## July 2006 P2 Conference Call 20 July 2006

**1. Solvent Substitution at Sandia National Laboratories** – Joseph Lenhart, 505-284-9209, <u>jllenha@sandia.gov</u>

By assessing the pollution prevention and safety enhancement opportunities early in the design process, Sandia was able to significantly reduce the amount of hazardous chemicals used in a cleaning process. Substituting Brulin detergent for toluene and hexanes cleaning agents reduced hazardous waste production by 83% (768 liters per year to 128 liters per year) and cleaning time from three days to one. Those reductions translated into diminished exposure to hazardous materials and cost savings of about \$40,000.00 per year.

## 2. LANSCE Lead Removal – Ben Poff, 505-665-9822, poff@lanl.gov

The Los Alamos Neutron Science Center (LANSCE) hosts several facilities that make use of the Center's proton linear accelerator: Neutron Nuclear Science, Lujan Neutron Scattering Center, Proton Radiography, and the Isotope Production Facility. LANSCE is the largest user of lead at Los Alamos National Laboratory (LANL) and, because changing research needs require different lead use configurations, the lead inventory is always in a state of flux. Prior lead inventory control systems were inefficient because each research team managed its own lead. Managing the inventory was also hampered by the perception that the lead had been activated.

In an effort to control this situation, LANSCE personnel developed a business case for a centralized inventory that incorporated life-cycle assessments, safety concerns, and waste management and disposal costs. They also created a lead user education program, worked with site P2 and EMS staff, developed a project management system, and instituted field teams to provide advice and direction to lead users. The teams consist of the waste management coordinator, an industrial hygienist, and a representative from radiation control. The LANL set aside fund was tapped for financial support.

After centralizing the lead inventory, LANSCE personnel determined that only about 1% of the inventory was activated and reduced the amount of non-activated lead by 81% through recycling via a local vendor.

## **3. EMS Implementation at Oak Ridge National Laboratory** – Kathy Carney, 865-576-5748, <u>carneyka@ornl.gov</u>

Oak Ridge National Laboratory (ORNL) implemented its EMS on the same model it used earlier in gaining ISO 14001 registration in 2004 and 2005: integrate it with existing management systems or modify those systems to accommodate EMS elements. The Standards Based Management System is the framework ORNL uses for managing all internal and external requirements by identifying the appropriate management system and tools or functions to respond to requirements. As an example, a tool related to the work/project planning and control management system is a form/questionnaire that elicits information on all environmental hazards and impacts associated with a project in order to identify opportunities to minimize the project's environmental impact.

ORNL uses its Strategic Planning Process to ensure that line organizations are aware of and integrate EMS objectives and targets into their Division Specific Business and Performance Plans. Progress in achieving the objectives and targets becomes part of the performance reviews of division leadership.

4. Federal Electronics Challenge (FEC) – Jeff Eagan, 202 586-4598 Jeff.Eagan@hq.doe.gov (presented by Josh Silverman)

The Electronic Product Environmental Assessment Tool (EPEAT) registry – a site that provides a one-stop-shop for purchasers to identify products that conform with environmental performance criteria – is due to be on line on 27 July. EPEAT is a procurement tool to help institutional purchasers evaluate, compare and select desktop computers, notebooks and monitors based on their environmental attributes. EPEAT also provides a clear and consistent set of performance criteria for the design of products, and provides an opportunity for manufacturers to secure market recognition for efforts to reduce the environmental impact of its products. The EPEAT web site is maintained by a non-profit organization – EPEAT, Inc – that operates the system for product registration and verification.

The Department is looking into recycling/take back opportunities in which it returns electronic equipment to the manufacturer and receives credit for future purchases. Please contact Jeff if you have knowledge of or experience with take back programs.

The new P2 reporting requirements for electronic equipment purchase and recycle are very similar to those required of FEC members. Thus, joining the FEC as a member would not require a lot of additional effort.

5. P2 Updates – Josh Silverman, HQ, 202 586 6535 josh.silverman@eh.doe.gov

Several sites have activities/programs that should be considered for an EPA awards programs. The EPA's Water Efficiency Leaders (WEL) awards recognize organizations and individuals who are providing leadership and innovation in water efficient products and practices. The nomination deadline is 28 July. More information is available at <a href="http://www.epa.gov/water/wel/">http://www.epa.gov/water/wel/</a>

In addition, DOE sites appear to have existing programs that qualify for recognition under NPEP – National Partnership for Environmental Priorities. NPEP is a voluntary program, run by EPA, that focuses on reductions in the use or release of the 31 Priority Chemicals (PC) identified under TRI. It seeks a 10% reduction in PC releases reported to TRI by 2008, using 2001 as a baseline year. Lead is the toxic material most frequently targeted by participating sites, with mercury second. The NPEP entails no ongoing reporting requirement apart from 1) the initial application and 2) certifying that you have achieved the targeted reduction. Overall, NPEP offers a relatively simple way to obtain recognition for the good environmental work sites are already engaged in. Additional information is available at http://www.epa.gov/epaoswer/hazwaste/minimize/partnership.htm

The P2 reporting system re-design is on track and should be ready for pilot-testing in early August by the five volunteer sites: Brookhaven National Laboratory, Sandia National Laboratories, Lawrence Livermore National Laboratory, and Princeton Plasma Physics Laboratory.