

**Pollution Prevention Project Report for 2004-2005
Sustainability Program, Colorado Department of Public Health and Environment**

**For Region 8 Pollution Prevention Roundtable
September 8-10, 2004 – Denver, CO**

	Partners	Description	Products	Barriers/Challenges	Opportunities
Current Projects					
CDPHE Environmental Management System	State Laboratory Services.	A continual cycle of planning, implementing, reviewing and improving our agency's processes and actions in order to enhance our overall environmental performance	A reduction in the amount of resources, water and energy used as well as a reduction in the amount of waste generated.	Changing employees behavior (turning off lights, recycling, duplex printing, carpooling, etc.) Cost of upgrades.	Motion sensors for lighting. Waterless urinals. Duplex printers. Vending misers for soda machines. Window tint for skylights. Educate employees
Comprehensive Measurement Tool (COMET) Project	CO Asphalt Pavement Assoc. 25 companies	Targeted compliance assistance effort that builds off COMPASS by going next step to EMS implementation.	EMS template for sector. Increased compliance, more accurate permits and APENs. Significant improvement with stormwater regulations	Seasonal operation of facilities makes implementation difficult. Most companies are small and have limited time, financial and staff resources.	Continued improvements in compliance across all media. Apply more broadly to sector and to other states. Customize EMS for sector.
EMS Permit Pilot Project	Aerospace, semi-conductor, livestock sectors NGOs, EPA, local POTWs, other state agencies, governor, environmental leaders	Voluntary program that incorporates permits and permit requirements into the framework of an EMS.	Improved management and integration of regulatory requirements, procedures, record keeping, reduction of environmental impacts, etc. through an EMS. Cross media analysis and solutions. Performance-based measurements.	EPA & internal staff support. Existing single-media regulatory programs and ways of doing business. Fear of change and thinking cross media versus medium specific.	New approach to permitting and regulating sources. Increased environmental performance and results. Reduced inspections. Applicability to other states. Improved efficiencies for both states and participants.

Environmental Leadership Program	Industry, NGOs, Staff	Recognition/reward program for environmental leaders. Gold and Silver tiers to program.	Beyond compliance/continual environmental improvement, increased communication with community, CDPHE and others in regulated community.	Resources Meaningful incentives Coordinating with EPA re: Performance Track program	Expand program to help market the program through partners tier and a stewardship tier. Better coordination with PT. Turn violators into leaders.
Cross Media Compliance Assistance (CA) Team Sector Projects	Air, Consumer, Sustainability, Waste, Water staff	X-media CA/P2 visits to sector facilities (auto salvage (mercury switches), corrections, surface coating, auto body)	CA & P2 checklists, site specific reports, CA metrics (change in compliance rates), P2 implementation metrics, environmental performance metrics	Facility participation, resources to staff projects, obstacles to credit from env. divisions for site visits (inspection beans)	Efficient way to improve compliance and environmental performance (with P2) on x-media basis (especially if multiple inspection beans per visit are possible)
Cross Media Enforcement Team	Air, Consumer, Sustainability, Waste, Water staff	Review, improve and develop departmental enforcement policies.	Cross media policies, approaches, training, and tools for enforcement, which incorporate P2 and sustainability principles	Statutory restrictions, education and awareness of inspectors	Sustainability and P2 can be done by all inspectors and throughout all enforcement policies
Mercury (Hg) Environmental Problem Solving (EPS) Team	Air, Sustainability, Waste, Water staff	X-media approach to reducing Hg releases including auto switches, thermostats, thermometers, & dental Hg	Outreach documents, environmental performance metrics for Hg collected/recycled	Resources (staff and program \$\$)	Reducing Hg releases and exposure on a x-media basis; visible issue nationally
Energy Efficiency (E2) / Environment (E3) Partners	Air, Consumer, Sustainability, Waste, Water staff, Dept. of Energy (DoE), Office of Energy Management & Conservation, local government env. staff	Free E2 assessments for facilities referred by env. inspectors; funded by DoE	E2 identification and training materials, site specific assessment reports, project metrics on assessments, recommendations and implementation	Few env. inspectors make referrals, many facilities don't request assessments, hard for small businesses to implement E2 without additional \$\$ and technical assistance	E2 reduces emissions, help create better businesses, often create better relations with businesses and env. agency

Planned Projects					
Environmental Preferable Purchasing	Other State agencies.	Develop policy and procedures for the purchasing of environmental preferable products such as cleaning chemicals, office supplies and other day-to-day items.	Create a stronger market for products made with recycled and non-toxic material. Put less toxic chemicals into our water system.	Finding products which meet our performance needs. Increased cost of some of these environmentally preferable products.	Increase the percentage of paper we purchase with recycled content. New contract with company that cleans the State laboratory.
Industrial Ecology	CSU, CU, Leaders, Industry	Develop an exchange network for waste.	Zero waste Reduce dependence on raw materials	Resources Management of network.	Zero waste Turn companies into leaders.
Ag/Rural Roundup	Farm/Livestock organizations Schools Communities Internal staff	Chemical roundup on farms, ranches, schools and in the community.	Reduce risk and possible exposure to toxics chemicals in rural areas. Guarantees proper disposal of chemicals.	Expensive with respect to handling waste, transportation, etc.	Partnering with rural organizations provides them with an additional member service. Broaden current programs to be more inclusive of the entire rural area.
EMS Collaboration	Leaders, industry	Mentoring silver leaders and other interested companies with hands-on EMS training.	Series of sessions that would result in development of an EMS by end of the training. Training curriculum would be developed. Reduced environmental impact.	Resources and time. Scheduling – missing sessions will put participants behind.	Move more companies into the Gold tier of leadership. Training curriculum could be used for future training and for other interested entities.
Cooperative Environmental Project	Williams Oil & Gas Air Division Sustainability Program	Cooperative agreement between CDPHE and company to achieve superior environmental performance.	Beyond compliance. Improved relationship and understanding between CDPHE and the company. Partner on EMS & Design for the Environment.	CDPHE resources and staff availability. Community component to project?	Design stage improvements for industry. Turn violator into leader and improve perception within environmental divisions of O&G. Sector applicability.

Tribal Partnership	Ute Mountain Tribe, Southern Ute Tribe, EPA Region 8 and FOSTTA	Begin dialogue on leveraging resources between tribal and state P2 programs.	To be determined.	Resources.	Leveraging resources.
Environmental Results Program	Air, Consumer, Sustainability, Waste, Water staff	Develop cross media compliance and permitting program that includes sustainability and P2.	Sector-based compliance assistance and P2 tools, permits by rule, and self-auditing elements.	Resources, development of regulatory requirements, education.	Better use of state resources to reach more facilities, tie to self-auditing and promote P2.
Data, Indicators and Outcome Measures	Air, Consumer, Sustainability, Waste, Water staff	Develop department-wide indicators focus on outcomes v. outputs.	Continual modification and improvement of all programs for greater benefits to the environment.	Resources, EPA accepting and valuing outcomes over outputs, education of regulatory community.	Nationwide movement and will puts P2 as tool of choice due to outcomes.
Hospitals for Healthy Environment	H2E, hospitals, air, consumer, water, waste, health divisions	Try to create H2E opportunities in Colorado.	Information and resources for hospitals to reduce impacts and measure outcomes.	Resources.	New partnerships, significant solid waste, energy, water, and mercury opportunities.
Lead (Pb) Free Electronics Initiative	Sustainability & Waste staff, EPA Solid Waste/RCRA staff, NPEP, electronics manufacturing facilities	Use European Union ban on Pb in electronics after 2006 as motivation to reduce or eliminate Pb use by electronic equipment manufacturers (14 in Co, ~40 in Region 8),	Webcast workshop from Region 3 in 11/04, Pb free electronics outreach info, NPEP members, Pb reductions, other environmental performance metrics	Staff resources and \$\$, facility interest	Timely motivation from EU ban, Region 3 technical leadership, NPEP recognition
Lean Manufacturing	Sustainability staff, ELP companies, other interested businesses	Provide training in Lean Manufacturing techniques (kaizen, Six Sigma, standardization, reduced variation)	Lean Manufacturing training and materials	Staff resources and \$\$, Lean Manufacturing expertise, facility interest,	Improve environmental performance, help create better businesses, often create better relations with businesses and env. agency