

**Department of Toxic Substances Control
Pollution Prevention Advisory Committee
January 22, 2003
Draft Meeting Summary**

Attendance

Advisory Committee:

- Greg Beach, San Bernardino County Fire Department
- Robin Bedell-Waite, Contra Costa County Hazardous Materials
- Larry Moore, Larry's AutoWorks
- Kelly Moran, Sierra Club
- Lisa Wanzor (for Barbara Brenner), Breast Cancer Action
- Ann Heil, Los Angeles County Sanitation Districts
- Stewart Crook, Agilent Technologies
- Dave Campbell, Paper, Allied Industrial, Chemical and Energy Workers International Union
- Neil Norcross, BP
- Howard Levenson, Integrated Waste Management Board
- Linda Mazur, Office of Environmental Health Hazard Assessment
- Jim Bennett, State Water Resources Control Board
- Don Ames, Air Resources Control Board
- Nita Davidson (for Nan Gorder), Department of Pesticide Regulation
- Jeff Wong, Department of Toxic Substances Control
- Steven Monk, Cal/EPA Office of the Secretary

Department of Toxic Substances Control (DTSC) staff:

Bill Ryan, Kim Wilhelm, Tim Ogburn, Kathy Barwick, Alan Ingham, David Hartley, Mary Pride, Tyrone Smith, Zach Church

Visitors

Gary Goodman, Sacramento County; Steve Kubo, Department of Health Services

Facilitator

Laura Kaplan, Center for Collaborative Policy

ACTION ITEMS

Action Item	Responsible	By When
1. Revise Ground Rules according to AC comment and send final copy to AC members	DTSC staff	April 29, 2003
2. Distribute reminder copies of the Ground Rules	Facilitator	At regular intervals (e.g., the start of each new planning cycle).
3. Forward Larry Moore permit issue to Cal/EPA P2 Team	Steven Monk	February 11, 2003
4. Research Table 14 of 2002/2004 Report re: printing industry waste quantities	DTSC staff	April 29, 2003
5. Inform AC re: DTSC decision on industry targets for 04/06 P2 workplan	DTSC staff	April 29, 2003
6. Research auto body/paint industry for P2 project feasibility	DTSC staff	April 29, 2003
7. Research metal plating industry for P2 project feasibility	DTSC staff	April 29, 2003

I. Opening Remarks

DTSC Director Ed Lowry gave opening remarks. Mr. Lowry told the AC about the successful work to date, expressed his appreciation for their continued support, and described additional p2 activities occurring at DTSC (e.g., incorporation of P2 in recent regulation development).

II. Opening business

- Pollution Prevention Advisory Committee (AC) members, DTSC staff, and visitors introduced themselves.
- The AC reviewed and approved the May 20, 2002 conference call minutes (see handout #1 listed below).
- Laura Kaplan reviewed the agenda. No changes were proposed.

III. Ground Rules

Proposed revised Ground Rules (see handouts #2 and #3 listed below) were reviewed and approved with one change: add to the end of Section II: Composition, “DTSC and the Advisory Committee may, at their option, invite additional *ex-officio* representatives to serve.”

IV. Updates and Feedback on Ongoing P2 Projects

DTSC staff gave a brief overview of DTSC’s progress in implementing the Vehicle Service & Repair (VSR) program, the Mercury Elimination Leadership Project (HELP) voluntary program, the Semiconductor Industry P2 Project, the ongoing work with the petroleum refining industry, and the SB 14 enforcement project.

Vehicle Service and Repair P2 Project Update

Dave Hartley presented the update (see handout #4 listed below) and received the following information, advice, and questions for further research from the Advisory Committee:

- Add San Bernardino County to the list of VSR participants.
- Include statistics re: worker health & safety benefits in program reports.
- Do aqueous cleaners contain n-Hexane?
- Larry Moore described a problem he recently experienced with his new facility and a local agency's strict interpretation of regulations, creating a disincentive for P2. Steven Monk agreed to bring the issue to the Cal/EPA P2 team.
- In San Francisco Bay area, as of June 1, aqueous cleaners will be required to replace petroleum solvents. May want to de-emphasize aqueous products as rollout to Bay Area.
- Jim Bennett offered to work with the VSR staff to continue its outreach efforts.

Mercury Elimination (HELP) P2 Project Update

Dave Hartley presented the update (see handout #5 listed below) and received the following information, advice, and questions for further research from the Advisory Committee:

- Consider a second mailing to POTWs.
- Get Universal Waste information out to hospitals; some exemptions will be rescinded in 2006. Raise awareness of the existing database of materials, exemptions, and 2006 changes.
- Consider partnering with CWEA.
- Personal contact may improve participation.
- Is Thimerisol included in this project?
- Possible involvement by SWRCB.
- More marketing.
- Any materials developed, such as a list of products containing mercury, should be given out in hardcopy since people are more likely to use hardcopy than a website.
- Partner with nurses unions, Physicians for Social Responsibility?

Semiconductor P2 Project Update

Alan Ingham presented the update (see handout #6 listed below) and received the following information, advice, and questions for further research from the Advisory Committee:

- Can we reach the 80% of facilities required in the statute?
- Interview facility staff in order to assemble a "short list" of processes used. Work closely with a handful of facilities.
- Talk to HP as a possible leader in this industry—Stew to help identify contact
- Review May 20 AC meeting notes re: advice given then; was the advice used?
- Marketing: take advantage of the "weight of the state."
- Bring in other experts for workshops (outside of DTSC).

- Declining interest in this area as manufacturing is exported to other states/countries; industry transition underway.
- Concern that SB 14 call-ins viewed as enforcement.
- Positive reaction re: value of assistance to industry in preparing 2003 SB 14 plans.
- Stick with this approach but make it low-resource effort; redirect staff to other activities.
- Talk to south SF Bay POTWs; consultants; former Silicon Valley EE's
- There is a concern about a lingering relationship problem from when DTSC paid environmental groups to audit SB 14 plans.
- Concern re: workshops; not the most effective way to get info out there.
- Suggestion that staff explore life-cycle analysis as a tool in this project.
- Advertise forum/seminar as workshop on p2 techniques.

Petroleum Refineries Update

The Advisory Committee reviewed the petroleum refineries project update (see handout #7 listed below) and offered the following advice and comment:

- Go out and visit and see what they are doing.
- Forums are potentially productive.

SB 14 Enforcement Initiative Update

The Advisory Committee reviewed the SB 14 Enforcement Initiative update (see handout #8 listed below) and offered the following advice and comment:

- Good job!
- Suggestion to target repeat non-filers and follow up with them.

V. Public Comment

Gary Goodman of Sacramento County expressed support for P2 in general and interest in DTSC's mercury project.

VI. Pollution Prevention at Cal/EPA

Steven Monk gave a brief update on Cal/EPA's efforts to integrate pollution prevention across the agency (see handout #14). Advisory Committee comments included:

- Like to see more on P2 regulatory integration into DTSC and agency programs, or as a priority for P2 @ agency.
- Include P2 in inspection training—need greater emphasis—more P2 focus and information.

VII. Public Comment

No comments from the public were received.

VIII. DTSC Recommendations for Industry Targets for the 2004/2006 Pollution Prevention Workplan

Kim Wilhelm briefly explained the process DTSC used to identify industry targets for the 2-year workplan for 2004/2006 required under SB 1916 of 1998, and presented DTSC's recommended targets: the auto body/paint and metal plating industries (see handouts 9-13 listed below). The process was:

- DTSC surveyed stakeholders, including AC members, DTSC’s Hazardous Waste Management Program, DTSC executive staff, local governments, and others.
- The survey resulted in a list of 61 suggestions for consideration (handout #10).
- DTSC consolidated the AC’s list of targeting considerations to a list of five considerations for decision-making (handout #12).
- DTSC applied the considerations to the long list, and developed its short list (handout #11 and below).
- In an interactive process, DTSC reapplied the considerations to the short list and identified its recommended target industries.

Auto body shops/paint

- Solvents, cadmium, CrVI, VOC are environmental problems and a priority for state, local air regulatory agencies
- Worker H&S
- Technical feasibility
- Builds on relationships
- Environmental Justice

Metal plating

- CrVI and cyanide
- SCAQMD risk study
- Receptive industry
- Worker H&S
- Builds on relationships
- Feasible alternatives
- ARB interest
- DTSC regulatory issue re: cyanide
- Environmental Justice

2004-2006 Workplan Targets Discussion

A roundtable query revealed general support for DTSC’s recommended selection of the auto body/paint and metal plating industries. Support, suggestions and concerns were expressed, as follows:

- Do you have a baseline from which to measure reductions?
- Get enforcement referrals from competing facilities that are in compliance—get to the bad actors via the good ones.
- Both auto body/paint and metal plating recommendations are relevant to environmental justice.
- Both of the recommended target industries can have important worker health and safety implications.
- Target a chemical—get a wide variety of industries (e.g., CrVI—plasters, finishers, paint, others). On the other hand, staff would have to learn too many industry processes/alternatives—lower feasibility.
- Avoid trying to become “the experts”—go for low-hanging fruit.
- Focus on implementation.
- Early reality check with AC before workplan launch.

- Sorry to not do dry cleaners; but acknowledge that given the history and context of dry cleaner hazardous waste issues, no feasible projects that are likely to be effective have been identified.
- Care re: dry cleaner alternatives; clear cost-effective alternatives to perchloroethylene have not yet established.
- Metal plating
 - Don't just focus on state of the art facilities. Include the "back yard" businesses.
 - Look at di-thio carbamate? NDMA byproduct from treatment of plating chemicals a problem (for treatment plants).
 - Cyanide a concern for POTWs, don't know source(s).
 - Think about the timing—lots of stuff currently shaking out. May be regulatory changes in the next 18 months—need to research.
 - Demo the replacement technologies.
 - Concern re: unstable regulatory period. SCAQMD working with:
 - chrome plating/new rules;
 - cadmium plating (somewhat uncontrolled); and has an
 - aggressive testing program.
 Should we hold off two years for rules to take effect? Think about timing.
 - Find out whether staff is willing to work on wet floor shops—a health and safety concern.
 - Fume suppression is the first line of defense.
 - Don't just talk to associations.
 - How do you reach the small businesses (not association members)?
 - How to motivate people? This will be hard.
 - Need to develop a specific list of feasible alternatives for the industries; clear steps toward progress.
 - Has metal plating been "done to death"?
 - The "problem facilities":
 - Wide range of performance—subsistence to state-of-the-art.
 - Beware of compliance issues; some facilities will be wary of any DTSC outreach effort for fear of being caught out of compliance.
 - Identify through local government programs.
 - Identify through compliant facilities.
 - Like to see emphasis on bad actors.
 - Talk to Leif Magnuson (U.S. EPA Region IX p2 program).
- Auto body/paint
 - Air Resources Board/South Coast Air Quality Management District looking at:
 - application techniques;
 - low VOC spray gun cleaners; and
 - phasing out cadmium and CrVI in paints.
 - New technology—LaserTouch®; reduces material use, overspray (ARB).
 - Old paint a problem; wet sanding discharge—removal might be hazardous waste treatment.
 - Include spray gun cleaners?

- How to get to backyard mechanics.
- Intersection w/storm water programs/issues.
- Auto service association a good contact.

Kim Wilhelm asked the AC for thoughts on possible “back-up” targets areas, should further research per the AC’s comments and concerns indicate that DTSC’s recommended targets above are not feasible. The AC suggested (in no particular order):

- PBTs, target chemicals (lead, battery recycling)
- Arsenic
- Auto dismantlers
 - Messy operations.
 - Mercury switches.
- Vapor degreasers from metal finishers. Being eliminated in south, could bring it north.
- Mercury
 - Build on existing mercury initiatives?
 - Promote purchasing of mercury-free alternatives.
 - Business focus.
 - Use stuff from other states.
- Printed circuit boards.

The Advisory Committee formally registered its support for DTSC’s recommendation of auto body/paint and metal finishing as DTSC’s target industries for the 2004-2006 SB1916 Workplan, and requested that DTSC follow up on the concerns raised in the prior discussion. It was acknowledged that DTSC will use its best judgment in making the final selection of target industries, taking into account the new information and questions raised by the AC, and considering the AC’s list of backup targets in the event that auto body/paint or metal finishing should prove too problematic.

IX. Strategies for Target Industries

AC members brainstormed the following pieces of advice regarding project design. .

- Assemble information on specific p2 alternatives for each industry, in detail.
- Focus on waste streams that are problematic at the end-of-the-pipe, not at the source.
- Use VSR program as a model.
- Look at standard approaches. Contact facilities.
- Introductory visits—get to know industries, do reality checks.
- Partner with wastewater treatment plants, industrial waste inspectors—include them in the “reality check.”
- Need more detail—different areas of the state, differing local influences. Visit different parts of the state.
- Get insights from retired engineers from those industries.
- Narrow focus—chrome, cyanide focus good.
- Use contact allies.
- Cost-benefit approach.

- Identify p2 alternatives via interviews; work w/groups to get buy-in of small group first.
- What are the motivators? What are carrots, sticks? Think about incremental improvement as a motivator.
- Look for p2 measures that will be relatively simple and require little up front investment on the part of industry.
- Realize that people are risk averse and are not likely to implement measures with uncertain payoffs.
- Consult with U.S. EPA.
- ID influences and motivations. Research strategies to change behavior; get small change first, then move up. Study the tools of effective behavioral change, such as asking for a small change before asking for a bigger one.
- Look for the simple projects—behavior changes.
- Sector analyses—how many businesses, identify motivators, burdens, regulations, market, motivators.
- Look at the EPA sector notebooks.
- Contact SCAQMD—Ann Heil has the name.

X. Public comment

No comments were received from the public.

XI. Concluding business

- Bill Ryan outlined DTSC's next steps: DTSC will decide which industries it will focus on during FY 2004/2006 P2 workplan implementation and inform the AC no later than 4/29/03.
- The next meeting of DTSC's Pollution Prevention Advisory Committee will be held May 13, 2003, in the DTSC Berkeley office at 700 Heinz Avenue, Berkeley, CA. Agenda items include:
 - Review all recommendations of the AC since its inception, follow-up on status, and decide which recommendations to continue tracking.
 - DTSC will inform the AC of its decision on 04/06 workplan targets.
 - DTSC will present its initial research regarding the list of known p2 alternatives for new projects.
 - Discussion re: strategies for working with the targets.

The meeting adjourned at 3:45 p.m.

List of Handouts Provided (all handouts available from Kathy Barwick):

1. May 20, 2002 Conference Call Draft Minutes
2. Memo re: Revisions to SB 1916 Advisory Committee Ground Rules and 1/6/03 DTSC/SB 1916 Advisory Committee Draft Revised Ground Rules
3. 1999 DTSC/SB 1916 Advisory Committee Draft Ground Rules
4. Department of Toxic Substances Control Vehicle Service and Repair Project January 2003
5. California Mercury (Hg) Elimination Leadership Program (HELP)

6. Semiconductor Industry Forum
7. Petroleum Refining Forum
8. SB 14 Compliance Initiative
9. Planning Overview for the Development of DTSC's Pollution Prevention Two Year Workplan
10. Results of DTSC Survey to Identify P2 Targets for 04/06 P2 Workplan
11. DTSC Short List for 04/06 P2 Workplan Targets
12. Simplified Decision Criteria for 04/06 Workplan
13. Targeting Considerations from 00/02 P2 Workplan
14. Status of the P2 @ Agency Project as of January 22, 2003