**PROJECT SUMMARY**

**Title**:        Growth and Advancement of Colorado's Environmental Leadership Program Using Innovative and Integrated Tools and Partnerships within the Printing & Imaging Sector

**Applicant**:    Colorado Department of Public Health and Environment, Environmental Leadership Program

**Project Manager**: Lynette Myers, Administrator, Colorado Environmental Leadership Program
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**Total Project Cost:**   Total Budget: $268,178
                            Requested from EPA: $241,878
                            Leveraged, Non-Federally Funded Staff Time: $26,300

**Project Period:**      **October 1, 2009 - September 30, 2012**

**Project Abstract:** Raising awareness of environmental leaders is a challenge for leadership programs at both the state and federal level. Without adequate awareness leadership programs lack a critical incentive for growth and continued success. The Colorado Department of Public Health and Environment (CDPHE) will address this need by creating a valuable incentive for environmental leaders and by piloting a collaborative "compliance on-ramp" with the printing and imaging sector that can be modeled and duplicated in other sectors and states. Colorado's project will meet these goals by assembling a team within CDPHE, the printing and imaging sector and Colorado's current Gold Level environmental leaders to: (1) improve and develop a marketing program for members of state environmental leadership programs and the U.S. Environmental Protection Agency's National Environmental Performance Track Program; (2) increase participation in leadership programs through mentoring opportunities and the development of a team of certified third party auditors (comprised of environmental leaders); and, (3) create a leadership program on-ramp for small businesses by integrating a self-certification approach (i.e., Environmental Results Programs (ERP)) with an Environmental Management System (EMS) to increase leadership program membership and move small businesses beyond compliance. CDPHE is confident that this project can result in significant environmental benefits including reductions in emissions of air pollutants and greenhouse gases; improving water quality, and improving regulatory compliance and environmental stewardship from both the integrated EMS/ERP approach and successful marketing efforts that encourage more companies to seek an environmental leadership status.

**Statutory Authority and Flexibility:** Existing authorities allow for the implementation of this project without the need for additional statutory authority.

**Certification of State Agency Support From the Highest Level:** James B. Martin, Executive Director; Colorado Department of Public Health and Environment endorses this proposal.

**Pre-proposal Budget Summary**

State: Colorado

Agency: Colorado Department of Public Health and Environment

Project Title: Growth and Advancement of Colorado's Environmental Leadership Program Using Innovative and Integrated Tools and Partnerships within the Printing & Imaging Sector

| Purpose | Total Project Costs | Proposed State Funds | Proposed "other" Funds | EPA Funding |
|---|---|---|---|---|
| Contractual Services | $80,900 | | | $80,900 |
| Supplies | $7,000 | | | $7,000 |
| Operating and Travel | $102,000 | | | $102,000 |
| Personal Services | $25,370 | | | $25,370 |
| Indirect | $26,608 | | | $26,608 |
| Other | | $9,500 | $16,800 | |
| **Total** | **$268,178** | | | **$241,878** |

| Indirect Rates | |
|---|---|
| **Category** | **Rate** |
| Contractual Services | 1.00% |
| Supplies | 19.20% |
| Operation & Travel | 19.20% |
| Personal Services | 19.20% |

**Budget Narrative**

Personnel: Administrator, Environmental Leadership Program, Annual Salary: $75,698.40, Time assigned to grant projects: 10%, Total Personnel Cost: $ 25,370.33

Fringe Benefits: 25% rate covers dental. health, life, short-term disability, Medicare and PERA.

Operation & Travel: Workshops, venues, travel.

Supplies: Workshop materials, marketing materials.

**Problem (Issue) Statement:** For well over three decades state environmental programs have organized regulatory programs around the single-media framework of federal rules (i.e., the Clean Air Act, Clean Water Act, CERCLA and EPCRA, et al.). These programs strive to protect the health of our citizens and our nation's natural resources. The structure of single-media programs and tools limit the ability of environmental programs to realize greater environmental results. State environmental leadership programs and EPA's National Environmental Performance Track Program serve an important function in filling the gap of conventional single-media programs by encouraging entities to raise the regulatory compliance bar beyond mere compliance, to beyond compliance. Capitalizing on the full potential of leadership programs, however, is often constrained by the value given to leadership programs versus the traditional core programs of air, water, hazardous and solid waste. By developing the right incentives and integrating leadership programs into core regulatory programs, leadership programs can serve an important role and add value to regulatory programs. Developing, for example, effective marketing tools and approaches to attract new members, especially small businesses, and effective incentives for existing leadership members, leadership programs can be strengthened and sustained.

**Background**: EPA's Performance Track and state leadership programs, including Colorado's Environmental Leadership Program, publicly recognize and provide incentives to companies that not only meet compliance, but also go beyond compliance, such as by setting pollution prevention goals that are not required by regulation. Traditional regulatory programs do nothing to either recognize superior environmental compliance or to encourage even greater environmental results. Attracting more businesses to participate in leadership programs will provide greater environmental and public health benefits as well as better leverage the value of leadership programs. Creating new incentives for existing leaders and working with small businesses to merge new compliance tools (e.g., the Environmental Results Program) with leadership principles (e.g., an Environmental Management System), this project will develop new techniques for increasing awareness and environmental compliance through a focused, collaborative approach. Small businesses are a particular focus of this project because according to federal data there are an estimated 493,886 small businesses in Colorado, yet only two are members in Colorado and EPA's leadership programs.

Colorado's Environmental Leadership Program consists of 33 Gold Leader members (this level is equivalent to EPA's Performance Track Program). Of Colorado's Gold Leaders, 12 also participate in Performance Track. At the time of application to the leadership program, Gold Leaders can also apply to Performance Track, yet only 12 companies have opted into both leadership programs. According to Colorado's leadership members, one of the primary reasons why companies choose not to participate in both programs is that Performance Track requires a certified third-party audit of environmental management systems while Colorado's program will accept third-party audits performed by Colorado's existing leadership program members; some of which may or may not have audit certification, but have the experience. Many companies, small businesses in particular, do not have the resources to hire a certified third-party auditor. This project will create a self-sustaining third party audit certification team comprised of Gold Level environmental leaders. This team will audit potential leadership companies who request the service, at no cost. The result is three-fold: 1) create a mentoring aspect for leadership

programs; 2) make leadership programs more self-sustaining by adding value to media-specific programs; and 3) create a new incentive for leaders.

Small businesses, in particular, are under represented in leadership programs because they lack awareness of leadership programs. Marketing has not been a top priority for most leadership programs due to the lack of resources and in-house marketing expertise. Creating effective marketing tools will provide state programs and Performance Track with new opportunities to increase program awareness at every level (i.e., internal, general public, within sectors) and create a valuable incentive for current and future leadership members.

Last, and pivotal to the success of leadership programs, many companies have not developed or implemented an Environmental Management System (EMS) at a facility level. The primary reason is that many companies have neither the understanding of an EMS, nor the tools and resources necessary to implement management systems. Integrating leadership programs into existing programs and regulatory tools such as state Small Business Assistance Programs (SBAPs), and the Environmental Results Program (ERP) can increase awareness of leadership programs and provide businesses assistance with development of EMS requirements. For example, the focus of Colorado's ERP is to quickly and effectively target a particular sector, such as drycleaners, and bring them into compliance using a self-certification and spot-check approach. This proposal, in part, will bring together the environmentally beneficial tools of self-certification (ERP) and an EMS and pilot an integrated approach. Leveraging resources and results from an ERP project previously implemented by CDPHE's Small Business Assistance Program within the printing and imaging sector, will allow CDPHE to advance ERP to the next step, "Phase III of the ERP." By bringing together CDPHE's Environmental Leadership Program with the SBAP and the Printing and Imaging Association Mountain States (PIAMS) a new collaborative effort can focus on creating a multi-media ERP certification and leadership program on-ramp. This concept will take companies involved in ERP to the next level – implementation of an EMS, and to eligibility for state environmental leader programs and Performance Track.

The project will meet this goal by creating an ERP checklist that includes EMS elements and utilizes a third party audit team to conduct EMS audits. Subsequent membership in a leadership program will then allow these small businesses to tap into the marketing incentive developed as a result of this project and, in time, become certified EMS auditors as an added incentive.

Program Guidelines and Eligibility Requirements:  The multi-media and multi-faceted elements of Colorado's project will meet and exceed the prevention and pollution control goals of the federal and state Clean Air Act, Clean Water Act, and Solid Waste Disposal Act. It will do this by expanding the department's ERP compliance assurance tool to include elements of an EMS, including continual improvement and beyond compliance goals. In addition to benefiting federal laws, the project will result in improved compliance with state-only and OSHA rules.

Achieving compliance and marketing the success of environmental leaders in maintaining, and in fact going beyond compliance are end results of this project -- results that directly boost EPA's strategic goal of Compliance and Environmental Stewardship (Goal 5, EPA's 2006-2011 Strategic Plan). By taking two innovative tools, ERP and EMSs, and integrating them together,

Colorado is confident that greater environmental results will be realized at the end of the proposed three-year project period. Add in the additional elements of marketing the achievements and benefits of leadership programs and a certified auditor opportunity for environmental leaders, and this project takes innovation to a new level for regulatory agencies.

**Project Objectives:** Finding effective and creative ways to achieve superior environmental protection is the primary goal of CDPHE's proposal titled the Growth and Advancement of Colorado's Environmental Leadership Program Using Innovative and Integrated Tools and Partnerships within the Printing & Imaging Sector. A second goal of the project is to test a systematic, multi-media outcome-based regulatory approach to increase compliance and help companies achieve beyond compliance results – i.e., become environmental leaders. This project provides an opportunity for states and the EPA to examine the benefits of an integrated environmental leadership approach in protecting and enhancing public health and the environment.

The goals of this project will lead to the following objectives:
- Increase membership in the Performance Track and state environmental leadership programs across all sectors. Initially, one small business sector will realize the benefits of this project. The ease of transferability of this project to other state leadership and regulatory programs will increase the number of environmental leaders nationwide, resulting in greater environmental benefits through the attainment of beyond compliance goals by a larger number of companies.
- Expand and integrate regulatory tools, such as ERP with leadership tools, such as an EMS to integrate leadership programs into traditional single-media (air, water and waste) programs and realize greater efficiencies and environmental results. In addition, this objective will create an on-ramp for businesses to qualify for leadership programs.
- Increase awareness of the program at the local, state and federal levels by implementation of effective marketing strategies. The benefit of this objective will double as an attractive incentive for existing and future environmental leaders.
- Develop a valuable incentive for leadership programs by creating a team of certified third-party EMS auditors. Beyond the benefit as an incentive, this aspect of the project creates a mentoring opportunity for leaders and will help to increase membership and sustain leadership programs.

**Methodology or Technical Approach:** Throughout the project period, the project manager, collaborative partners and contractors will evaluate and assess data quality by looking at the following data quality aspects:
- Completeness (is all the data included)
- Appropriateness (scope and detail appropriate to support project objectives and EPA and Colorado strategic goals)
- Accuracy (level of accuracy appropriate to questions being asked and project goals)
- Precision (description of desired measurement)
- Relevance (adds information, techniques and methods that support project objectives)
- Comparability (to other state leadership programs and ERP performance)

The specific methods proposed for each task of the project are provided below.

Task One - Marketing
CDPHE will contract with a third-party marketing entity to develop and test various marketing tools and approaches that can be used by states and EPA to increase awareness and participation in leadership programs. This task will create an enticing and sustaining incentive for current members, as well as draw new members to leadership programs. In addition to benefits for leadership members, the general public will benefit from a successful marketing program by gaining greater knowledge of environmental leaders and the type of environmental results leadership programs provide communities or the products they provide. Thus, support for these programs can grow at the local level. The development of the main marketing tools will occur during the first year of the project with implementation of marketing techniques taking place throughout the entire project.

Task Two – Certified EMS Audit Team
This element of the project will help advance and sustain state leadership programs and Performance Track by developing a team of certified EMS auditors from the membership of environmental leadership programs. This task offers a train-the-trainer course to Colorado's Gold Level leaders, and pending the availability of resources, to other state leadership programs and to EPA's regional Performance Track administrators. Once trained, the certified auditors will perform third-party audits for potential members and maintain certification on an ongoing basis. The participation of environmental leaders is voluntary. The timeline for completing this phase of the project is one year to train and prepare the auditing team, with the remaining two years spent auditing and certifying EMSs at companies interested in applying to Colorado and EPA's leadership programs.

Task Three – Collaboration & Integration
Task Three involves collaboration with several key partners: the department's Small Business Assistance Program (SBAP), environmental staff overseeing CDPHE's ERP and the voluntary participation of the Printing and Imagining Association Mountain States (PIAMS). Together, the project partners will concurrently pilot an EMS the ERP (led by SBAP) with the end goal of implementation of beyond compliance goals and a new cluster of companies eligible to apply to state and federal environmental leadership programs (i.e., the printing and imaging sector). This aspect of the project also includes training for the printing and imaging sector on development of an EMS. The integration of an EMS into ERP will occur during the first year of the project with implementation in the printing and imaging sector following in year two (or sooner depending on when the EMS/ERP tool is completed). Also beginning in year two CDPHE will conduct random inspections to evaluate success of an ERP approach and assist the sector with implementation of the EMS element. Reporting of environmental results will occur on an annual basis after implementation of an EMS.

**Outcomes and Measures:** This project has three primary elements; marketing of leadership programs, development of a certified EMS auditing team, and collaboration and integration with CDPHE's existing ERP effort. Not only will companies meet compliance via use of the ERP, but also participating companies will go beyond compliance by concurrently developing an EMS. In addition, this aspect of the project will utilize the integrated ERP/EMS tool as an on-ramp to both the Performance Track and the Colorado Environmental Leadership Program. The larger

the participation in both programs the larger the benefit to the environment. Environmental performance measures will be developed as necessary and used throughout the project period. Each phase of the project will contribute baseline data on environmental performance and participation prior to the introduction of marketing and Phase III ERP implementation. Data collected through the project will be provided to EPA and interested stakeholders on a quarterly basis and summarized in the final project report.

<u>Environmental Outputs</u>
Each project task will measure emissions of pollutants, risk factors, use of energy and natural resources in the following areas:
o Solid waste in tons per year
o Hazardous pollutants (air, water, land) in pounds per year
o Water use in gallons per year
o Energy use in kilowatt per year
o Air pollutants in pounds/tons per year ($CO_2$, PM, VOCs and GHGs).
o Pollution prevention indicators (including pollution prevention performance information)
o Community involvement measures (increased reporting to the community through public reports such as sustainability or environmental reports)

*Task One – Marketing* - The goal of Task One is to increase participation in Colorado's Environmental Leadership Program and Performance Track through the development of new marketing tools.

**Output:** Reports of methodologies for recruiting participants, internet marketing, notices to stakeholder groups, the number of new leadership members as a result of marketing and the number of people/companies reached. This project will contribute baseline data on both the state and EPA programs prior to additional marketing and will provide quarterly updates of data following the implementation of marketing techniques.
o **Short Term Outcomes:** Increase awareness of leadership programs at all levels**.** <u>Measurable 1<sup>st</sup> order outcomes include:</u> collecting baseline data of current methodologies versus the number of participants in the programs; baseline data of stakeholder awareness of the program; the number of participants after program is implemented**;** and the amount of stakeholder awareness after the program is implemented.
o **Intermediate Outcomes:** Create an effective leadership program incentive that equates to an increase in marketing and public relation opportunities for leadership members. <u>Measurable 2<sup>nd</sup> order outcomes include:</u> baseline data of current members in Colorado and EPA leadership programs; and data of companies applying to leadership programs as a result of marketing.
o **Long-Term Outcomes:** Increase environmental benefits from attainment of leadership program goals by a larger number of companies participating in the programs. <u>Measurable 3<sup>rd</sup> order outcomes include:</u> the number of applicants to Colorado and EPA leadership programs due to marketing; baseline data of environmental outcomes of current participants; data of environmental outcomes of increased participants

*Task Two – Certified EMS Audit Team* – The goal of Task Two is to create a certified third-party audit team comprised of Colorado's existing Gold Leader members. This adds a self-sustaining

element to the program through mentorship and creates a certified audit team to help companies meet the audit criteria of leadership programs.

**Output:** Training Course
- o **Short Term Outcomes:** Certify a person to train others to perform EMS audits (train-the-trainer).
  Measurable 1st order outcomes include: number of attendees at training course.
- o **Intermediate Outcomes:** Create a training course for EMS audit certification.
  Measurable 2nd order outcomes include: - Not applicable
- o **Long-Term Outcomes:** Provide regular trainings for the EMS third-party audit team.
  Measurable 3rd order outcomes include**:** track number of courses for costs and benefits

**Output:** Create an audit team.
- o **Short Term Outcomes:** Select a team of interested Gold Leaders to participate.
  Measurable 1st order outcomes include**:** the number of interested parties.
- o **Intermediate Outcomes:** Train and certify an audit team of leadership program members.
  Measurable 1st order outcomes include**:** the number of attendees; and cost/benefits.
- o **Long-Term Outcomes:** Provide third-party audits to companies that may not have resources for EMS audit.
  Measurable 3rd order outcomes include**:** the number of companies utilizing the service; passing the audit; companies recognized in leadership programs as a result of the audits; imaging sector companies utilizing the service; and cost/benefits.

*Task Three – Collaboration & Integration* – The goal of Task Three is to work with a number of project partners to integrate an EMS into CDPHE's existing ERP. The integrated version of the ERP will act as an on-ramp to leadership programs by creating a template for other state leadership and ERP programs. Task Three will partner Colorado's leadership program with CDPHE's Small Business Assistance Program (SBAP) and the Printing and Imaging Association of Mountain States (PIAMS) to pilot an EMS element in SBAP's on-going ERP efforts.

**Output:** Meetings with PIAMS members, number of companies participating in ERP, and the number of companies brought into compliance and that advance to the ERP/EMS pilot.
- o **Short Term Outcomes:** Partnership with the printing association and SBAP to design an EMS and environmental outcomes to support the ERP and the printing and imaging sector.
  Measurable 1st order outcomes include: the number of PIAMS members and number of members participating in ERP
    a. Number of PIAMS members brought into compliance via ERP
- o **Intermediate Outcomes:** Pilot an EMS/ERP tool with the printing and imaging sector to: implement an EMS; set above and beyond environmental goals; and meet the criteria to apply to both Colorado and EPA's leadership programs.
  Measurable 2nd order outcomes include**:** the number of PIAMS members willing to participate in the pilot project.
- o **Long-Term Outcomes:** Market with PIAMS to get other printing and imaging companies to participate in ERP. This would result first in an increase in compliance though the ERP and create a second group that could advance to the EMS component.

Measurable 3<sup>rd</sup> order outcomes include**:** the number of PIAMS members brought into compliance; the number of PIAMS members participating in the pilot; and the increase in number of PIAMS members as a result of marketing and ERP outreach.

**Output:** Provide training courses and support for the printing and imaging sector to implement an EMS and increase awareness of Colorado and EPA's leadership programs.
- o **Short Term Outcomes:** Education and training of beyond compliance initiatives (EMS) to the printing and imaging industry.
  Measurable 1<sup>st</sup> order outcomes include**:** the number of PIAMS members attending the training; and the number of training courses, training manuals, meetings and people trained.
- o **Intermediate Outcomes:** Phase III ERP participants implement EMSs and strive to meet the criteria of the state and EPA leadership programs.
  Measurable 2<sup>nd</sup> order outcomes include**:** the number of PIAMS members implementing EMSs
- o **Long-Term Outcomes:** Participants in the pilot apply to both the state and EPA leadership programs
  Measurable 3<sup>rd</sup> order outcomes include**:** the number of PIAMS members who apply to leadership programs; and cost and benefit of implementing an EMS.

**Output:** Promote the integrated ERP/EMS tool with other state leadership and ERP programs.
- o **Short Term Outcomes:** Reports, trainings, meetings and education of leadership programs.
  Measurable 1<sup>st</sup> order outcomes include**:** the number of states requesting information and attending trainings
- o **Intermediate Outcomes:** Create an avenue for other states to use existing ERP programs to support above and beyond environmental benefits through Performance Track.
  Measurable 2<sup>nd</sup> order outcomes include**:** the number of state programs implementing the ERP/EMS tool
- o **Long-Term Outcomes:** Realize greater environmental benefits through the attainment and growth of beyond compliance goals by a larger number of companies participating in Performance Track.
  Measurable 3<sup>rd</sup> order outcomes include**:** the number of applicants to Performance Track as a result of Colorado's ERP approach

**Past Performance - Programmatic Capability and Reporting Environmental Results:**
Colorado EMS Permit Pilot Program – CDPHE was awarded an Innovation Grant in 2004 to pilot a multi-facility permitting project that implemented a whole-facility EMS approach to achieve performance beyond regulatory compliance. The agreed-upon tasks were successfully fulfilled and have been integrated into regulation (EMS Permit Program). Reports were sent to the EPA based on the timeline and schedule implemented in the grant. In addition, CDPHE continues to meet and update the state, EPA and interested stakeholders on decisions regarding the EMS Permit Program.

Pollution Prevention Incentives for State (PPIS) Grant Program –Each year CDPHE applies for and receives PPIS Grant support that is used to focus CDPHE's pollution prevention efforts on scaling up projects that the environmental divisions have piloted over the past several years. Projects include Greening Government, Environmental Leadership Program (ELP) and cross-media compliance assistance and enforcement efforts. The funds support technical assistance to external and internal customers. Through the PPIS Grant, CDPHE strives to integrate pollution prevention into compliance assurance, regulatory and permitting programs across all the department's environmental divisions. Included in this work are efforts to link CDPHE's ERP and sector based cross-media compliance assistance projects to ELP; enhance CDPHE's internal EMS; and implement greening government projects across Colorado's 16 state agencies. CDPHE collects measurements for the PPIS Grant Program as described in the work plan and reports out annually.

Colorado Environmental Performance Partnership Agreement (PPA) Grant Program – The PPA is an agreement that identifies and explains the key environmental priorities and goals of the State of Colorado, and the working relationship between CDPHE and EPA Region 8. The fiscal year 2007 and 2008 PPA continues the pattern established in the previous agreements; to achieve the goals of the National Environmental Performance Partnership System (NEPPS). The NEPPS provides a framework for delineation of CDPHE and EPA roles in carrying out environmental laws in each state. Colorado's PPA identifies key state priorities, allocates federal resources to the highest state priorities and allows for flexibility in finding ways to achieve mutually agreed upon goals. Colorado provides EPA with midyear and end-of-year updates on PPA activities.