



2005 Pollution Prevention Workshop

*Focus on P2
Continuing the Journey Toward
Waste Elimination*



May 2-5, 2005 Las Vegas, NV
Sponsored by: NNSA Service Center
LLNL, NTS, LANL, HQ EH and the Office of Civilian
Radioactive Waste Management

Workshop Registration

Please fill out this form if you are participating in the workshop and **email just this page back to me at: msweitzer@doeal.gov**. We do not have an official registration web site for this workshop. It is important to get a count of participation for the workshop to ensure we make the appropriate space accommodations for all the attendees for the events.

There is no cost to attend/participate in the workshop. There is also no cost to attend the PPOA training (currently scheduled for Monday May 2).

Participant Name:

Your Organization/Location:

Your Phone Number:

Your Email Address:

Attendance: (Check all that apply)

- 1. PPOA Training, Monday May 2**
- 2. Possible Opening Reception, Monday evening after training.**
- 3. Workshop Sessions**
 - Tuesday**
 - Wednesday**
- 4. Thursday Tour(s)**

2005 Pollution Prevention Workshop Schedule

Monday May 2, 2005	Tuesday May 3, 2005	Wednesday May 4, 2005
8:00 – 4:00	7:00 – 8:00	7:00 – 8:00
PPOA Training	Continental Breakfast: Sponsored by LANL	Continental Breakfast: Sponsored by LANL
5:00 – 7:00 PM	8:00 – 9:00	8:00 – 11:30
Opening Reception: Sponsored by SHAW ENVIRONMENTAL INC. Welcome: Mike Sweitzer DOE P2 Awards Presentation – Andy Lawrence, HQ EH	Opening Plenary: Welcome: Mike Sweitzer - Welcome by Jim Mangeno and goals for workshop. - Kathy Carlson, NSO Manager. Welcome	Sustainable Design Session and Charrette
	9:00 – 11:30	11:30 – 1:00
	Corporate Session - IG Report Findings: NNSA, SC, EM Response and Action Plan. - 2006 and Beyond P2 Goals: Develop final goals for presentation to EH-1 and Secretary for signature. - P2 Reporting Process: Using the new P2 goals develop reporting structure and requirements	Lunch (On your own)
	11:30 – 1:00	1:00 – 5:00
	Lunch (on your own)	Best Practices session. Develop best practices and lessons learned for site problematic waste streams, highlight and feature 2004 P2 award nominations. Include Chemical Mgmt.
	1:00 – 2:15	5:00
	Federal Electronics Challenge Briefing EPA – Adrienne Priselac and Annette Guarriello, BPA	Adjourn for the day. Closing Announcements: Mike Sweitzer
	2:15 – 2:40	
	Break	
	2:40 – 3:40	
	P2 Funding Mechanisms: GSAF Program Development and Lessons Learned to fund P2 projects and other funding mechanisms.	
	3:40 – 5:30	
	EMS Session. Adjourn for day after session completion.	

2005 Pollution Prevention Workshop Schedule

Thursday May 5, 2005	Friday May 6, 2005	Workshop Schedule Notes
7:00 – 5:00 NTS/LLNL Tour	Travel Day	
8:30 – 12:00 Networking/Session Wrap-up for folks not attending tour. Small meeting room will be available.		
12:00 Close Workshop		

Workshop Session Summary

Monday – May 2, 2005 Room: Caribbean 3 & 4

8:00 – 4:00 PPOA Training

Session Leader(s): Lisa Burns, Shaw Environmental, Inc.
PH: 513-782-4686
Email: Lisa.Burns@shawgrp.com

PPOA 7-hour Training Class

The proposed PPOA training course will be a 7-hour course presented on a selected day of the P2 Workshop scheduled for May 2-5, 2005 in Las Vegas, NV.

The course will be developed using an interactive format with case studies and example assessments performed at a variety of DOE sites, including NNSA, EM, FE, and Office of Science sites. The 1995 DOE-sponsored PPOA course materials will be a starting point for course development, but will be re-designed and updated for current DOE-wide and site-specific issues and the new executive order requirements. The course will consist of short discussions and descriptions on the PPOA process, followed by hands-on, team-oriented exercises. Energy and water efficiency, as well as sustainable design examples will be incorporated. Emphasis on team development, opportunity identification, and cost/efficiency calculations will be included, as well as a segment on implementation planning and Action Plans. Key components on EMS aspect and impact analysis and objective and target development will be discussed (relating to how PPOAs can be integrated into site's EMS).

5:00 – 7:00 PM Opening Reception

Tropicana Hotel: Room: Caribbean 3 & 4
Sponsored by: SHAW ENVIRONMENTAL INC.

Welcome and Opening Remarks: Mike Sweitzer, NNSA

DOE FY 2005 P2 Awards Presentation: Andy Lawrence. Presentation of Best-In-Class Awards, P2 Star Awards and White House Closing the Circle award nominations.

**Tuesday – May 3, 2005 Room: Caribbean
3 & 4. Breakout Room Hawaiian 4**

8:00 – 9:00 Opening Plenary

Session Leader(s): Mike Sweitzer, NNSA PH: 505-845-4347
Email: msweitzer@doeal.gov

- Welcome: Mike Sweitzer
- Welcome by Jim Mangeno, HQ NNSA 3.6, and goals for workshop
- Welcome by Kathy Carlson, Manager, NSO, Welcome/Opening Remarks

9:00 – 11:30 Corporate Issues

Session Leader(s): Charlie Henn, NNSA PH: 505-845-4396
Email: chenn@doeal.gov

Greg McBrien, HQ EM PH: 301-903-1385
Email: gregory.mcbrien@em.doe.gov

IG Report

The Final DOE IG report was issued in March 2005. The report details problems in pollution prevention programs at several sites and contains recommendations for EH, EM and NNSA. The recommendations have been accepted by all three organizations. To address the recommendations, corrective actions on performance measures, program funding, and opportunity assessments must be taken. [Note - in the Exit Conference with the DOE IG, Jeff Nelson (IG audit team lead) reminded everyone that DOE Order 224.3 requires that heads of all program offices review IG findings and recommendations, even if they are assigned to other organizations, to determine if they apply to their organization and whether action is needed to resolve the issues.]

The session will begin with an overview of DOE IG audit since January 2004 by Jeff Nelson from the DOE IG. Jeff will discuss the audit findings and the recommendations. A panel of representatives from EH, NNSA, and EM will then discuss the response of their program office to the audit report and the approach being planned for corrective actions. The panel will take questions from the workshop attendees. The estimated time for the session presentations is 40 minutes with an additional 20 minutes for questions.

Break – 15 minutes.

2006 and Beyond P2 Goals

Session Co-Lead: Jane Powers

The current DOE P2 Goals will begin to expire at the end of 2005. New, follow-on goals to continue the progress of the P2 program at DOE are being developed by EH-43. In 2004, a P2 Goals Working Group was established by EH to get field and headquarters involvement in the development of new P2 goals for the Department. The P2 Goals Working Group met in Washington, DC in September 2004 and developed a draft set of P2 Goals for review by the field. The new P2 Goals are currently under review at EH Headquarters. Jane Powers, head of the P2 Goals Working Group, will host a session on the new goals. Representatives from the P2 Goals Working Group (members TBD) will conduct a panel discussion of the new goals to outline the issues that shaped the current draft version of the goals and some of the background that led to the current version of the proposed goals. Jane will be sending out copies of the proposed goals to workshop attendees prior to the workshop. In addition, Jane will update the status of the proposed goals and discuss the process EH will take to issue the new goals. The panel will take questions from the workshop attendees. The estimated time for the session presentations is 30 minutes with an additional 15 minutes for questions.

P2 Reporting Process

Session Co-Leaders: Bruce Campbell, LLNL, Don Lentzen and Josh Silverman, HQ EH

The issuance of new P2 Goals will require an update to the P2 reporting information gathered from DOE sites. The new goals will utilize more qualitative

reporting from sites, which compliments the EMS approach to P2. EH is pursuing development of a new reporting database. A draft “roadmap” that outlines the new data inputs and outputs will be distributed to workshop attendees in late April. Bruce Campbell with LLNL and Josh Silverman from EH have distributed a reporting questionnaire to gather input from workshop attendees. Information from the questionnaire will be provided during the session. In addition, Jane Powers, Josh Silverman and Don Lentzen from EH-43 will discuss reporting issues and the roadmap with the workshop attendees. The estimated time for the session presentation is 30 minutes with an additional 15 minutes for questions.

11:30 – 1:00 *Lunch Break*

1:00 – 2:15 *Federal Electronics Challenge*

Session Leader(s): Jeff Eagan, HQ EH PH: 202-586-4598
Email: Jeff.Eagan@eh.doe.gov

Ms. Adrienne Priselac, EPA PH: 415-972-3285

Ms. Annette Guarriello, BPA PH: 503-230-5982

DOE joined eleven other major federal agencies last November in signing the Federal Electronics Challenge (FEC) MOU. Led by the Federal Environmental Executive and staffed by the EPA, the Challenge is a comprehensive voluntary program to promote sustainable environmental stewardship of federal electronic assets. The FEC has three major components:

- Procuring “greener” (reduced toxic materials, increased energy efficiency, increased reused and recycled material, and easier to disassemble for component recovery at end of life) electronic equipment.
- Extending the useful lifespan of electronic equipment.
- Arranging for reuse/recycle/reclamation of surplus and obsolete electronic equipment.

The FEC is actively recruiting federal facilities to become FEC Partners and agree to work on one or more of these programs. Four DOE facilities are current Partners. DOE’s Bonneville Power Administration was the first federal facility in the nation to be awarded Gold status because of their forward-looking programs in all three FEC categories.

This exciting workshop session will feature presentations by both Adrienne Priselac, FEC Coordinator for the EPA Region 9 Office, and Annette Guarriello of the award-winning FEC Team at Bonneville Power.

2:15 – 2:40 ***BREAK***

2:40 – 3:40 ***P2 Funding Mechanisms***

Session Leader(s): Denny Hjeresen, LANL PH: 505-665-7251
Email: dlh@lanl.gov

GSAF Program Development and Lessons Learned. A handbook will be developed and provided to workshop participants. Other funding mechanisms will be highlighted that are used across the Complex for funding P2 projects.

3:40 – 5:30 ***Environmental Management Systems***

Session Leader(s): Carolyn Holloway, SNL/NM PH: 505-845-5248
Email: cholloway@doeal.gov

"Pollution Prevention Programs- The Cornerstone of an EMS.

Each presentation will be up to 30 minutes leaving a few minutes for questions after each presentation. The presentations are on disk. So a computer and overhead projection system should cover this.

Abstracts

450.1-5 Guide on P2 in EMS Co-Chair: Jane Powers EH-43

This guide provides discretionary guidance for implementing the P2 requirements of DOE O 450.1, which requires implementation of sound stewardship practices that are protective of the air, water, land, and other natural resources impacted by DOE operations. This objective is to be accomplished by implementing EMSs as part of existing ISMSs. As part of that integration, DOE o 450.1 requires DOE elements to provide for the systematic planning, integrated execution, evaluation of

P2 and reduce or eliminate waste, pollutants, and Class I ozone-depleting substances (ODS) at DOE facilities through source reduction, reuse segregation, and recycling and by procuring recycled-content materials and environmentally preferable products and services.

"Implementing an EMS that integrated P2/sustainability concepts

Co-Chair: Janice Jackson at Y-12

BWXT Y-12 has implemented an EMS that integrated pollution prevention (P2)/sustainability concepts into environmental planning procedures/operations. The identification of significant environmental aspects/impacts was designed to give credit for positive impacts resulting from P2 activities. The aspect identification procedure included a scoring system assigning positive points to these aspects, and negative points to environmental impacts causing environmental harm. This successful integration of P2 into EMS efforts was reflected in new P2 initiatives.

"P2 program integration with the LANL EMS" Co-Chair: LANL

As LANL implements its IMS it is taking several steps to merge the EMS and P2 programs. In this model, P2 will become an integrated tool in the ongoing use of the EMS. First, the LANL integrated Work Management System was modified to require preventive actions in the process of work approval. Second, P2 requirements were structured into project approval processes. Third, pollution prevention opportunity assessment tools are being used to support EMS environmental aspect identification at the Division level. Fourth, financial incentives such as the Generator Set aside Fund (tax on waste) program are being restructured to support prevention opportunities identified by Divisions during EMS implementation. Finally, Lab-wide objectives and targets with P2 requirements are being extended to the Division level.

Wednesday – May 4, 2005
Room: Caribbean 3 & 4. Breakout Room
Hawaiian 4

8:00 – 11:30 ***Sustainable Design***

Session Leader(s): Jack Mizner, SNL/NM PH: 505-845-3576
Email: jhmizne@sandia.gov

Karin King, LLNL PH: 925-422-0756
Email: Karin.King@oak.doe.gov

SUSTAINABLE DESIGN MINI-CHARRETTE DRAFT AGENDA

PURPOSE: 1) Familiarize the audience with Sustainable Design principles and the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED) rating system. 2) Provide each attendee with a working knowledge of how to implement sustainable design principles into the design and construction of a building. 3) Produce a Session report that contains the following:

- LEED rating for each of the buildings
- Recommended SD strategies (organized by LEED category) for
- Qualitative life-cycle and first cost impacts
- A strategy for implementing the recommended SD strategies

SESSION CO-FACILITATORS: Jack Mizner (Sandia National Laboratories), Karin King (DOE Livermore Area Office), Tom McGeachen (Princeton Plasma Physics Laboratory), Bruce Campbell (Lawrence Livermore National Laboratory), Doug Vetter (Sandia National Laboratories).

ATTENDEES: In addition to the P2 personnel that will attend the meeting, sites are encouraged to invite their facilities, project management and procurement personnel. We will extend special invitations to specific DOE personnel (Vic Petrolatti, Will Litner, Will Prue, Beverly Dyer), DOE procurement, and the EFCOG Sustainable Design working group members.

- REFERENCE MATERIALS (for each attendee): LEED Rating System, "Greening Federal Facilities", "LANL Sustainable Design Guide", "Environmental Design & Construction Green Guide", one-page SD

Reference sheet, project descriptions, LEED scoring template. We would like to provide hard copies of each reference, as well as a CD that contains all references.

SCHEDULE

8:00 – 8:45 - INTRODUCTION TO SUSTAINABLE DESIGN (Emphasize “Sustainable Design is an off shoot of pollution prevention” with reference P2 Act of 1990. Incorporate ISWG and DOE Secretarial Challenge into Background presentations).

- First principles and benefits
- LEED rating system
- Case studies

8:45 – 9:00 – BREAK

9:00 – 10:30 – GROUP BREAKOUT SESSION

- Breakout groups will be organized according to the five LEED categories (Site, Water, Energy, Materials and Resources, Indoor Environmental Quality). We anticipate having two groups per category. Each group will be assigned a building to work on, either 1) a typical Office building (use LLNL- Design Build package as a basis), or 2) a typical Lab building (use SNL, GPP Design-Build Lab as a basis)

Each Group will:

- Develop SD strategies for each building for the assigned LEED category
- Rate each building according to LEED for the assigned category, using a yes/maybe/no
- For each of the SD options, identify the first cost and life-cycle cost impacts (using a qualitative +/-)system

10:30 – 10:45 – BREAK

10:45 – 11:30 – GROUP REPORTS

11:30 – 1:00

Lunch Break

1:00 – 5:00

Best Practices

Session Leader(s): John Harley, SRS PH: 803-557-6332
Email: John.Harley@srs.gov

Co-Chairs: Beverly Whitehead, Don Lentzen, Josh Silverman

Goal: To gain solutions to P2 program and technology issues while maximizing opportunities for personal networking.

Requirements:

- Workshop participants shall come prepared to discuss their “best practices” and to seek solutions to their problems.
- Table Leaders shall be familiar with the FY05 P2 award nominations in their area of discussion and shall facilitate networking and identification of lessons learned.

Agenda:

- Presentation & Discussion of EFCOG P2 Survey - (30 min) – Presenter: TBD (hopefully - Al Villareal / Samuel McCord / Jack Mizner)
(The Energy Facility Contractor’s Group (EFCOG) completed a short survey (3/2005) of member identified “best practices” that demonstrate successful P2 integration into mission execution. This presentation with a question and discussion period will highlight survey results.)
- Interactive Table Discussions Based on P2 Award Categories - (2.5 Hrs)
(Workshop participants will rotate between table discussions that will be facilitated by “Table Leaders”. Table topics will be based on DOE P2 award categories, but may expand to other areas through discussions. Table discussions are schedule for 20 minutes each with a 10 minute break between rotations. Rotation will be managed to maximize participants’ interaction. Table leaders will be responsible for selecting 2-4 “best-of-the-best” to present in session wrap up. Table topic areas, at least initially, are:

- ❖ [Waste/Pollution Prevention](#)
- ❖ [Recycling](#)
- ❖ [Green Purchasing / Minimizing Petroleum Usage in Transportation](#)
- ❖ [Environmental Management Systems](#)
- ❖ [Sustainable Design/Green Buildings](#)

- Table Highlights – Table Leaders (30 min)

(Each table leader will summarize their lessons learned in a 5 minute or less wrap up that identifies the “best practice” and a contact that is available for additional information.)

Help Needed:

(Please Contact John Harley (803) 557-6332 or john.harley@srs.gov)

- Volunteer Table Leaders -- Let me know if you will lead a table discussion.
- Displays & posters; Anyone is encouraged to bring a display or poster that highlights “best practice(s)”.

5:00

Workshop Session Closing Comments

- Workshop Session Closing Comments: Mike Sweitzer

Thursday – May 5, 2005 Breakout Room Hawaiian 4

7:00 – 5:00

NTS/LLNL Tour

Session Leader(s): Marjorie Gonzalez, LLNL
Al Karns, NV

The Nevada Test Site tour will include stops at several facilities and points of interest, including:

Joint Actinide Shock Physics Experimental Research (JASPER) Facility – JASPER is an experimental research facility developed by personnel from LLNL, LANL, Sandia, and Bechtel Nevada. Using a 30-meter-long, two-stage light-gas gun, JASPER is being used to study the behavior of actinides and other materials under high pressures, temperature, and strain rates. These extreme laboratory conditions approximates those experienced in nuclear weapons, and data from the experiments are being used to determine material equation of state and to validate computer models of material response for weapons applications. JASPER features nested confinement systems that assure that radioactive materials are not released into the building or environment after target impact. The primary target chamber houses the target material, and a high explosive closure valve traps radioactive contaminants within the chamber after the projectile enters. A secondary containment chamber assures that if any materials escape from the primary target chamber, they will not migrate into the building environment.

U1a - The U1a Facility is an underground experimental complex at the U.S. Department of Energy's Nevada Test Site. The U1a complex supports routine test site activities in which high explosives are detonated to test the readiness of equipment, communications, procedures, and personnel. Test data help maintain the reliability of the nuclear weapons stockpile by allowing scientists to gain more knowledge of the dynamic properties of aging nuclear materials. Of particular interest is data on the behavior of plutonium that can be used in computer calculations of nuclear weapon performance and safety in the absence of actual underground testing. In the Livermore experiments conducted at U1a, chemical high explosives are detonated next to samples of weapons-grade plutonium (Pu-239) to obtain information about plutonium and its alloys. The tests are subcritical, that is, no critical mass is formed, so no self-sustaining nuclear fission chain reaction occurs as it does in a nuclear detonation. The U1a complex consists of horizontal tunnels mined at the base of a vertical shaft approximately 970 feet beneath the surface.

Big Explosives Experimental Facility (BEEF) – Large conventional high-explosive experiments are conducted on a firing table at BEEF. Data collected supports the nation's Stockpile Stewardship Program, and complements the U1a complex and other hydrodiagnostic facilities.

Sedan Crater – Sedan was a cratering experiment that was part of the Plowshare program - the peaceful uses of nuclear explosives. The 104-kiloton nuclear device explosion displaced about 12 million tons of earth, creating a crater 1,280 feet in diameter and 320 feet deep.

Cameras, binoculars, recording equipment, firearms, and personal cellars are prohibited on tour. Briefings are unclassified.

Tour participants must supply their own safety shoes and safety glasses.

Tour Agenda

7:00 a.m.	Leave Tropicana Hotel
8:30 a.m.	Arrive Mercury/Receive badges and dosimeters
8:50 a.m.	Leave Mercury
9:05 a.m.	Arrive Weapons Effects Area
9:20 a.m.	Leave Weapons Effects Area
9:45 a.m.	Arrive JASPER Facility
11:00 a.m.	Leave JASPER Facility
11:40 a.m.	Arrive U1A – model
12:30 a.m.	Leave U1A
12:45 p.m.	Arrive BEEF
1:25 p.m.	Leave BEEF
1:45 p.m.	Arrive SEDAN Crater
2:00 p.m.	Leave SEDAN Crater
2:50 p.m.	Arrive Mercury
	Cafeteria, restroom stop
3:05 p.m.	Arrive Gate 100
	Turn in badges, dosimeters
3:10 p.m.	Leave Gate 100 for Las Vegas
4:45 p.m .	Arrive Tropicana

8:30 – 12:00

Networking /Session Wrap-up

Small conference room will be available for networking and session wrap-up for folks not attending the tour.

12:00

Close Workshop

Hotel Services

Hotel: Tropicana Hotel and Casino, 3801 Las Vegas Blvd. So.

Room Block = 90 rooms (Workshop participants are encouraged to stay at this hotel for workshop attendance).

Guest Room Rates: \$ 75.00 per night beginning Sunday, May 1 through Thursday May 5. I was told by the hotel that the rate for those wishing to stay past Thursday night (i.e., Friday and Saturday nights) would be \$ 139.00.

Reservations are made by calling 1-800-634-4000, ask for the “DOE Pollution Prevention Workshop”.

Note: The hotel is saying that the block of rooms will be held until **Monday April 4 at 5 PM.** You need to guarantee your reservation with a credit card but they will **NOT** charge your card until you arrive for the workshop.

No refunds will be issued if the reservation is cancelled less than 48 hours prior to arrival.

If it is necessary to send packages and or materials for the workshop please send them to the attention of the Tropicana Business Center and be sure to note the dates(s) of the meeting (i.e., “May 2-6, 2005”) and Name of the Group (i.e., “DOE Pollution Prevention Workshop) on the mailing label. The address is:

Tropicana Resort and Casino
Attention: Tropicana Business Center
DOE Pollution Prevention Workshop, May 2-6, 2005
3801 Las Vegas Blvd. South
Las Vegas, NV 89109

The phone number for the Business Center is: 702-739-3653; Fax: 702-739-3648.