

California Department of Toxic Substances Control (DTSC)  
Office of Pollution Prevention and Technology Development (OPPTD)

**March 2008**

**Welcome to P2 E-News!**

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**Nanotechnology: the Power of Small**

In April 2008, PBS will be airing a three-part Fred Friendly Seminar Series entitled Nanotechnology: the Power of Small. Go to <http://powerofsmall.org/> and click on "Station Locator" in the upper left corner of the screen to find the broadcast time for your area. On Wednesday, April 2, 2008 from 5:30 to 7:30 p.m. (EST), the Washington DC premier of the series will be shown at the Woodrow Wilson Center with special guest U.S. Senator Ron Wyden (OR).

This series will explore issues regarding nanotechnology and privacy, health, and the environment with a panel of experts from academia, government, industry and non-profit organizations. The panel members participate in a hypothetical situation where a series of dilemmas are presented by the moderator over the course of the program. The dilemmas are not shared with the members prior to the event.

For the show taped in Berkeley, California, the moderator, John Hockenberry, introduces the audience and the panel members to the town Sunnyville. Sunnyville's main employer has shut down and a new solar panel manufacturing plant which promises jobs and development is being considered. The new plant uses nanomaterials to construct efficient and very cheap panels that could put a big dent in the nation's energy bills. However, there is poor data on the effect these nanomaterials might have on the environment or on people. Should the plant go forward? Join the Berkeley panel, which includes our Director Maureen

Gorsen, as they wrestle with this issue. Copies of the DVD are available for checkout at the DTSC Technical Resource Center in the Cal/EPA Library. For more information on library hours, location and contacts, visit the Cal/EPA Library webpage at <http://www.calepa.ca.gov/library/>

Nanotechnology Contact: Suzanne Davis, (916) 327-4206, [SDavis@dtsc.ca.gov](mailto:SDavis@dtsc.ca.gov)

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## **Green California Summit and Exposition Building a California for Future Generations**

April 7, 2008 (Monday) (This is day 1 of a 3 day event)

Sacramento Convention Center

Benefit from a comprehensive program of classes and seminars. Hear from leading experts and discover best practices to utilize the promise of new technologies - and prepare for new standards and regulations. Building a California for Future Generations: Greening the Golden State! Don't miss the only conference on state and local government efforts to green the Golden State! Don't miss your only chance all year to get up to date on the current policies and tools that make California the world leader in sustainability. Discover the latest products and services! See over 250 exhibits, including a model green building and a green auto mall. Learn from experts and leaders! Attend dozens of classes and seminars on a range of essential subjects.

"If you want to understand what California's state and local governments are doing to create healthy communities and a vibrant, green economy, you can't miss the Green California Summit. This is the event for anyone who wants to be part of a green revolution that is changing the world." Rosario Marin, Secretary, California State and Consumer Services Agency, Co-Chair, Green California Summit Advisory Board <http://www.greentechnology.org/gcsummit/attendees.htm>

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## **Free PERC Dry Cleaning Alternatives EXPO**

Sunday, May 18, 2008

9:45 a.m. to 3:30 p.m.

Southern California Edison's Customer Technology Application Center (CTAC)  
6090 North Irwindale Avenue, Irwindale, CA 91702

The EXPO features dry cleaners successfully using water-based and carbon dioxide cleaning systems along with their equipment suppliers and manufacturers. Cost information will be available. Safer spotting chemicals will also be demonstrated. Government agency representatives from the California Air Resources Board (CARB), South Coast, and the Bay Area Air Pollution Control Districts will discuss the PERC regulations and grant programs available to purchase alternatives to PERC.

The EXPO is FREE; however, you must register as an attendee or to reserve a free vendor table by May 12, 2008 by calling (818) 244-0300 or e-mailing [irta@earthlink.net](mailto:irta@earthlink.net)

CARB recently adopted a phase-out of PERC dry cleaning by 2023. This EXPO is part of a CARB and DTSC demonstration program to inform cleaners about non-smog forming, non-toxic alternative processes through Assembly Bill 998. The Institute for Research and Technical Assistance (IRTA), a non-profit organization, is the organizer of this EXPO. Check <http://www.irta.us/> for updates on the EXPO and non-PERC alternatives. Sponsors include Southern California Edison, CARB, and DTSC. Contact: Robert Ludwig, (916) 324-2659, [rludwig@dtsc.ca.gov](mailto:rludwig@dtsc.ca.gov)

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**2008 Western Regional Pollution Prevention Network Conference**  
October 8 - 10, 2008, Monterey Hyatt

Approximately 200 pollution prevention innovators attend from California and U.S. Region 9. Conference participants include representatives from local, state, and federal agencies, businesses, and non-governmental organizations. Choose from eighteen technical and six training sessions to be posted on the webpage after the Network planning meeting in April. Visit <http://www.wrppn.org/> for Conference updates. Contact: Robert Ludwig, DTSC, (916) 324-2659, [rludwig@dtsc.ca.gov](mailto:rludwig@dtsc.ca.gov)

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**Vehicle Service and Repair (VSR) P2 Model Shops**

Waste Management Inc. is a large nationwide contractor and the second private company to obtain "P2 Model Shop" status in DTSC's Model Shop program. This recognition program, specifically designed for the vehicle repair industry, is easy to implement, cost effective, and can save shops money. Shops identify possible sources of pollution and choose alternatives for their shop that reduce hazardous waste and the associated management and disposal costs. With the public's increasing demand for green auto repair shops, shops benefit from the DTSC P2 Model Shop Logo signifying recognition by the State for implementing a specific level of pollution prevention.

Waste Management Inc. also formed a partnership with DTSC to perform equivalent certifications of its approximately 57 remaining California facilities by their environmental managers. It continues to add fleet maintenance facilities to DTSC's P2 Model Shop list by successfully reducing solvent waste generation through the implementation of aqueous cleaning technologies, reducing oil purchases and the generation of used oil with their oil analysis program, implementing the use of hydrophobic mops, and implementing other best

management practices outlined in the DTSC VSR program. Waste Management Inc. promotes the overall reduction in hazardous waste generation while minimizing worker exposure and protecting the environmental from hazardous materials and wastes.

[http://www.dtsc.ca.gov/PollutionPrevention/VSR/VSR\\_P2Model.cfm](http://www.dtsc.ca.gov/PollutionPrevention/VSR/VSR_P2Model.cfm) Contact: John Ison, (916) 322-4233, [jison@dtsc.ca.gov](mailto:jison@dtsc.ca.gov)

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### **High Efficiency Oil Filters in the State Fleet**

DTSC's Office of Pollution Prevention and Technology Development (OPPTD) demonstrated the performance of High Efficiency Oil Filters in the State fleet. Because these filters clean engine oil better than standard filters, they extend the time between oil changes and reduce both oil purchase costs and waste oil generation. The Departments of Transportation (Caltrans), Forestry (CDF), Corrections (CDC), and General Services (DGS) participated in the project. Participants installed the filters, collected oil samples, and recorded vehicle mileage and service events.

In 2003 California State agencies purchased approximately 250,000 gallons of motor oil for a fleet of 70,000 vehicles. If these High Efficiency Oil Filters allowed the interval between oil changes to be doubled, as demonstrated in some cases, an annual \$500,000 in cost savings and decrease of 125,000 gallons of waste oil might be achieved. The final report will detail the specifics in cost savings and waste reduction that could be achieved if the technology were adopted across the entire State fleet. The report will be used in DTSC's ongoing Pollution Prevention outreach efforts to federal, State, local government, and private fleets.

[http://www.dtsc.ca.gov/TechnologyDevelopment/OPPTD\\_FLY\\_High-Efficiency-Oil-Filters.cfm](http://www.dtsc.ca.gov/TechnologyDevelopment/OPPTD_FLY_High-Efficiency-Oil-Filters.cfm) Contact: Ed Benelli at (916) 445-2959, [ebenelli@dtsc.ca.gov](mailto:ebenelli@dtsc.ca.gov)

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### **Environmentally Preferable Purchasing (EPP) Task Force**

The Secretary of the State and Consumer Services Agency, in consultation with the California Environmental Protection Agency (Cal/EPA), established the Environmentally Preferable Purchasing (EPP) Task Force to develop a strategy to provide state agencies with information and assistance regarding environmentally preferable purchasing. Representatives from various State agencies with specific fiscal, procurement, and environmental policy expertise comprise the membership of the EPP Task Force. Adrian Farley, Interim Deputy Director, Procurement Division, Department of General Services (DGS) and Mark Leary, Executive Director, California Integrated Waste Management Board co-chair the EPP Task Force.

EPP Task Force Work Groups meet independent of the Task force and include:

- Education and Outreach: develop partnerships to improve current training materials and extend stakeholder network. The EPP Best Practices Manual is available online at <http://www.green.ca.gov/EPP/Introduction/default.htm>.
- Standards and Certification: identify and evaluate product standards and the independent third parties who certify compliance with those standards.
- Vehicles: develop EPP contract language to be included in the annual vehicle procurement process.

The EPP Task Force meets the last Wednesday of every other month at the Cal/EPA Headquarters Building in Sacramento or the Department of General Services (DGS) in West Sacramento. For more information about the State's EPP activities, go to <http://www.green.ca.gov/EPP/default.htm>. The DTSC EPP Task Force representative is Stan Lau (916-323-9617, [slau1@dtcs.ca.gov](mailto:slau1@dtcs.ca.gov)).

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### **Toxics in Packaging**

A new OPPTD branch, Toxics in Products, is implementing the Toxics in Packaging Prevention Act (Health & Safety Code Sections 25214.11-25214.21) that went into effect January 1, 2006. This statute prohibits the intentional introduction of the heavy metals lead, cadmium, mercury, and hexavalent chromium into any package or package component and limits the incidental metal concentrations to a sum total of 100 parts per million (ppm). Packaging material examples are food over wrap for retail food products, plastic clamshells for products, cardboard to protect laptop computers, steel strapping to secure shipping containers, and recycled materials used for new packaging. DTSC is taking a proactive approach to limiting these metals in our environment through educating businesses, local government, and consumers regarding potential toxic metals in packaging and eliminating these toxic metals prior to manufacturing.

Over 2,000 California businesses were mailed a request to provide certificates of compliance for the packaging materials that they manufacture, distribute, or supply. This identified businesses unaware of the new requirements. By asking businesses to obtain certifications from their upstream suppliers, the outreach effort has extended outside of California into other states and internationally. On April 2 - 3, 2008 DTSC will host the next biannual membership meeting of the Packaging Clearinghouse (TPCH), <http://www.toxicsinpackaging.org/>, a consortium of states that discusses the implementation and enforcement of toxics in packaging laws. The meeting will be held at our office in Berkeley. Our Environmental Chemistry Laboratory (ECL) is developing and researching proper analytical methods to test packaging samples of varying or complex matrices.

To receive automatic updates regarding Toxics in Packaging, visit <http://www.dtsc.ca.gov/ToxicsInPackaging/> Contact: Ron Ohta (916) 324-5192, [ROhta@dtsc.ca.gov](mailto:ROhta@dtsc.ca.gov)

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## **Green Chemistry Initiative**

In the spring of 2007, Cal/EPA Secretary Linda Adams requested that the Department of Toxic Substances Control (DTSC) lead a broad public process to generate ideas to fill information and safety gaps about chemicals, develop overall policy goals, and identify and recommend policy options. Green Chemistry is a strategy to reduce the use of toxic substances so that they do not harm the public or contaminate the environment, as a preferred approach to managing industrial wastes by disposal or incineration. Green Chemistry is a way to make goods and engineer processes using less toxic materials, less energy, and less waste. Renewable feedstocks, recycling, sustainability, and other life-cycle attributes are incorporated at the design stage. This Green Chemistry "cradle-to-cradle" approach means fewer hazardous substances along with improved air quality, cleaner drinking water, and a safer workplace.

The California Green Chemistry Initiative is divided into two phases. During Phase One, from April to December 2007, participants brainstormed more than 800 green chemistry options. These options were compiled into the Phase One report. This spring, Phase Two will analyze the multitude of possible options. To evaluate these, "draft" frameworks are being developed to be posted on DTSC's website and discussed at five scheduled public workshops. Phase Two includes three concurrent tracks: evaluation of the draft frameworks, the development of implementation strategies for identified "key elements" and the deliberations of the Green Chemistry Science Advisory Panel.

Currently, the 23-member Green Chemistry Science Advisory Panel is formulating its advice to DTSC Director Maureen Gorsen on the state of the science, strategies for educating the next generation of scientists, and other science-based recommendations to advance green chemistry. For more information about DTSC's Green Chemistry Initiative, including a list of Science Advisory Panel members and information about their activities, go to: <http://www.dtsc.ca.gov/PollutionPrevention/GreenChemistryInitiative/index.cfm>

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## **Sharps and Home Health Care Waste**

In general terms, sharps waste means any devices such as hypodermic needles, hypodermic needles with syringes, blades, needles with attached tubing, syringes contaminated with biohazardous waste, and acupuncture needles. Every year more than 2 billion needles and syringes are used nationwide outside of healthcare settings and most end up in trash or recycling containers, posing serious health risks to children, workers, and the general public. Governor Schwarzenegger approved SB 1305 on July 12, 2006 and it takes effect on September 1, 2008. This measure prohibits the disposal of sharps in household

trash, including recycling and green waste containers. In addition, HSC Section 118286(b) allows sharps to only be transported to a collection center in a sharps container and managed by a specified facility (i.e., hazardous waste, medical waste generator facility, or a facility managed as part of a mail back program).

The California Integrated Waste Management Board (CIWMB) now has a home-generated sharps disposal assistance program to aid in the development of a safe, convenient, and cost-effective infrastructure for the collection and proper disposal of these home-generated sharps. If you would like to be added to the CIWMB's Sharps Listserv, click on the attached link:

<http://www.ciwmb.ca.gov/Listservs/>, go to Medical Waste: Sharps, and click on Subscribe. <http://www.ciwmb.ca.gov/WPIE/HealthCare/PPCP.htm> Contact: Jim Cropper, California Integrated Waste Management Board, [jcropper@ciwmb.ca.gov](mailto:jcropper@ciwmb.ca.gov), (916) 341-6595

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### **Pharmaceutical Waste**

There are few safe and convenient ways for consumers to dispose of unused prescription drugs. Nearly all unused pharmaceuticals enter either our solid waste system or our sewage system. Neither disposal method is environmentally sound. Pharmaceuticals flushed down the toilet pass through our sewage treatment plants - which are generally not designed to eliminate these chemicals. Pharmaceuticals discarded in landfills seep into the surrounding water table. The US Geological Survey tested 139 streams across 30 states in 2002 and found that 80 percent of the waterways had measurable concentrations of prescription and nonprescription drugs, steroids, and reproductive hormones.

With the passage of SB 966, CIWMB has begun the process of establishing a state-wide solution for the growing problem of improper disposal of unused and expired pharmaceutical drugs by creating model disposal programs. The California Integrated Waste Management Board will report back to the legislature on the potential state-wide implementation of these programs and determine if additional regulations are necessary to properly collect and dispose of pharmaceuticals. Contact: Jim Cropper, California Integrated Waste Management Board, [jcropper@ciwmb.ca.gov](mailto:jcropper@ciwmb.ca.gov), (916) 341-6595

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As always, please feel free to tell your friends and associates about P2 E-News! Anyone interested in receiving P2 E-News is welcome to subscribe using the DTSC Listserv webpage at <http://www.calepa.ca.gov/Listservs/dtsc/> (scroll down to DTSC P2 E-News and click on Subscribe).

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Pollution Prevention (P2) - Changing the way we think and act so we can reduce or eliminate the creation of waste and pollution.

That's all for this month, folks!  
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