

US EPA ARCHIVE DOCUMENT



# State Innovation Grant Program: Colorado

## Developing a Cross-Media Environmental Permitting Approach through Facility Environmental Management Systems (2002 Competition)

### The State Innovation Grant Program

In 2002 EPA introduced the State Innovation Grant Program to support efforts led by state environmental agencies to test innovative approaches for achieving better environmental results and improved efficiency in permitting programs. Between 2002 and 2007, the State Innovation Grant program competition awarded over six million dollars to support 35 state projects that test permitting innovation for a variety of regulated entities including several small business sectors. A summary of the awards by year appears in the table below.

State Innovation Grant Program Statistics, 2002-2007			
Competition Year	Proposals Submitted	Proposals Selected	Total Program Funding (\$)
2002/2003	29	6	\$618,000
2004	33	9	\$1.425 Million
2005	26	7	\$1.479 Million
2006	25	6	\$1.243 Million
2007	17	7	\$1.611 Million
Cumulative Total	130	35	\$6.376 Million

"Innovation in Permitting" has been the theme of the State Innovation Grant competition since its inception. In the last three competition cycles states received awards for projects in the following three categories:

- **The Environmental Results Program (ERP)** is an innovative approach to improving environmental performance based on a system of the interlocking tools of compliance assistance, self-certification (sometimes, where permissible, in lieu of permitting), and statistically-based measurement to gauge the performance of an entire business sector. The program utilizes a multimedia approach to encourage small sources to achieve environmental compliance and pollution prevention. (See: <http://www.epa.gov/permits/erp/>)
- **Environmental Management System (EMS)** is a system involving a continual cycle of planning, implementing, reviewing and improving the processes and actions that an organization undertakes to meet its business and environmental goals. EMSs provide organizations of all types with a structured system and approach for managing environmental and regulatory responsibilities to improve overall environmental performance and stewardship. (See: [www.epa.gov/ems/info/index.htm](http://www.epa.gov/ems/info/index.htm))
- **Performance Track** is a partnership that recognizes top environmental performance among participating US facilities of all types, sizes, and complexity, both public and private. (See: <http://www.epa.gov/performance-track/>)

NCEI has provided awards also for projects testing watershed-based permitting, and for permit process streamlining in past competitions. For more information on the history of the programs, including information on solicitations, state proposals, and project awards, please see the EPA State Innovation Grants website at <http://www.epa.gov/innovation/stategrants>

### Project Background:

In 2003, The Colorado Department of Public Health and Environment (DPHE) received a State Innovation Grant to undertake a three-year Environmental Management System (EMS) Permit Pilot Program. By using EMSs to augment regulated facilities' environmental permits, the program intended to address the environmental limitations of technology-based standards while reducing regulatory burdens on businesses. Early in the project, DPHE shifted its approach to integrating a facility's EMS with its permits, rather than attempting to substitute an EMS for the permits. DPHE sought to test whether this approach would yield greater environmental benefits and higher compliance rates than traditional permits, while at the same time provide businesses with enhanced flexibility to meet environmental goals and reduce administrative burdens.

DPHE expected that by granting facilities the authority to determine how best to meet their environmental goals, the program would encourage facilities to innovate and prevent pollution. The department also hoped the program would foster involvement by community stakeholders and generate better information for regulators and the public through annual external audits. Other program goals included:

- Enabling regulators to consider cross-media impacts and benefits in decision-making;
- Leveraging state regulatory resources by using a participating facility's EMS to replace and/or augment DPHE's regulatory functions, (i.e. inspections, minor permit modifications, and compliance reporting);
- Reducing administrative burdens by consolidating

all environmental permits into one cross-media permit, and establishing a single point of contact at DPHE; and

- Establishing stakeholder involvement and public participation provisions throughout the EMS permitting process.

The EMS Permit Pilot Program was conceived and implemented by a cross-media team of DPHE employees. DPHE team members invited stakeholders, including representatives from the regulated community, environmental and community organizations, and local and federal government entities, to help develop the program. This broader stakeholder group developed the specific components of the program, including: eligibility criteria for regulated facilities, permit requirements, public participation provisions, criteria for operational flexibility, requirements for continual improvement projects, and compliance monitoring and reporting requirements.

## Project Description

DPHE initially developed regulations to give them the authority to develop and implement the EMS permit pilot, a move that was supported by Colorado legislature through the passage of new legislation. DPHE then selected five facilities, that the agency considered to be environmental leaders within their respective industries, to participate in the EMS Permit Pilot Program. One of these facilities ultimately dropped out of the program. DPHE arranged for third-party baseline assessments, which included measurement of existing environmental conditions, and an EMS audit to be conducted at each participating facility. Following the completion of the assessments, DPHE assisted facilities with developing or implementing their EMSs.

Next, DPHE and the facilities worked together to complete the EMS permit application process. Facilities were asked to identify the requirements of their existing air, water, and waste permits. Then, if they chose, facilities could add other applicable environmental requirements to their EMS permit. Facilities were also asked to list their requests for operational flexibility, provide relevant data for DPHE

and local agencies to perform equivalency determinations, propose continual improvement projects, and submit a compliance certification form. In addition, DPHE worked with facilities to create a Community Involvement and Communications Plan (CICP) that outlined how the facility would effectively communicate with community stakeholders.

To ensure that the EMS permits were considered equivalent to facilities' existing environmental permits, DPHE developed specific environmental standards and work practices requirements for EMS permits. They also required facilities to participate in external audits to assess compliance with environmental requirements in the EMS permit. The department conducted an initial inspection at each facility during the pilot program, and then provided a third-party consultant to conduct annual compliance audits. Lastly, prior to issuance of the EMS permits, DPHE solicited inputs from stakeholders and conducted a public comment process as required by state law.

## Results

DPHE found that its Environmental Management System (EMS) Permit Pilot Program was a success. EMS performance and regulatory compliance data analyzed over the course of the program showed improvements in environmental performance compared to the baseline assessments. Follow-up assessments conducted by a third-party auditor at the conclusion of the pilot program document an overall improvement in environmental performance across the four participating facilities, as shown in Table 1.

Table 1	
Area/Media Type	Average % Improvement in EBPIs
Emissions of air pollutants	15%
Hazardous wastes generated	27%
Electrical energy used	3%
Natural gas consumed	10%

The public participation requirements of the pilot program yielded benefits as well by enhancing communication with the community and involvement by the public. DPHE noted that although developing the CICIP required an upfront investment of the facilities' time and resources, it ultimately increased their awareness of community concerns. The CICIP also helped stakeholders understand the facilities' environmental impacts and plans for improvement under the EMS permit.

One limitation of the project noted by DPHE was the U.S. EPA's decision to have participating facilities maintain their conventional environmental permits throughout the EMS permit pilot program. This made it difficult to test the efficiency of the EMS permit program, as DPHE staff had to dedicate significant time to maintaining the existing permits, leading to conflicting priorities and resistance to the EMS permitting process. Moreover, the requirements of the existing permits prohibited DPHE from granting participating facilities full operational flexibility, which also affected facilities' ability to pursue unique continuous improvement projects.

Overall, with the completion of the EMS Permit Pilot Program, DPHE has forged a new permitting and regulatory approach that relies on a performance-based EMS permit to serve as a facility's environmental permit(s). Action taken by Colorado's General Assembly during the 2007 legislative session with passage of Senate Bill 07-218 institutionalized the program on a permanent basis within DPHE.

## Connection to EPA's Goals

This program directly supports EPA's Strategic Goal #5, focused on compliance and environmental stewardship, by promoting an innovative approach to improve compliance and pollution prevention. It also supports several Cross-Goal Strategies through exploration of improved compliance assistance approaches and incentives to achieve environmental protection.

## Project Contacts:

For more specific information on the Colorado State Innovation Grant, please contact one of the individuals below:

---

### Phyllis Woodford

Colorado Department of Public Health and Environment  
Denver, CO  
303.692.3477  
[phyllis.woodford@state.co.us](mailto:phyllis.woodford@state.co.us)

---

### Dale Murphy

U.S. Environmental Protection Agency - Region 8  
Denver, CO  
303.312.6126  
[murphy.dale@epa.gov](mailto:murphy.dale@epa.gov)

---

### Beth Termini

U.S. Environmental Protection Agency – Region 1  
Boston, MA  
617.918.1662  
[termini.beth@epa.gov](mailto:termini.beth@epa.gov)

---

## Program Contact:

### Sherri Walker

State Innovation Grant Program  
U.S. Environmental Protection Agency  
Washington, DC 20460 (MC1807T)  
(202)-566-2186; FAX (202) 566-2220  
[walker.sherri@epa.gov](mailto:walker.sherri@epa.gov)