

## **Partners for A Clean Environment (PACE)**

### ***2007 Progress Report***

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## Table of Contents

<b>1. Introduction</b>	<b>3</b>
<b>2. 2007 PACE Results</b>	<b>5</b>
PACE OUTREACH	5
ENVIRONMENTAL PRACTICES	6
<b>3. 2007 PACE Sector Developments</b>	<b>7</b>
PACE MANUFACTURERS	7
PACE LANDSCAPE PROFESSIONALS	8
PACE RESTAURANTS	9
PACE DENTAL OFFICES	10
PACE PRINTERS	11
PACE RETAIL	11
PACE CHILD CARE CENTERS	12
PACE AUTO REPAIR / AUTO BODY	12
<b>4. 2007 PACE Outreach Summary</b>	<b>13</b>
<b>5. 2008 PACE Goals</b>	<b>14</b>
<b>6. 2007 KICP/PACE Results</b>	<b>14</b>
MCM 3 – ILLICIT DISCHARGE DETECTION AND ELIMINATION	14
Status of KICP/PACE Goals from 2006 Annual Report	17
<b>7. 2007 KICP/PACE Goals</b>	<b>17</b>

## 1. Introduction

This report describes the activities the Partners for A Clean Environment (PACE) Program has accomplished for the 2007 calendar year and outlines the program goals for the coming year. Insights and lessons learned will be presented so that PACE may continuously improve and share experiences with organizations pursuing similar objectives.

The PACE Program provides education and recognition for environmental achievement to businesses and municipalities in Boulder County and portions of Weld County. PACE is a voluntary and non-regulatory program that provides educational outreach and technical assistance on a variety of environmental issues at no cost to participants. The primary goals of the program are to increase participation and adoption of sustainable practices to minimize use of hazardous materials, improve energy efficiency and water conservation, and decrease use of resources and generation of waste.

The city of Boulder offices of Environmental Affairs and Water Quality and Environmental Services, Boulder County Public Health (BCPH), city of Longmont Public Works and Water Utilities, city of Lafayette Public Works Water Treatment, and the Keep It Clean Partnership (KICP) all provide guidance and funding for the PACE Program.

The PACE Program began in 1995 with resources from the city of Boulder and the BCPH Environmental Health Division. The initial focus of the program was on the auto repair, auto body, and printer business sectors. The city of Boulder has also supported the development of the PACE web site ([www.pacepartners.com](http://www.pacepartners.com)).

In 2003, the city of Longmont Public Works and Water Utilities began supporting PACE outreach within Longmont, focusing on the auto repair, dental, and restaurant business sectors. While still covering all certification criteria, PACE staff has been able to focus on the water quality impacts of influent water to the wastewater treatment plant.

Also in 2003, the KICP, formerly the Watershed Approach to Stream Health Project, began contracting with PACE to help businesses and municipal operations implement stormwater best management practices (BMPs) and prevent stormwater pollution, as required by the Clean Water Act stormwater regulations. Several municipal governments in the Boulder Creek and St. Vrain watersheds formed the KICP to cost-effectively meet stormwater regulations and the region's water quality needs. Participants include Boulder County; the cities of Boulder, Longmont, and Louisville; and the towns of Superior and Erie.

Boulder County Public Health provides funding, resources, and staff to administer the program. In 2005, the PACE childcare sector was developed in conjunction with the BCPH Family Health and Environmental Health divisions.

PACE business sectors consist of mostly small businesses that generate less waste than a large company, but collectively, they can have a large impact on the environment. Sector-specific criteria for participation in PACE were developed through PACE staff research and input from business and agency representatives.

PACE sectors and focus areas include:

### **Auto Repair**

- Solvents and cleaners - air emissions, hazardous waste, worker exposure, stormwater
- Waste antifreeze and oil filters - recycling, wastewater discharge, stormwater

### **Auto Body**

- Solvents and paints - air emissions, hazardous waste, worker exposure
- Vehicle washing - stormwater pollution

### **Printers**

- Press chemicals - air emissions, hazardous waste, worker exposure
- Paper products - solid waste, recycling

### **Restaurants**

- Food and beverage containers - solid waste, recycling
- Fats, oil, grease, and cleaning water – wastewater discharges, stormwater pollution
- Energy and water use – resource use, air emissions

### **Dental Offices**

- Silver, lead, and amalgam – wastewater discharges, hazardous waste
- Office products - solid waste, recycling, environmental purchasing

### **Manufacturing**

- Process chemicals - air emissions, hazardous waste, worker exposure
- Energy and water use - resource use, air emissions, water and wastewater treatment

### **Retail Stores and Office-based Businesses**

- Packaging and office products – solid waste, recycling, and environmental purchasing
- Energy and water use - resource use, air emissions, water and wastewater treatment

### **Landscape Professionals**

- Pesticides and fertilizers - worker exposure, stormwater pollution, and water quality
- Watering and irrigation – resource use and water quality

### **Child Care Centers**

- Pesticides and cleaners – child and worker exposure, indoor air quality
- Radon, lead, mold, and carbon monoxide levels – indoor air quality

The certification and recognition process varies, depending on the type of business. Operational criteria or “checklists” are used to certify businesses in most PACE sectors. Manufacturers must define and complete environmental projects to achieve and maintain certification. PACE certification for landscape professionals is a training certification program where individuals attend training seminars and complete an exam to demonstrate proficiency in sustainable landscaping practices. PACE staff verifies that certified partners continue to meet the criteria through annual visits and follow-up, in person or by phone.

To encourage environmental achievement, PACE provides personalized assistance, examples of successful local business approaches, vendor contact information, and peer references on specific products. A business or municipal operation that meets all criteria receives a framed certificate and a PACE window decal. As an incentive for participation, certified businesses receive free advertising throughout Boulder County. Advertising also educates the public about local businesses' environmental ethic. The reductions achieved by PACE businesses exceed what could be accomplished through a regulatory approach alone.

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As PACE has grown, staff has established working relationships with many local businesses and agencies. PACE is regarded as a valuable resource for waste reduction and pollution prevention information. This relationship is one of the many positive aspects of assisting businesses in a non-regulatory approach.

## 2. 2007 PACE Results

### PACE Outreach

Currently, 242 businesses and municipal operations are PACE-certified. Excluding retailers and manufacturers, 15% of Boulder County businesses and municipal operations in the target sectors are now PACE-certified.

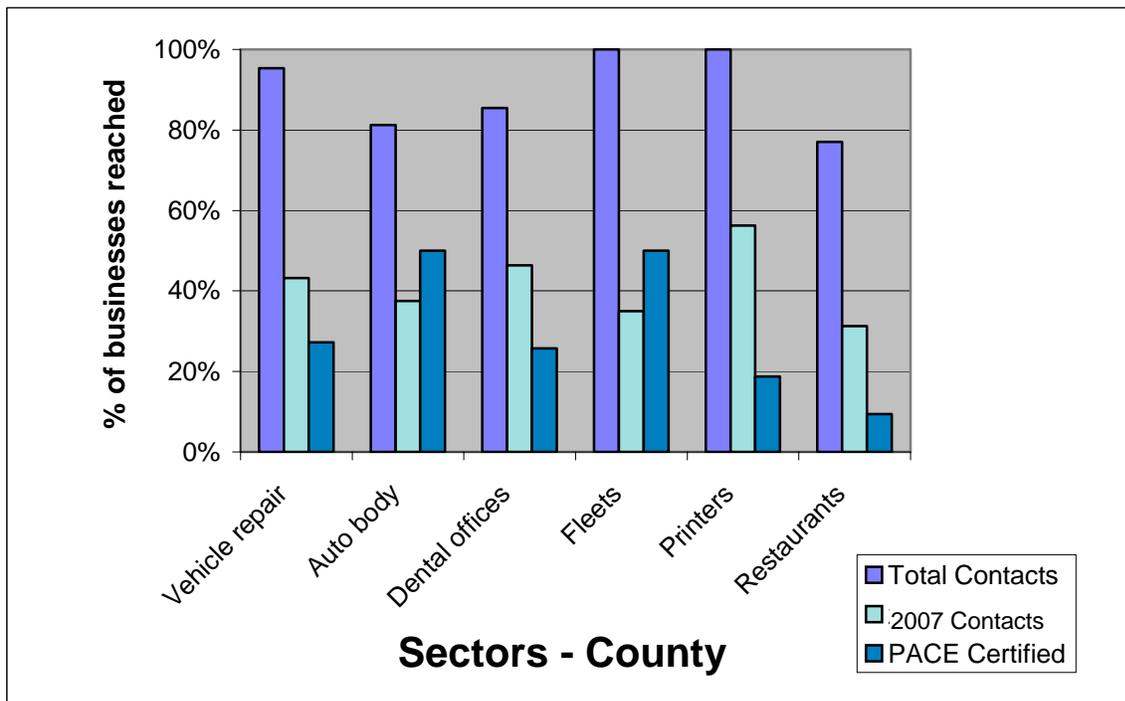
In the city of Boulder, 22 additional businesses became PACE-certified in 2007, bringing the total to 184. Of the 136 uncertified businesses contacted this year, 16% became PACE-certified. In the target sectors, 26% of the businesses are now PACE-certified.

In the city of Longmont, five additional businesses became PACE-certified in 2007, bringing the total to 41, and 8% of businesses in target sectors are now PACE-certified. In the city of Longmont 3%, of the 158 uncertified businesses contacted this year became PACE-certified.

Figures 1, 2, and 3 show the extent of PACE outreach in the entire county, the city of Boulder, and the city of Longmont.

### Figure 1. Business Participation – Boulder County

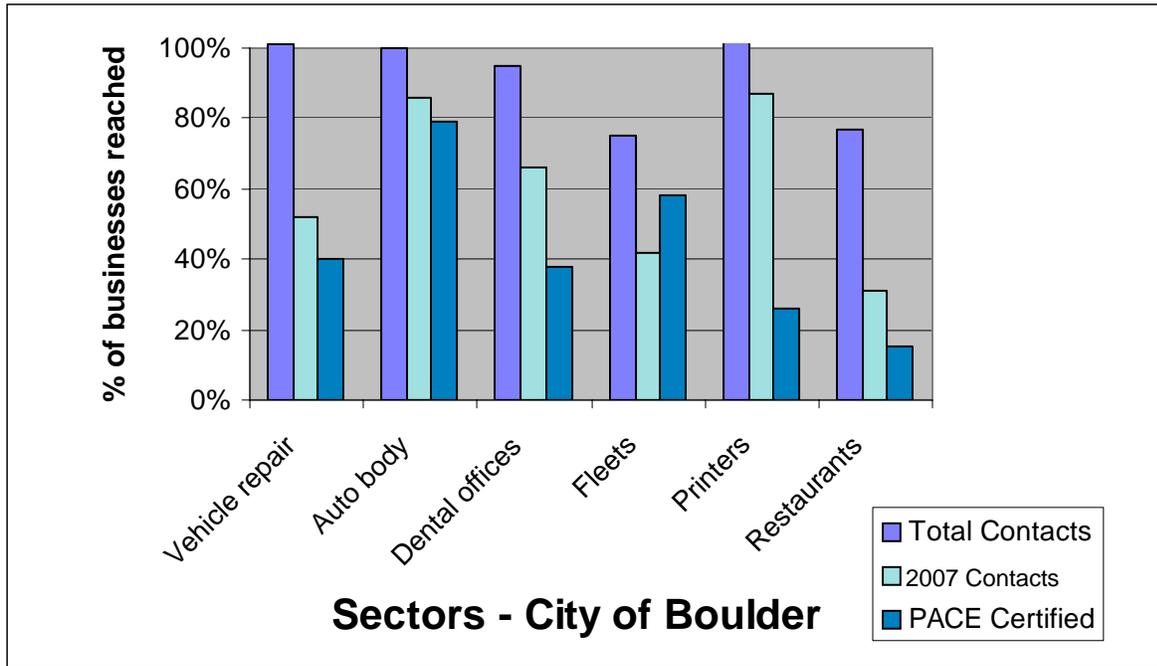
Over 80% of the PACE-targeted businesses in Boulder County have been contacted regarding the program with the exception of the largest sector - restaurants. The total number of certified businesses increased 5% in 2007.



### Figure 2. Business Participation – City of Boulder

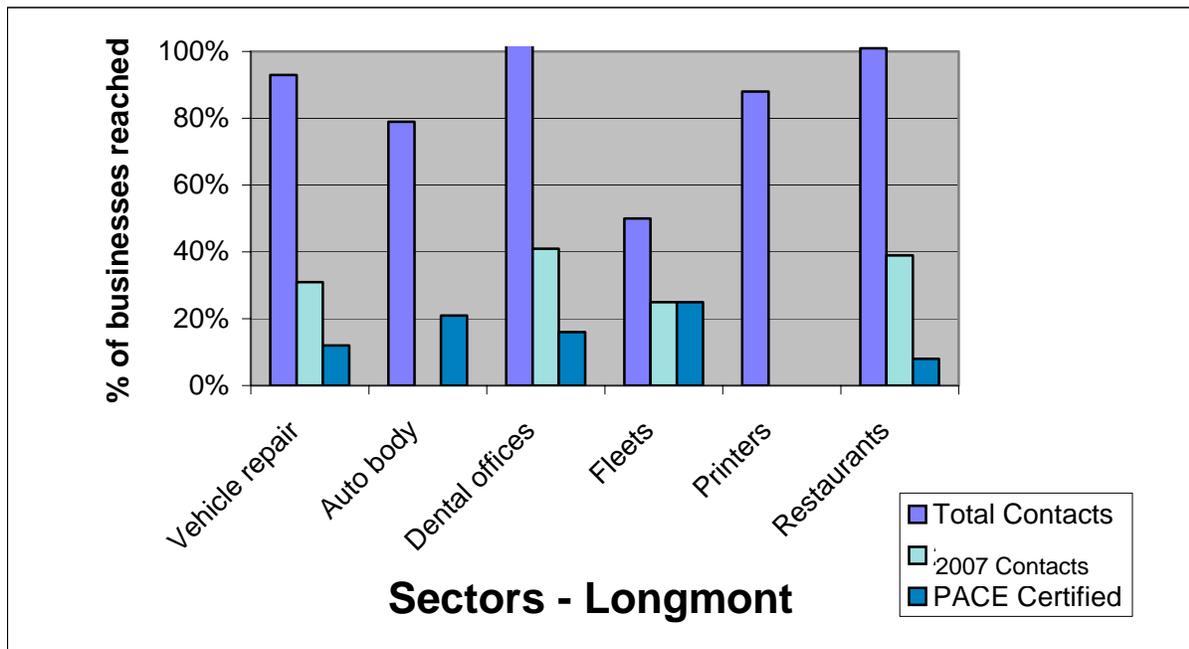
Outreach over the past 12 years has focused on city of Boulder businesses. Approximately 60% of the auto

repair facilities, 50% of the dental offices, and over 90% of the auto body businesses in the city of Boulder are now certified.



**Figure 3. Business Participation – City of Longmont**

The PACE Program began outreach to businesses in the city of Longmont in 2003. This outreach has focused on the vehicle repair, auto body, dental, fleet, and restaurant sectors. Nearly 98% of the businesses in these sectors have been contacted regarding the PACE Program.



**Environmental Practices**

PACE staff can have a large impact on a business’s environmental practices, regardless of whether the business is pursuing PACE certification. In 2003, PACE staff began tracking business action

and behavior change with regard to awareness and compliance with environmental regulations, stormwater protection, recycling, hazardous materials use, energy efficiency, and water conservation. Since many of the environmental practices promoted by PACE do not have an easily quantifiable environmental benefit, this metric is a good way to assess the impact the PACE Program has on the business community. Figures 4 and 5 summarize business action taken in Boulder County since 2003 and in 2007 as a result of PACE outreach. Figure 4 represents actions taken to ensure compliance with regulations, while Figure 5 shows actions that are above and beyond regulatory requirements. Compliance practices include measures such as providing secondary containment for outside storage and ensuring that wash water does not enter a storm drain. Business practices include composting organic materials, changing from incandescent bulbs to compact fluorescents, and switching to less toxic cleaners.

**Figure 4. Environmental Compliance Practices Adopted After PACE Contact**

<b>PACE Sector</b>	<b>Practices adopted in 2007</b>	<b>Total practices adopted since 2003</b>
Auto Repair Shops	8	49
Dental offices	15	54
Restaurants	29	93

**Figure 5. Environmental Business Practices Adopted After PACE Contact**

<b>PACE Sector</b>	<b>Practices adopted in 2007</b>	<b>Total practices adopted since 2003</b>
Auto Repair Shops	17	73
Dental offices	30	75
Restaurants	51	172

### **3. 2007 PACE Sector Developments**

#### **PACE Manufacturers**

Three PACE manufacturers maintained their certification and completed new P2 projects. Manufacturers are required to report on projects that were completed the following year (i.e. In 2007, PACE manufacturers reported on projects completed in 2006). SAE Circuits did not submit a report in 2006 or 2007 and is no longer PACE-certified. Figure 6 summarizes results from projects completed in 2006 by IBM Boulder, Roche Colorado Corp., and Lexmark International.

**Figure 6. Summary of Pollution Reductions by PACE Manufacturers**

<b>Category</b>	<b>Reason for Reduction</b>	<b>Annual Reduction</b>
Electricity Use	Equipment replacement and energy efficiency	10 million kWh
Natural Gas	Equipment replacement and energy efficiency	20,500 DecaTherms
Solid Waste	Source reduction, reuse, and recycling (paper, plastics, metal, batteries, wood, etc)	3,912 tons
Hazardous Waste	Source reduction / control technology	1,804 tons
Water Use	Recycle and reuse in cooling towers, conservation and efficiency measures	7 million gallons

Collectively, the companies’ air emissions of hazardous air pollutants (HAPs) and volatile organic compounds (VOCs) are more than 70 percent lower now than in 1995 when the city began tracking this information. Roche Colorado Corporation is the primary source of air emissions among the three companies and has reduced HAPs emissions by more than 70 percent and VOCs by nearly 90 percent since 1995.

Although hazardous waste generation has been a more difficult issue for the companies to address, the total hazardous waste volume decreased by nearly 10 percent last year. In 2006, Roche recycled over 1,800 tons of process chemicals that would have otherwise been disposed of as hazardous waste.

These three companies recycled 3,912 tons of paper, metals, and other materials in 2006. Lexmark implemented a process to re-introduce toner fines, reducing solid waste by 20 tons annually, and recycled 130 tons of construction debris.

With respect to energy use, each company seeks to reduce energy use, and several choose to purchase renewable energy. In 2006, Roche completed lighting upgrades that will save 678,000 kWh of electricity each year. IBM implemented several energy conservation projects and saved over 9,300,000 kWh of electricity and 20,500 DecaTherms of natural gas.

PACE contacted six new manufacturers this year, and anticipates that several will be certified in 2008. One of the new businesses was directed by court order to participate in the PACE program in lieu of fines for a stormwater violation. PACE staff is continuing efforts to collaborate with other city and county programs to meet the goals and needs of businesses in Boulder County - this collaboration will be valuable for the manufacturers program.

**PACE Landscape Professionals**

Three new landscape professionals became PACE certified in 2007, increasing the total number to 20. PACE continued to use the educational opportunities that were expanded in 2006 in order to better accommodate demand for certification opportunities. These opportunities included the spring training given by the Boulder County Cooperative Extension, the fall training symposium offered by the city of Boulder Water Conservation, and the Best Management Practices (BMP) training provided by Green Industries of Colorado (GreenCO). Prospective landscapers are required to attend a total of two days training and then pass an exam given by PACE to become certified.

Partnerships with the Boulder County Cooperative Extension and the city of Boulder Water Conservation Office have been pivotal to sustaining this program. PACE sponsored breaks and had informational displays at both the Cooperative Extension training and the Water Conservation

Office's symposium.

PACE promoted the certified landscapers through several newspaper advertisements, a 91.5 FM KUNC radio announcement, and a half-page advertisement in the Boulder County Home & Garden magazine.

In 2008, PACE will begin developing criteria for a PACE Allies Landscape Maintenance program. This program build on PACE's collaboration with the city of Boulder's Water Conservation Office, as well as expand outreach and education about water quality and conservation, air quality, hazardous waste management and reduction, and other P2 messages to a growing industry in Boulder County.

### **PACE Restaurants**

2007 was a very successful year for PACE outreach in the restaurant sector, with 19 newly certified food establishments in Boulder. The increased willingness of restaurants to adopt sustainable practices can be credited to PACE's level of support, as well as a heightened environmental awareness by management staff. Energy and water assessments performed by the PACE staff have led to the installation of improved-efficient equipment such as high efficiency toilets, waterless urinals, dishwashers, CFLs and LED exit signs at many restaurants.

Bacaro Venetian Taverna and The Pub at Boulder Brewery are two examples of restaurants that have made strong commitments to sustainability, garnered widespread staff support, and implemented multiple initiatives spanning the full spectrum of the PACE criteria, greatly reducing their environmental impact. Figure 7 below details the changes made at both restaurants.

*"The employees are very excited to see the change and think it is the right move. These changes touch everyone personally." Best of all she noted is that "Just knowing that the patrons are in a zero waste environment is rewarding. From the bottle of wine to the dinner receipt everything is recyclable, compostable, or reusable." -Lesley Barnes, Bacaro Event Coordinator*

**Figure 7. Summary of Pollution Reductions by PACE Restaurants**

<b>Changes Made in:</b>	<b>Bacaro Venetian Taverna</b>	<b>The Pub at Boulder Brewery</b>
Resource Management	From fragmented recycling to comprehensive recycling and composting throughout, redesigned disposal area, purchasing compostable tableware and trained staff for a more effective diversion program	From fragmented recycling to comprehensive recycling with environmentally preferable products
Environmentally Preferable Cleaners	Changed chemical cleaner vendor to obtain a more environmentally preferable lineup of cleaners	Obtained MSDS sheets for all their cleaners and is no longer using chlorine bleach to clean non-food contact surfaces
Grease Management	Changed service providers for used oil hauling and the area is much cleaner	
Energy Efficiency	Full lighting retrofit changing from 60-watt bulbs to 35-watt bulbs and LED exit signs installed	Decamped from six 60 watt incandescents to three 14 watt CFLs in each bathroom
Water Efficiency	Changed to a lower operating cost, water and detergent use dishwasher, low flow spray valve installed	3 new HET toilets using 1.1 gallons per flush installed to replace 3.5 gallons per flush toilets, low flow spray valve installed
Stormwater Protection	Improved maintenance practices and set up meetings with facility manager and pressure washer to make sure they are cleaning the disposal area in a proper way	Closing dumpsters and tidied up recycling and trash area
Elective Criteria	Comprehensive composting behind the bar, bathrooms, dishwashing area and prep area, environmentally preferable paper products	Changed from Styrofoam to compostable sugarcane clamshells

In 2007, PACE partnered with the University Hill Business Alliance to support their initiative to reduce their collective environmental impact, to be a model for other commercial districts, and to be the nation’s first zero-waste commercial district. PACE has played a key role as a facilitator between the city of Boulder, University Hill business leaders, and the University of Colorado, and provided technical support in the initiative’s developmental phase. PACE also created marketing materials to describe the initiatives and resource sheets to assist businesses in the uptake of zero-waste practices.

**PACE Dental Offices**

In 2007, PACE certified two new dental offices in Boulder and three in Longmont, bringing the total number of certified dental offices to 53.

PACE offered extensive input and participation in the successful development of dental mercury ordinances in Boulder and Lafayette. While the ordinances require dental offices to install advance amalgam separators, they also require the offices to implement best management practices (BMPs) for the use of amalgam. PACE will continue to assist dental offices in understanding the ordinances, selecting appropriate separators and implementing amalgam BMPs.

PACE expanded its outreach to Lafayette in 2007, beginning with site visits in the dental sector. In addition to providing continued assistance with ordinance compliance, two areas where continued support is especially needed is conventional recycling (i.e., paper and co-mingled

containers) and recycling of X-ray fixer waste, which is currently plumbed to sanitary drains in many offices.

In Boulder, implementation of the amalgam BMPs and compliance with the new ordinance has preceded smoothly due in large part to an endorsement from the Boulder County Dental Society and to the efforts and organization of the staff of Boulder's Waste Water Treatment Plant. The majority of the affected dental offices are already complying the two-part measures of the ordinance, well ahead of the May 2008 deadline. A side benefit of the ordinance is that dental office staffs have gained a higher level of environmental awareness and in some cases have been inspired to take further voluntary steps.

The PACE program has benefited from this ordinance, as dental offices are now more receptive to the program and it is easier for a dental office to become PACE-certified once they install an amalgam separator.

PACE's dental outreach was prominently mentioned in two articles regarding the new ordinances that were published in the Daily Camera and the Lafayette News.

### **PACE Printers**

One new printer was certified in 2007, and PACE expects to certify another shop in early 2008. The decline in the number of traditional printers in Boulder County has continued as the digital reproduction market has grown and printing operations have merged with facilities outside the county. To account for this market shift, PACE expanded outreach to screen-printing shops in the city of Boulder. These site visits were well received and PACE hopes to have its first certified screen printer in 2008.

While the growth of the digital market has somewhat reduced chemical use, it has only sped paper consumption. This has spurred PACE staff to research options for expanding the certification criteria to include paper source requirements. One consideration is to require that a percentage of paper stock be Forestry Stewardship Council and/or Sustainable Forest Initiative certified. PACE staff plans to conduct a survey during regular site visits of all certified shops this year to obtain feedback regarding the addition of this criterion.

Additional concerns associated with digital reproduction are emerging, such as the volatile organic content of ink cartridges. PACE will continue research and address these issues.

PACE staff provided input on criteria for a statewide green printing program being developed by Colorado Department of Public Health and the Environment (CDPHE) and Printing and Imaging Association Mountain States (PIAMS). It is currently being piloted with shops that are PIAMS members around the state.

### **PACE Retail**

In 2007, PACE revised the retail criteria to include general businesses. The Retail and General Business Criteria document is more concise and separated the criteria into categories for management and culture, energy efficiency, water conservation, and resource management; and a new section on sustainable transportation. In the past year, PACE focused its retail outreach in on the outdoor industry. Site visits were conducted with Nau, REI, GoLite and Smartwool, leading to the certification of Nau with the rest on the doorstep to certification. Focus was placed on this sector due to the current green movement in the outdoor industry, as well as the strong environmental and social leadership that these businesses display locally.

Another industry entering the green movement is the financial sector, with the Boulder Valley Credit Union (BVCU) becoming the first financial institution to receive PACE certification.

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PACE's continued collaboration with community partners has been very rewarding – PACE worked with the city of Boulder's Office of Environmental Affairs and the Boulder East Organization to begin the development of a sustainable transportation plan for BVCU. The plan looks to include a fleet of employee bicycles, as well as education and incentives for employees to choose sustainable transportation modes for their work commutes.

Both the outdoor and financial sectors are highly visible and trusted by the public, and provide a valuable conduit to communicate the sustainability message. PACE will continue to work with these motivated sectors to stretch their sustainability efforts further and to build a strong presence in the retail sector that is highly recognizable in the Boulder County community.

### **PACE Child Care Centers**

In 2007, PACE visited six new child care centers. Each center was inspected for lead and two received radon test kits. Follow up letters documenting the findings of the site visits and recommendations for improvements were sent to each center.

At least 50 real-time lead content tests were conducted on painted surfaces in each center visited in 2007. Painted toys were also assessed. Lead paint was detected at two of the facilities – one of which had damaged and chipped lead paint that was a potential risk for the children. The lead paint at the other center was in good condition and did not need remediation. Both centers where lead was detected were made aware of the situation and given instructions for mitigating the potential hazard in the event of remodeling, demolition, or other disturbance.

The radon kits will be collected and recorded in 2008.

A listing of all cleaning supplies and pesticides used in each child care center was collected and recommendations for reducing amounts and proper storage were provided.

### **PACE Auto Repair / Auto Body**

Two auto repair facilities were newly certified in 2007, one in Lafayette and one in Longmont.

PACE received a Community Outreach Program grant from Boulder County Resource Conservation Division in 2007 to purchase 30 refillable spray bottles and 30, 1-gallon containers of non-chlorinated bulk brake cleaner. These were distributed to auto repair shops that were still using aerosol brake cleaners in an effort convince them to switch to a cost-effective, environmentally preferable option.

In November, PACE staff began collecting data from the auto repair shops that received the spray bottle pollution prevention kits. As anticipated, several shops did use the spray bottles but did not collect data. Only two shops reported not using the bottles at all (one of which gave the bottle to another shop that already used the refillable bottles).

The data collected from the shops that did track their usage was compiled and used to estimate the project impact for all of the shops that used the spray bottles. The following are the survey results (the figures represent the total estimated project impact for all shops over the three-month survey period):

- On average, each shop performs 6.5 brake jobs per week, using the equivalent of 2 aerosol cans per job.
- Seventy percent of the shops indicated that they would continue to buy brake cleaner in bulk and use the refillable spray bottles. Of these shops, 30% had already purchased additional spray bottles and/or bulk cleaner.

- The number of brake jobs performed by all shops over the three-month survey period was 2,184.
- The projected number of aerosol cans diverted from waste stream was 3,058
- If these shops continue to use the refillable spray bottles, over 12,200 aerosol cans will be diverted annually. At an average weight of 4 ounces per empty can, that's a total weight of over 3,000 pounds.
- Buying brake cleaner in bulk is typically half the cost of aerosol. With this in mind, the total cost savings for the participating shops would be about \$20,000

PACE continued outreach to all shops on energy efficiency this year, with a focus on auto dealerships. In addition to encouraging them to participate in the city of Boulder's Energy Performance Program, PACE provided them information on the National Auto Dealers Association's (NADA) program that recognize dealerships that achieved a 10% reduction in their energy use. In 2007, McCaddon Cadillac Buick Pontiac GMC completed a lighting upgrade for their entire facility. A case study will be completed for this project in 2008.

## 4. 2007 PACE Outreach Summary

In addition to site visits, contacts, and new certification development for Boulder County businesses, PACE staff conducted outreach and education to reach an even broader audience.

### **Educational Materials and Outreach**

- All new city of Boulder employees are educated about the PACE program during orientation.
- Placed ongoing advertisements on local radio stations and in newspapers.
- Staffed tables during Earth Day celebrations at IBM and 29<sup>th</sup> Street.
- Compiled information on lead, radon, mold and chemical usage for distribution to over 600 homes as part of the Neighborhood Sweeps conducted in Boulder and Longmont

In September, PACE teamed with Longmont United Hospital (LUH) and the City of Longmont's Public Works and Water Utilities Department to conduct Colorado's first-ever pharmaceutical collection event. The goal of the event was to educate the public about the threat to waterways posed by improper disposal of excess, expired, and unwanted pharmaceuticals - many of which are flushed directly down the drain. Wastewater treatment plants are not designed to remove these chemicals, and so they are released directly into downstream waterways.

The event collected around 270 pounds of medications from nearly 200 people. As an added bonus, four industrial-sized trash bags filled with pill containers were taken to EcoCycle for recycling. Normally the # 5 plastic from which the containers are made is not collected for recycling due to low demand; however, EcoCycle agreed to accept the containers due to the large quantity. Two trash bags filled with paperboard packaging materials were also recycled. In addition to the pharmaceuticals, several mercury thermometers were accepted for proper disposal, as well as durable medical goods such as diabetes test strips that can be re-used.

Due to the success of this event PACE plans to support multiple collection events in 2008.

PACE worked with MRW & Associates to develop a new logo, as well as a suite of templates for educational and marketing materials. The new logos and materials are being gradually

introduced into PACE's outreach. The new look has been well received and PACE hopes that it will bolster public recognition of the program.

## 5. 2008 PACE Goals

Staff will continue to meet annually with PACE-certified businesses and help other businesses take action to achieve certification. Staff will contact mostly Boulder and Longmont businesses through PACE contract funding from these cities. Additional businesses within the KICP area will be contacted regarding stormwater protection and PACE certification.

Based on the success of the pharmaceutical collection event in 2007, PACE plans to coordinate with communities throughout Boulder County to hold multiple collection events in 2008.

In the past two years, PACE has worked with several hotels in Boulder. As a result of their interest, and the large potential for reducing environmental impacts, PACE plans to develop a new Hospitality sector in 2008. PACE will work with industry representatives and other stakeholders to develop the certification and pilot the outreach messages. The areas of focus will include energy efficiency, water conservation, waste reduction, and laundry systems.

The Retail sector certification criteria was finalized in 2007, and was formatted such that the criteria were broken-out into five categories – Culture and Management, Energy Efficiency, Water Conservation, Resource Management, and Transportation. To achieve certification, businesses are required to meet all Core criteria in each category, as well as two Elective criteria in each category. This format has been well received and allows businesses some flexibility. Therefore, the criteria for all other sectors will be adapted to match this format.

In 2007, PACE began working with University Hill businesses that have expressed interest in pursuing Zero-Waste. PACE will continue to work with the University Hill Alliance with the goal of creating a Zero-Waste business district and creating a model that can be used by other districts.

PACE continually strives to build upon past successes and establish the program as a valued resource to the business community, while maintaining environmentally, economically, and socially sustainable actions and practices.

## 6. 2007 KICP/PACE Results

Stormwater regulations call for implementation of six minimum control measures (MCM) to address the impact of stormwater runoff on water quality and stream health, including: 1) Public Education and Outreach, 2) Public Participation and Involvement, 3) Illicit Discharge Detection and Elimination, 4) Construction Site Stormwater Runoff Control, 5) Post-construction Stormwater Management, and 6) Pollution Prevention and Good Housekeeping for Municipal Operations. The KICP / PACE partnership focuses on MCM 3.

### **MCM 3 – Illicit Discharge Detection and Elimination**

This portion of the KICP / PACE Project focuses on educating the commercial sector about stormwater pollution and best management practices (BMPs) they can follow to prevent stormwater pollution.

During the year-end status review of the 2005 KICP / PACE contract, the KICP Steering Committee agreed to set a goal that all restaurant and vehicle repair businesses in the KICP

jurisdiction would receive a PACE site visit by the end of 2007 (the expiration of the first NPDES Permit cycle). It was recognized that this goal would not be completely achievable due to businesses closing and new businesses opening during 2007; however, PACE would ensure that each KICP municipality receives at least the same number of site visits as businesses currently open in the restaurant and vehicle repair sectors. PACE achieved this goal in 2007, with most businesses receiving at least two site visits during the five-year permit cycle.

In 2007, PACE continued stormwater assessments with businesses likely to have stormwater impacts (i.e., restaurant, auto body, and auto repair). Site visits provided one-on-one technical assistance to educate businesses, identify stormwater impacts, and identify low cost solutions. Highlights of these assessments include:

- Reviewed stormwater criteria during site visits
- Stormwater criteria were reviewed with all businesses contacted or recertified in 2007 and were required to adopt the BMPs in order to be certified.
- Eighteen (18) new businesses were KICP / PACE certified in 2007 in the vehicle repair, auto body and restaurant sectors. An additional five (5) businesses were certified in the retail and landscape sectors.
- One-hundred-and-forty-three (143) businesses were recertified with the KICP / PACE criteria in 2007.
- In addition to the vehicle repair, auto body and restaurant sectors, fourteen (14) retail site visits were conducted in Boulder.
- Refer to Figure 1 for a breakdown of visits completed in 2007.

**Figure 8. 2007 Stormwater Outreach to Businesses**

<b>Jurisdiction</b>	<b># of Contacts per Contract</b>	<b>Auto Repair Contacts</b>	<b>Restaurant Contacts</b>	<b>Total Actual Contacts</b>
City of Boulder	170	77	98	175
City of Longmont	58	35	75	110
Boulder County	7	7	3	10
City of Louisville	32	6	27	33
Town of Erie	4	2	4	6
Town of Superior	1	0	1	1
<b>Total KICP Area</b>	<b>272</b>	<b>127</b>	<b>208</b>	<b>335</b>

**Figure 9. Cumulative Stormwater Outreach to Businesses**

<b>Jurisdiction</b>	<b>Vehicle Repair and Auto Body</b>		<b>Restaurants</b>	
	<b>Total Businesses</b>	<b>Site Visits to Date</b>	<b>Total Businesses</b>	<b>Site Visits to Date</b>
City of Boulder	131	221	268	348
City of Longmont	91	135	188	284
Boulder County	9	9	18	35
City of Louisville	7	15	67	68
Town of Erie	4	5	10	14
Town of Superior	1	6	13	18
<b>Total KICP Area</b>	<b>243</b>	<b>391</b>	<b>564</b>	<b>767</b>

## Status of KICP/PACE Goals from 2006 Annual Report

- PACE will conduct one-on-one trainings with ten (10) facility maintenance organizations. The 2007 contact called for eight (8) trainings and three (3) were conducted.
- Develop a web-based training and certification for mobile cleaners (dependent on finalization of State rulings). Lack of State rulings on mobile cleaner requirements prevented PACE from developing a web-based training for mobile cleaners. The KICP Coordinator approved using this time to outline the PACE Allies program for 2008 instead.
- Develop new outreach approach to encourage do-it-yourself and rental stores to implement proper stormwater practices and stock pollution prevention materials and equipment for their customers. In the past, PACE has found that some of the rentals shops have been receptive to the KICP message in regards to their own operations, but are resistant to providing stormwater protection equipment with rentals to their customers. In 2007, PACE attempted to develop a new outreach strategy for this sector; however, without a regulatory driver, the DIY and rental shops continue to be unreceptive to the KICP message, and it appears that they are not distributing the stormwater materials to their customers. PACE visited seven (7) DIY and rental shops in the KICP jurisdiction to ensure that they are implementing appropriate stormwater BMPs. Several of these shops have now received more than one site visit. Additionally, PACE returned to five (5) of the shops to restock brochures.

## 7. 2008 KICP/PACE Goals

For the new five-year permit cycle beginning in 2008, PACE will be implementing several new initiatives aimed at reducing illicit discharges. These initiatives include:

**New Sector Outreach Development** – PACE will develop criteria, BMPs and outreach material for new sectors including gas stations and car washes.

**PACE Allies** – This initiative will allow PACE to work with service providers such as power washers and landscape maintenance services that do not fit the traditional PACE model, but can affect a businesses' ability to meet stormwater BMPs. PACE staff will be able to provide businesses with a list of service providers that understand and are able to follow stormwater BMPs. In 2008, PACE will develop a list of Allies in the Power Washing and Landscape Maintenance sectors

To become a PACE Ally, a service provider will need to complete the following steps:

- Review sector appropriate BMPs
- Pass a test to demonstrate understanding of BMPs
- Provide three dates and locations where they will be working - PACE will select one of the dates to observe their work
- Sign pledge stating that they will consistently adhere to the BMPs

**One-on-One Training** – PACE will conduct one-on-one trainings with facility/property managers to discuss and demonstrate proper methods for exterior cleaning.

**Outreach Beyond PACE Sectors** - Activities that negatively impact stormwater quality are frequently observed in non-PACE sectors. PACE will respond to these incidents to provide educational outreach on regulations and BMPs. This outreach will be conducted either at the request of a KICP Partner or when observed by PACE in the field. At the KICP Partner's discretion, this outreach may serve as a "first warning" in NOV process.

In addition to these new activities, PACE will continue to provide outreach to the existing priority sectors – auto repair facilities and restaurants.

To help KICP Partners best address the needs of their communities, each municipality was asked to assign a priority ranking to each of the PACE activities. PACE then created a customized scope of work based on each municipality's prioritization. Hours – and site visit numbers where appropriate – were assigned to each activity for each municipality based on the municipality's ranking of the activity and their portion of the total funding.