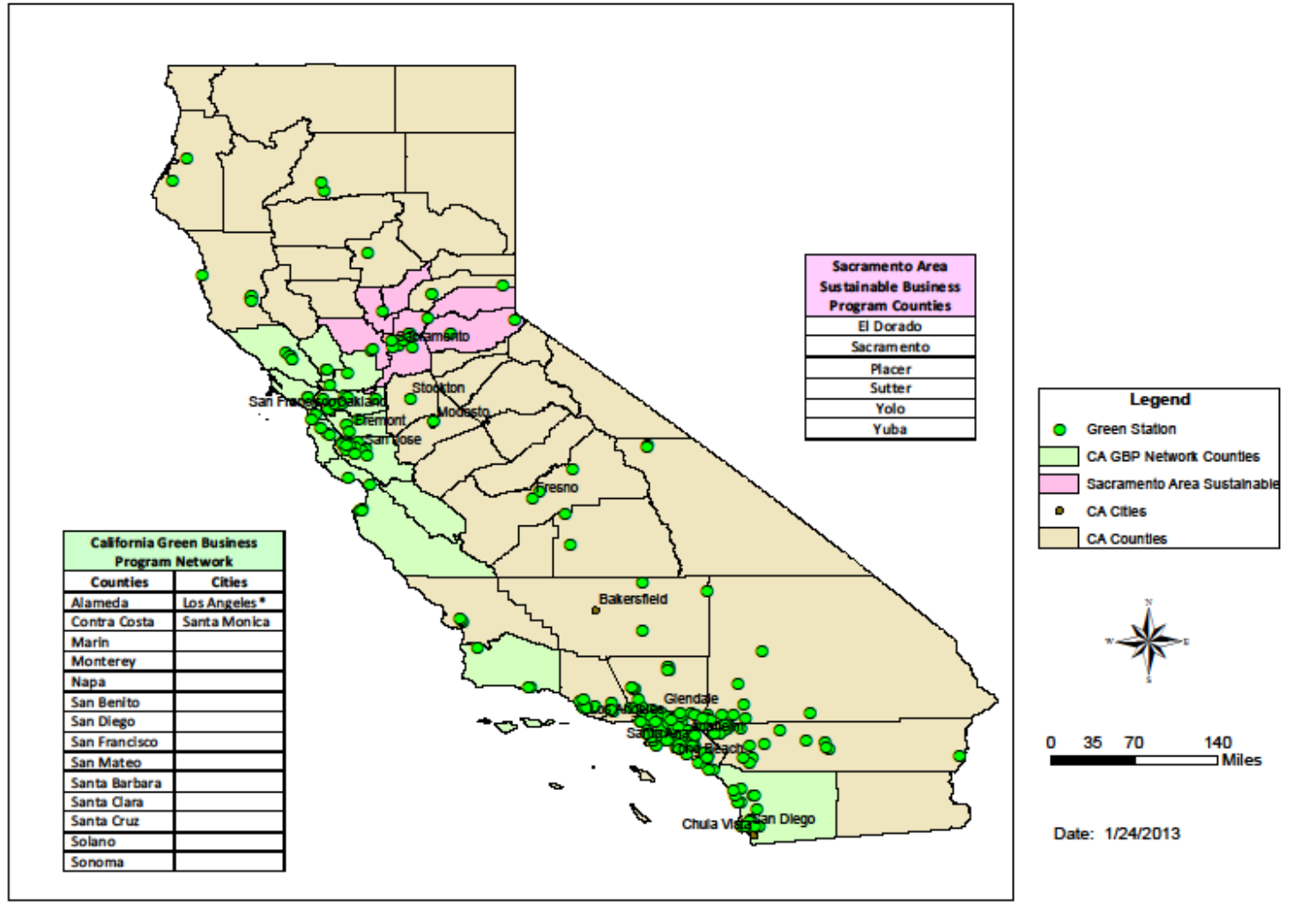
- In 1998, the amended Act of SB1916 required DTSC to:
 - Select two industry sectors for two-year projects
 - Typically large or technically complex category
 - Work directly with businesses & industry associations
 - Primarily small business category
 - Expanded technical assistance to small businesses through local government - CUPA, assistance providers, and industry associations
 - Develop P2 practices for specific industries or processes - model source reduction
 - Model shop program for automotive services the model shop and green station programs for fleets, auto repair, and auto body and refinishing sectors
- Led to small business recognition programs
 - Businesses adopted P2 practices voluntarily, participated voluntarily.

VEHICLE SERVICE AND REPAIR (VSR) Program



- The Vehicle Service and Repair (VSR) Program recognized a business (fleet, auto repair shop, etc.) that adopted and incorporated the best management practices into that business' formal pollution prevention program.
- The business received formal recognition that its pollution program “meets the state of California’s standards for VSR P2 practices.”
- DTSC had collaborated with the Bureau of Automotive Repair (BAR) to enroll automotive repair shops in BAR’s Green Station Recognition Program. This partnership enabled automotive repair shops to receive “dual certification” from both DTSC’s and BAR’s program. This joint Model Shop Program offered automotive repair shops an opportunity to take advantage of substantial marketing benefits by meeting the public's increasing demand for green auto repair shops.
- An award of a green Pollution Prevention Model Shop logo showed the State’s recognition of shops that reach the 100-point threshold required by DTSC’s voluntary pollution prevention training. The logo could be included in the shop’s advertising, promotional marketing, and point of purchase locations.

Green Stations and CA Green Business Program Network

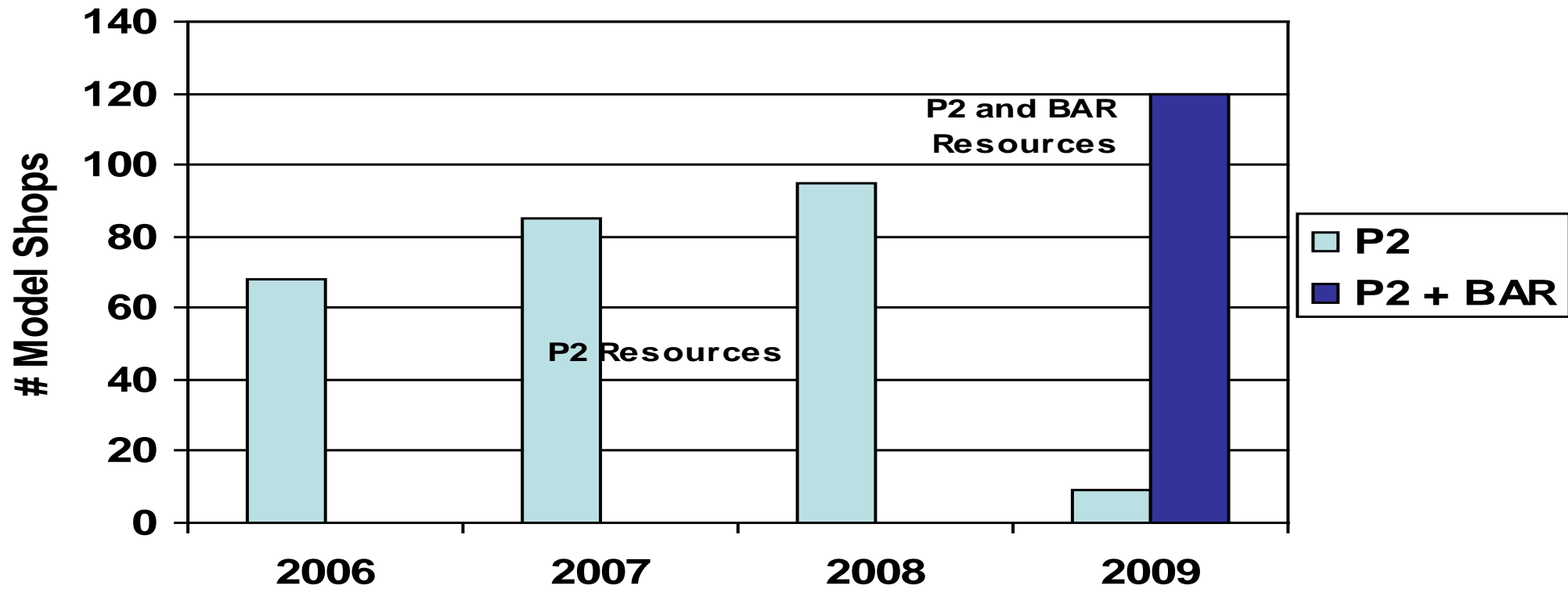


Green Stations Results

- DTSC-BAR Recognition Program
- More than 200 Auto Repair and Auto Body & Paint Shops were certified
- Program ended December 2013
- Certifications good for 3 years
- Shops referred to existing Green Business Programs and Cool California Small Business Award
- Encourage local agency to start a program



SB 1916: Sector P2 Implementation VSR Model Shops and BAR Partnership



Auto Body and Paint Project

- **There are approximately 8,000 auto body and paint shops in the state of California. Many of these shops do body work and refinishing, and produce repairs that are near factory-finish quality.**
- **The Auto Body and Paint (AB&P) P2 project commenced in July 2004 and sunset in mid 2010. The project goals were to increase adoption of pollution prevention strategies; reduce hazardous waste generation and VOC emissions at shops; and partner with local programs and associations that provide outreach to their businesses.**
- **Training materials identifying best management practices and pollution prevention strategies were developed, including fact sheets and guidance in both English and Spanish, and high-quality training videos in DVD format**

Auto Body and Paint Project-cont'd

- Developed P2 and Compliance Assistance Checklist to help shop managers and operators evaluate opportunities to reduce waste and improve compliance at their facilities.
- Two thousand copies of the training materials “toolkit” were published for distribution to auto body shops, shop organizations, local regulatory agencies and green business programs.
- A Spanish-language version of the toolkit was developed to better serve the training needs of the industry.
- Training videos were developed
- DTSC also funded a project with The Institute for Research and Technical Assistance (IRTA) to identify, test and demonstrate low-VOC, low toxicity alternatives for the auto body industry.



Department of Toxic Substances Control
Office of Pollution Prevention and Technology Development

The Auto Body and Paint Shops Fact Sheets



*Practical Approaches for
Preventing Pollution*



The fact sheets cover the following topics:

- reducing paint waste,
- managing sanding waste,
- gun cleaning,
- solvent recycling,
- wastewater management, and
- waterborne coatings.

Pollution Prevention and Compliance Opportunities Checklist

Doc. No. 801



DEPARTMENT OF TOXIC
SUBSTANCES CONTROL

Auto body and paint shops generate emissions and wastes that can be discharged to the air, land, and water. Shops are regulated by local environmental agencies because the products they use and their work practices may release pollutants to the environment. Using pollution prevention (P2) measures and best management practices in your shop can help you achieve compliance with regulatory requirements, reduce toxic and smog forming volatile organic compounds (VOC) emissions, reduce the time and money spent to manage hazardous wastes, and eliminate contaminated storm water discharges. Implementing P2 may help reduce operating expenses, and may reduce your permit fees and requirements from local enforcement agencies.

Pollution Prevention in Auto B

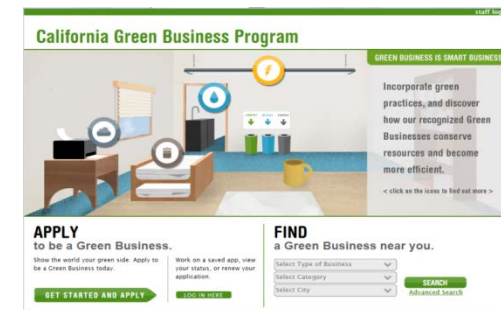
The Metal Finishing Model Shop Program

- The Metal Finishing Model Shop program was a partnership between industry and regulatory agencies to help metal finishing businesses run cleaner, safer shops.
- Participants in the voluntary program worked with DTSC and local regulatory staff to identify and eliminate possible pollution sources and build on their existing pollution prevention efforts.
- Pollution Prevention Project With The Metal Finishing Industry: Summary Report Of Phase 1: July 2007- March 2010 (April 2013)
[Http://Www.Dtsc.Ca.Gov/Pollutionprevention/SB14/Upload/Metal_finishing.Pdf](http://www.dtsc.ca.gov/Pollutionprevention/SB14/Upload/Metal_finishing.Pdf)
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California Green Business Program

- CAGBP is a voluntary program for businesses in California
- CAGBP is run by a group of local governments and participating agencies and departments in the Counties and/or Cities
- Work with existing small-medium sized businesses to reduce overall operating costs, pollution & increase resource efficiency

www.greenbusinessca.org



Challenges for Model Shop Concept

- **Regulatory basis for conducting P2-assistance-type, non-enforcement site visits**
- **How to win the business co-operation for P2 assistance visits.**
 - How to overcome reluctance of shops to participate in a voluntary P2 assistance program. Shops were afraid of DTSC visiting them for any reason, given that DTSC visits to plating shops as an example, historically resulted in high monetary fines.
- **How to address minor violations if encountered during site visits.**
- **Staff resources & funding**
 - DTSC and local agencies
 - Businesses resources to implement changes
- **Collecting Data & Tracking tools**
- **Broadcasting success stories**
- **Measurement to show effectiveness**
 - Hard to measure something not done, waste not generated
 - Difficult to convince businesses to share data with regulatory agency

Challenges for Voluntary Approach

- Industry, not government, implements P2.
 - Barriers include capital costs, employee reluctance to change, lack of effective alternative, etc
- There are misconception between regulatory & voluntary approaches
- Never really overcame the barriers to include shops that could have benefited most
 - Shops with compliance problems and middle of the road shops
- Not enough data to convince businesses to overcome barriers
- Some businesses give minimal effort
 - The possession of a plan, does not guarantee P2 implementation
- Frequent monitoring and evaluation is needed for successful implementation
 - follow through may be easily neglected with competing business demands



New DTSC P2 Program

- 2008-2009 legislation established Toxic information clearinghouse and Green Chemistry efforts at DTSC.
- Green Chemistry law was enacted
 - Shift from focus on worker use and end of life (disposal or recycle) to full life cycle
 - Regulations (Safer Consumer Products) adopted
 - Alternative Analysis (AA) required for captured product-chemicals
 - Avoid regrettable substitutions when specific substances are banned
- Transition to Alternative Analysis - P2 projects provided examples - life cycle approach to evaluate alternatives
 - Example , lead wheel weights ban – relied in part on related auto repair resources
- ***Much*** more AA work followed – DTSC developed guidance materials for conducting AA, etc.
- DTSC's - Green Chemistry & Safer Consumer Products implementation
 - Law amended - shifted DTSC work and changed some requirements for affected generators
 - SB14 generators – maintain plans and report documents - not reported to DTSC

DTSC New P2 Program-cont'd

- Although DTSC P2 program emphasized source reduction –upstream of end of pipe- we still looked at waste generating processes. And focused mostly on worker use and disposal in evaluating alternatives. In a life cycle view – this is mostly use and end of life.
- The P2 work at DTSC shifted to evaluating alternatives, especially to avoid regrettable substitutions as may happen when chemical bans are enacted.
- The portion of regulations that involve alternative analysis aim to avoid potential regrettable substitutions (MTBE in fuel is one well known example of a regrettable substitution)
- DTSC staff looked at some of the past projects for opportunities to evaluate the life cycle of products with chemicals of concern- at the beginning. Much more work followed to develop AA materials in the implementation of safer Consumer products regulations.
- DTSC needed to use resources to implement, law was changed again to accommodate. DTSC will conduct P2 projects as resources allow. It is important to note, generators still must comply with required elements.



DTSC P2 Successes

- Industry leaders and “P2 Champions”
 - Proactive owners/operators – implement best practices
 - Example to others - provide Model
 - Local agency and green business programs staffs
 - Businesses looking for methods to reduce waste and save \$\$
 - Workers drove the initiative at many businesses
 - wanted to reduce exposure to toxic and hazardous product and processes
 - Concern for their communities and future generations
- Waste reductions aligned with cost savings or short payback period
 - Automotive refinishing coatings – good example
- Positive relationship between businesses and DTSC and local agencies