

FEATURE ARTICLE

Connecting P2 & The Air, Water & Waste Programs

For a number of years the P2 programs in the Northeast have been actively trying to connect their work with the activities underway in the air, water and waste compliance and enforcement programs. The following article describes some of the recent activities and accomplishments in this area by some of the Northeast states.

Massachusetts

Massachusetts continues to build on its efforts to integrate P2 into its regulatory programs. Three of the Department's improvements-- Waste Prevention FIRST (Facility - Wide Inspections to Reduce Toxics), the Toxic Use Reduction Program and the Environmental Results Program (ERP) contain P2 as their driving force.

As proud as they are of these accomplishments, DEP recognizes the need for continuous improvements. The Bureau of Waste Prevention (BWP) in Boston has recently been realigned in order to better serve the needs of the regulated community and the public. They have gone from a media-based organizational structure focusing on large industrial facilities to a multi-media structure reflecting the needs of small and medium-sized facilities and the public at large.

The realignment of the BWP is meant to improve the Department's ability to integrate P2 into its operations in the following manner. First, by combining P2 and strategic planning in one division, it facilitates the infusion of P2 into the Bureau's future operations. Second, by aligning the BWP structure with its customers, (e.g. staff working on industrial pollution will be grouped within Business Compliance, and staff whose focus is consumer behavior work together in Consumer and Transportation), the Bureau will view the facilities as

they view themselves; multi-media holistic P2 approach. And, finally, the realignment creates a specific division (Consumer and Transportation) designed to influence people's behaviors to reduce pollution.

Since the realignment, the Bureau is engaged in a major training initiative to integrate P2 into its regulatory operations. Under a grant from the EPA Environmental Technology Initiative Grant Project, key P2 personnel have been undergoing training in P2 and innovative technology options. The curriculum seeks to provide knowledge and skills to enhance regulator's ability (individually and collectively) to recognize and recommend innovative P2 options. Consistent with the multi-media goals of the realignment, virtually the entire staff at the BWP has been cross trained in the regulatory programs that have not been their specialty. Inspectors have been given P2 training in four industry sector processes:

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surface coating, metal finishing, dry cleaning and photoprocessing. Multi-media team working skills have also been taught to selected BWP personnel. Finally, workshops are being developed to train decision makers and inspectors on the integration of P2 into enforcement, policy development and regulations. The longer-term project is to promote cleaner, safer and more competitive industries by training regulatory staff in ways to incorporate P2 knowledge into three routine job functions.

In MA, the Office of Technical Assistance continues to work with the DEP on integrating P2 into policies and regulations wherever possible. In recent months, OTA staff have done training on sources of P2 information on the Internet for DEP inspectors, and DEP has invited OTA staff to participate in pre-permitting conferences with companies. A lot of informal communication and information exchange occurs between the P2 assistance program and the regulatory agency, often on a regional basis.

In more formal, statewide efforts, there are currently two activities underway to assure P2 integration into policies and regulations. The Executive Office of Environmental Affairs has convened a working group that meets regularly to determine how P2 gets incorporated into air regulations and policies. OTA staff also is participating in a DEP workgroup with similar ambitions across all media. The DEP group is planning training sessions on P2 for this spring. The initial workshops will be for permit writers.

New York

Proposed Small Business Compliance Incentive Policy

On October 30, 1997, DEC Commissioner Cahill announced his proposal for the Department to adopt a Small Business Compliance Incentive Policy consistent with the US EPA's Policy on Compliance Incentives for Small Business. This proposal is expected to be made available within the next few weeks for public review.

The policy states that DEC will refrain from initiating enforcement proceedings or will mitigate penalties when a small business makes a good faith effort to comply with environmental requirements by receiving compliance assistance or promptly disclosing the findings of a voluntarily conducted environmental audit. This policy will cover all media programs, including water, air, and solid and hazardous materials.

DEC's newly implemented Regional Enforcement

THE NORTHEAST WASTE MANAGEMENT OFFICIALS' ASSOCIATION

The Northeast Waste Management Officials' Association (NEWMOA) is a non-profit, non-partisan interstate governmental association. The membership is composed of state environmental agency directors of the pollution prevention, hazardous and solid waste, and waste site cleanup programs in Connecticut, Maine, Massachusetts, New Hampshire, New York, Rhode Island and Vermont.

NEWMOA's mission is to help states articulate, promote and implement economically sound regional programs for the enhancement of environmental protection. The group fulfills this mission by providing a variety of support services that

- facilitate communication and cooperation among member states and between states and EPA, and
- promote the efficient sharing of state and federal program resources.

NEWMOA's P2 program was established in 1989 to enhance the capabilities of the state and local environmental officials in the northeast to implement effective source reduction programs. The program is called the Northeast States Pollution Prevention Roundtable (NE P2 Roundtable). This program involves the following components: (1) NE P2 Roundtable meetings and workgroups; (2) regional P2 information resource center and databases of information; (3) source reduction research and publications; (4) training sessions; and (5) regional policy coordination and development. The NE P2 Roundtable is supported by NEWMOA member states and by grants from

Coordinators program will be responsible for implementation of the policy with regard to eligibility requirements and mitigation efforts. The P2 Unit will be responsible for coordination of a comprehensive outreach effort in conjunction with the NYS Environmental Facilities Corporation Small Business Assistance Program and Empire State Development's Environmental Ombudsman's Unit and for providing certain on-site technical, regulatory compliance and P2 assistance.

Sector-Based Multi-Media Grant

The U.S. EPA has awarded the P2 Unit a sector based multi-media grant of \$371,000 to work with

Northeast States Pollution Prevention News

Northeast States Pollution Prevention News is published three or four times per year by NEWMOA's P2 Program, called the Northeast States Pollution Prevention Roundtable (NE P2 Roundtable). The publication is provided free to the northeast states, EPA and other interested individuals and is supported by funds from EPA Region I and the northeast states.

The NE P2 Roundtable would like to thank the following people for writing and producing this newsletter: Joe Antonio, Cynthia Barakatt, Pat Gittis, Terri Goldberg, Gary Gulka, Jack Healey, Vince Perelli, Janet Sapadin, Mary Sherwin, Paul Walsh, and Mary Werner. Terri Goldberg managed production of the newsletter.

The NE P2 Roundtable appreciates hearing comments and suggestions on the newsletter from the readers. Write NEWMOA at the address on the back cover of the newsletter or call 617 367-8558 x 302, e-mail: NEPPR@tiac.net.

Please use the form at the back of this issue to request an address change or to add your name to the mailing list. NEWMOA appreciates your cooperation in ensuring that the mailing list is correct.

industries on complying with environmental standards and identifying and implementing P2 measures. As part of this project, the Department will develop a comprehensive and standardized environmental audit/assessment protocol integrating International Standards Organization (ISO) 14,000 guidelines to be used voluntarily by industries to assess their facilities. The audit protocol will be designed to help industries interpret and determine their environmental position within the guidelines set forth by ISO 14,000 and to offer P2 measures and technical assistance to achieve their environmental goals while meeting regulatory requirements. The use of ISO 14,000 guidelines to develop the protocol will provide assurance that the guidance has been developed as a result of input from a wide array of stakeholders, and that it is internationally accepted and used by facilities receiving ISO 14,000 certification.

The overall goals of the project are:

- The development and implementation of P2 techniques through education, outreach and assistance to businesses and the regulated community in general.
- The development and implementation of environmental auditing/assessment procedures and protocols, including an auditing/assessment program that incorporates ISO 14,000 concepts. Specific guidance will be developed for the following six industries: metal finishers, printers, pulp and paper, electronics, food and wood finishing.
- The development of a voluntary process using creative and flexible, as well as traditional approaches, toward improving environmental compliance by the regulated community through auditing and P2.
- The identification and removal of existing barriers to P2.

New Hampshire

P2 and media program staff in NH enjoy an excellent working relationship. The fact that both of the Department's primary P2 technical assistance programs, the NH Pollution Prevention and Small Business Technical Assistance (SBTAP) Programs, are located within the NH DES certainly helps. More important, however, was the creation of two forums -- the P2 Task Force and the Multi-Media (Air, Water, Waste) Inspectors Workgroup. Both forums have resulted in unprecedented levels of information exchange, cooperation, and coordination, not only between the P2 and the media program staff, but among the media staff themselves.

The conditions in NH have made it an excellent testing ground for a number of important P2 and compliance assistance initiatives. For instance, last year, EPA Region I, the Department, and the University of New Hampshire joined forces to explore sector-based (metal finishers) multi-media, P2 assessments under an enforcement relief provision. So far, three metals finishers have gone through the pilot, with a fourth site, a wire manufacturer, recently signing on. Two reports have been completed; a third is still being compiled. Most recently, the SBTAP headed up a successful outreach campaign to automotive service and autobody repair shops on the NH Seacoast.

Under this initiative, NH DES sent out a letter to over 1,500 shops offering them a new compliance and

prevention manual and a free, confidential on-site assessment prior to a targeted inspection effort by the hazardous waste compliance staff. Prior to the letter, SBTAP and hazardous waste compliance staff met to discuss deferring the inspections until after the educational effort. Compliance staff agreed to "hold off," and as a result, over 500 manuals were distributed and 100 assessments were conducted by two UNH Pollution Prevention interns. It is highly unlikely that these two P2 and compliance assistance efforts could have happened without the excellent working relationship between P2 and media staff.

PROGRAM UPDATES

CONNECTICUT

CONNECTICUT DEP

Printers Project

The CT Chapter of Printing Industries of America and the CT DEP co-sponsored an EPA satellite video conference on December 9, 1997 that was attended by 12 lithographers. DEP mailed its packet of environmental compliance and P2 information to 450 printers in late December 1997. A display board featuring information for lithographers on P2 will soon be available. For more information contact: David Westcott (860) 424-3297.

P2 Innovation Awards Program

A program run by CT's Office of Policy and Management is being encouraged by the DEP's new Commissioner, Arthur J. Rocque, Jr., as an opportunity to promote P2 and cost savings in CT. Commissioner Rocque asks that employees begin to take a closer look at how the agency operates and look for costs savings and innovative ways to eliminate waste and increase efficiency. The Commissioner has urge the programs to seriously consider employee suggestions on specific P2 actions that save money. The program provides monetary awards of up to \$5,000 to individuals.

Hartford CRRA Landfill Tour and Workshop

Fourteen neighborhood leaders attended a half-day seminar and workshop on the Hartford CRRA ash landfill in December 1997. Co-sponsored by CT DEP and the CT Resource Recovery Authority, the event featured speakers on design and construction of the ash landfill, regulatory overview of the ash landfill and requirements

of the operator. The hearty group toured the landfill construction site at the end of the morning.

New Pit Stops Fact Sheets

Two new fact sheets are now available from CT DEP-- one case study is entitled "Water-Based Paints" and the second case study about degreasers is entitled "New Parts Cleaning Systems Eliminate Hazardous Wastes."

P2 in the Automotive Classroom

The CT DEP in cooperation with the Department of Education Vocational Technical School System is presenting a P2 program for CT's Vocational Technical School automotive and autobody instructors. By participating in the program, teachers will be prepared to teach the next generation of auto repair specialists. The program will introduce " A Curriculum Guide for Environmentally Responsible Automotive Servicing " to the attendees. For more information contact: Elise Bennett (860) 424-3297.

Industrial Alliance Regional Energy Project

Improving motor efficiency will be the topic at two workshops sponsored by CT DEP, CT Office of Policy and Management Energy Unit, United Illuminating and ITT Flygt. Since seventy percent of industrial electricity is used to power motor-driven systems, there is a lot of opportunity for energy savings. Municipalities, small businesses and industry are invited to these workshops. For more information contact: Lynn Stoddard or Connie Mendolia at CT DEP (860) 424-3297.

For more information contact: Mary Sherwin, Lynn Stoddard, or Elise Bennett, CT DEP (860) 424-3297.

MASSACHUSETTS

MASSACHUSETTS OTA

Acid/Base Workshops

OTA is taking the lead in sponsoring a series of three workshops across the state in April and May on P2 opportunities in the use of acids and bases. Data collected through the Toxics Use Reduction reporting program combined with OTA staff field work indicates that acids and bases constitute one of the largest uses and waste streams of toxics in the state.

P2 EXPERTS ONLINE !!

The P2 Experts database is a searchable directory of private sector P2 professionals, including consultants, business professionals, educators, and staff from environmental organizations. P2 Experts offers a quick and convenient way to locate individuals that possess industrial and process knowledge and other P2 expertise. P2 Experts is funded by a U.S. EPA grant to the National P2 Roundtable (NPPR). NEWMOA is cooperating with NPPR on the development of the database.

P2 Experts is located on EPA's Enviro\$en\$e World Wide Web Site. To become a participant or access the P2 Experts web site, contact Rob Guillemin, NEWMOA (617) 367-8558 x309 or visit the P2 Experts site at <http://www.p2.org/p2experts>.

These workshops will cover the basics on the regulatory and health and safety issues associated with using acids and bases, as well as a range of P2 strategies. Any manufacturer who uses acids and bases will be invited to attend, but the jewelry, electroplating and electronics industries will be particularly encouraged to participate. Co-sponsors include the U.S. EPA Region I, and the American Electroplaters and Surface Finishers Society (AESF).

ISO Roundtable

OTA has teamed with the American Society for Quality (ASQ) to organize a statewide ISO 14,000 Roundtable, a discussion group led by companies who have gone through the ISO certification process. Approximately 30 company representatives and consultants attended the first meeting of this group in January in Dedham, MA. The next meeting is scheduled for March 11 at the Neponset Valley Chamber of Commerce in Norwood, and the group will also meet in May at the New England Environmental Expo in Boston. OTA's Joe Paluzzi and Joseph Karabots, President of Environmental Management International and a certified ISO 14,000 auditor, are co-chairs of the group. (The pair are also co-chairs of the Boston ASQ Chapter's Environmental Quality Committee.) The topic of the first meeting was a general overview of the ISO 14,000 certification process and incentives for obtaining certification.

EPA "Partner" Had OTA's Help

Fit to Print Advertising of Weymouth was recognized in October by the U.S. EPA as one of the agency's "Partners for Change." The recognition commended Fit to Print for using lead-free inks, reducing VOC emissions, and reducing the use of solvents. OTA's work with the company resulted in the small screen printer installing UV curing technology, which led to the changes that EPA recognized. Fit to Print was subsequently the subject of an OTA Toxics Use Reduction case study. Since implementing its P2 project in 1996, the company has increased its business dramatically and hired several new people, opened new markets, reduced labor-intensive cleaning processes, and solved a chronic wastewater discharge problem that literally threatened the viability of the business. A true P2 success story!

Changes in the TUR Reporting & Planning Process

OTA, TURI and DEP staff spent many hours over the past few months preparing recommendations for the upcoming 1997 toxics use reduction reporting, planning and plan update cycle. Now that there have been several years of reporting and planning cycles, the TUR program staff has received feedback from companies as well as recorded their own observations on how the process can be made easier and more useful for both the companies and agencies involved. After developing specific proposals for changes, a meeting was held with TUR stakeholders, including business and environmental advocacy groups, to get their impressions and recommendations about the proposed changes. Comments from the meetings are being used to determine the final changes to this year's process. In general, the changes seek to reduce paperwork and make the information that is gathered more meaningful and useful for everyone involved.

For more information contact: Cynthia Barakatt, MA OTA (617) 727-3260 x666, or cynthia.barakatt@state.ma.us.

MASSACHUSETTS DEP

New Mass Vehicle Inspection Program

Just before recessing in December, Massachusetts State lawmakers approved a more sophisticated emissions inspection program for motor vehicles, a

new tailpipe test that will cut smog-causing pollution from cars, trucks and buses by 25 percent and help MA meet federal health-based clean air standards.

The new high tech test, called Emissions Checkup, will be available beginning in the Spring of 1999. Instead of simply testing cars while they idle, the new program will feature a treadmill-like device called a dynamometer, which will collect and analyze emissions under simulated driving conditions up to highway speeds. The analysis itself will be more sophisticated, for the first time measuring emissions of nitrogen oxides (NOx), not just hydrocarbons as the current test does.

Because Emissions Checkup will be much more accurate than the current test, it will eliminate cars passing the test when they should not. It will target the worst-polluting cars and an on-line computer network will prevent sticker fraud. Specially-trained repair technicians will be able to use the new test equipment as a diagnostic tool to pinpoint the cause of excess emissions, and that will mean better repairs and maintenance and, as a result, less pollution.

A unique and satisfying features of the new program is the fact that for the first time, diesel trucks and buses will have to be tested too. For more information about Emissions Checkup contact: Fred Civian (617) 292-5821.

Zero Discharge

MA DEP's Innovative Technology Program and the Strategic Envirotechnology Partnership (STEP) have collaborated to facilitate the approval of a process that can eliminate the discharge of toxic chemicals into the waste stream by metal finishing facilities.

Metal plating and rinse baths, containing toxic chemicals, are typically shipped off-site as hazardous waste or treated with conventional precipitation systems that generate hazardous waste streams and a regulated wastewater discharge.

A better way to handle these wastes is through zero discharge systems, which separate and recycle the process water, metals and chemicals, so that there is no discharge to the local wastewater treatment system and no hazardous waste trucked off-site for disposal. Successful zero discharge processes can save money and reduce risk to the environment, but many so-called zero discharge units in the past have not consistently prevented all environmental emissions, particularly air emissions.

A new technology developed by Cellini Purification Systems of Ludlow addresses this concern. The CAST

system is a refinement of existing distillation processes that use flash distillation and an enclosed vacuum evaporation technology in conjunction with a patented liquid/vapor separation process. The system can be used either for complete zero discharge, with recycling of both water and chemicals, or for the reuse of just water or chemicals.

Cellini came to STEP to obtain verification of its performance and assistance with regulatory issues. A major regulatory roadblock facing the CAST system was the potential requirements for federal permitting for each installation as a hazardous waste treatment unit under the RCRA program. Staff from DEP's Bureau of Waste Prevention, DEP's Innovative Technology (IT) and STEP raised the issue with EPA Region I, which concurred with DEP's conclusion that the system, when properly installed and operated, meets the federal criteria for being totally enclosed treatment unit that will prevent the release of any hazardous waste into the environment.

As a result of these efforts, Cellini's system is exempt from federal RCRA permitting in New England, although users must still comply with federal hazardous waste management regulations. If installed in P2 applications that recycle both process water and chemicals, the CAST technology is also exempt from MA permitting. For more information contact: Paul Walsh (617) 556-1011.

TUR SEP

The TUR program negotiated an important Supplemental Environment Project (SEP) with Varian Vacuum Products. Varian assembles vacuum producing products used in the manufacture of products requiring a pure environment (e.g., devoid of dust particles). Varian has begun implementing a TUR project (specifically aimed at eliminating lead solder paste currently used at the facility in the diffusion pump manufacturing process) in lieu of a \$1,500 penalty. Varian has agreed to spend an estimated \$19,600 on the TUR project, submit monthly reports to DEP, OTA oversight, and, once the project is completed, make a good faith effort to inform other MA facilities, which utilize lead solder paste in their manufacturing processes of the TUR project and its results.

For more information contact: Paul Walsh, MA DEP (617) 565-1011.

MASSACHUSETTS TURI

Cleaner Technology Demonstration Sites

TURI has announced has announced its FY '98 Cleaner Technology Demonstration Sites and Industry Matching Grants Program. The goal of the program is to provide companies with the opportunity to test and demonstrate new cleaner technologies as well as to showcase their accomplishments. In partnership with the Institute, four MA companies, representing various manufacturing sectors, will host a series of site visits at their facilities in late spring and early summer. These demonstrations will introduce personnel from MA manufacturers, engineering firms, state agencies and others to cutting-edge toxics use reduction technologies. Discussions will focus on economic, environmental, and health and safety benefits, as well as product and performance quality, and regulatory considerations associated with the new technologies or methods being demonstrated. Associate sponsors of the program include the MA OTA, DEP, EPA Region I and the Massachusetts Manufacturing Partnership (MMP).

For FY '98, a total of \$60,000 has been awarded to support the following four projects:

- Acushnet Rubber Company, Inc., New Bedford, the first company in MA to obtain ISO 14,000 certification, will serve as a "ISO 14,000 Demonstration Site;"
- ASE Americas, Inc., North Billerica, a photovoltaics product manufacturer, "Fluoride Ion Reduction in Photovoltaic Product Manufacture;"
- Lab Medical Engineering and Manufacturing, Inc., North Billerica, a producer of stainless steel components from various grades of steel for medical/surgical applications, "Plasma-Based Technology for Stainless Steel Passivation;"
- and M/A-COM, Inc., an AMP Company, Lowell, a producer of semiconductor products including materials, discrete diodes and transistors, power devices, single function MMICs and ASIC chip sets for commercial and government applications, "TUR Demonstration Site and Low Temperature Powder Coating Feasibility Study." MA/COM will demonstrate the powder coating process as well as prior successes in TUR, including technologies such as CFC, TCE, and MEK elimination, non-lead PVC use in cables, wave solder redesign, wastewater and packaging reduction. For information contact: Karen Thomas, (978) 934-3143, e-mail-Karen_Thomas@uml.edu

Community Education Program

TURI has awarded grants to nine municipal and community organizations in MA through its Toxics Use Reduction Networking (TURN) Grants Program. The projects funded in FY'98 are among 25 TURN projects funded over the past three years that serve as models for citizen, government, business and worker partnerships promoting toxics use reduction and P2 in communities across the state. The program was established to encourage involvement by community organizations and municipalities in the state's Toxics Use Reduction Program. Two types of projects were funded: community awareness projects designed to raise awareness and understanding of TUR; and municipal integration projects that foster implementation and incorporation of toxics use reduction/P2 strategies into local municipal activities and functions.

This year's projects include green purchasing for municipalities, green audits and mentoring for small businesses, TUR training for laundry workers, a series of statewide TUR forums for local health and fire officials, and public health nurses, development of a model policy for integrating TUR in municipal services and contracts, on-site audits for municipal buildings and TUR training for municipal staff.

Municipal integration grants were awarded to: The Boston Police Department (BPD), Boston; Franklin County Solid Waste Management District (21 communities), Greenfield; Lexington Health Department, Lexington, with the town's Dept. of Public Works; the MA Health Officers Association (MHOA), Sherborn, with the MA Fire Prevention Association, the MA Environmental Health Association and NEWMOA; and the MA Public Interest Research Group, (MASSPIRG), Boston, and the Toxics Action Center, with outreach assistance from the MA Municipal Association. Receiving Community Awareness grants were: The Regional Environmental Council Inc. (REC), Worcester; the Independent Laundry Workers Union, Local 66L, Somerville, with the MA Coalition for Occupational Safety; the Lawrence Grassroots Initiative, Lawrence; and the Western MA Coalition for Occupational Safety and Health (Western Mass COSH), Springfield, with the Western MA Healthy Schools Network and ARISE for Social Justice.

Research in Sustainable Technologies

A new multi-campus University Research Program in Sustainable Technologies is a joint project of TURI and the Strategic Envirotechnology

Partnership (STEP) at the Univ. MA Lowell. The program taps the research capabilities of the Univ. of MA to advance the investigation, development and evaluation of sustainable technologies that are environmentally, occupationally and economically sound. The program provides research funding to Univ. of MA faculty from all campuses, annually, on a competitive basis and encourages faculty/industry partnerships and cross-campus collaboration. Industry partners provide guidance, propose applications for new technologies, and, in some cases, evaluate and/or adopt processes and technologies resulting from research. Grants totaling \$170,000 have been awarded for eight research projects at the Lowell, Dartmouth and Boston UMass campuses.

FY 1998 projects include:

- Sustainable Production of Alternative-Fueled Buses, John Duffy, Univ. MA Lowell, Mechanical Engineering Dept.;
- Enzyme-Catalyzed Modification of Soy Proteins for Cleaning and Emulsion Stabilization (for new biodegradable soy-protein based surfactants/emulsifiers/degreasing agents), Richard Gross, Univ. MA Lowell, Dept. of Chemistry;
- Alternatives to PVC in Medical Applications, Stephen McCarthy, Univ. MA Lowell, with the Univ. of MA Worcester and the Lowell Center for Sustainable Production;
- Battery Powered Solid State Cooler/Heater, Ziyad Salameh, Univ. MA Lowell, Dept. of Electrical Engineering;
- Fine Pitch Circuit Lines for Additive Technologies in Printed Wiring Board Fabrication, Sammy Shina, Univ. MA Lowell, Dept. of Mechanical Engineering;
- Ultrasonic-Assisted De-inking System for Mixed Office Waste Papers, John Walkinshaw, Univ. MA Lowell, Chemical Engineering Dept.;
- Computational Evaluation of Hydroquinone Non-Covalent Derivatives, John C. Warner, Univ. MA Boston, Dept. of Chemistry;
- Hansen-Type Hydrogen Bonding Solubility Parameters in Textile Sciences (a model to more accurately predict solvency), Steven B. Warner and Armand Lewis, Univ. MA Dartmouth, Textile Sciences Dept. with MA OTA. For information contact: Liz Harriman, at TURI, (978) 934-3387 or Charles Pace, STEP, (978)- 934-3199.

Summer InTURnships

For the third year, the Institute will co-sponsor engineering students from Univ. MA Lowell on summer inTURnships in TUR jobs in industry. The Institute trains the students in a modified TURP course and pays

for the first month's salary. Past projects have included identification and evaluation of options to replace hydrochlorofluorocarbons (HCFCs) used to deflux circuit board assemblies; identification of TUR options through industrial hygiene audits; evaluation of the compatibility of soldering masks with low-volatile-organic compound conformal coatings; decreasing energy use/increasing productivity in the cooling process; monitoring wastewater treatment systems; preparation of Form R and Form S reports; replacing acetonitrile in high performance liquid chromatographic analysis; investigating curing methods and coating appropriate for low-temperature electronics applications; and assisting a company in its move toward ISO 14,000 certification. For more information contact: Karen Thomas (978) 934-3143.

New Librarian

Claire LaForce, MLS, has joined TURI's staff as Librarian at the Institute's Technology Transfer Center (TTC). A recent graduate of the University of North Carolina's Graduate School of Library and Information Sciences, she completed her undergraduate work in Environmental Studies at Trinity College in Vermont. The TTC maintains the largest collection of resources on P2 and toxics use reduction in New England. Since 1989 it has served as both a research library and clearinghouse of information for industry, government, municipalities, citizens and university students, faculty and staff. Claire previously worked in the healthcare field and is beginning to expand the library's focus to include information on materials use in hospitals. For more information contact: Claire LaForce, e-mail- Clair_LaForce@uml.edu.

Continuing Education Programs

Continuing education mini-conferences for toxics use reduction planners have been scheduled for April 7 in Taunton and May 5 in Springfield. Internet training classes for planners will be held this spring at locations in Lowell and Southeastern MA. For more information contact: Anne Basanese, (978) 934-3144.

For more information contact: Patricia Gittes, MA TURI (978) 934-3129.

NEW HAMPSHIRE

NEW HAMPSHIRE DES

EMS Grant Update

The DES was one of eight states nationwide to be awarded a \$100,000 EPA grant to fund a Voluntary Environmental Management System (EMS) project in NH. The aim of the project is to assist a few small businesses at a single industrial park to put ISO 14,000 environmental management systems into place, and to assess what difference the use of the system makes in the companies' environmental and compliance performance, and in stakeholders' confidence in those firms. With stakeholder groups, the Department will also be exploring the issues of what, if any, regulatory incentives could be offered to firms with established environmental management systems. The project manager is currently working to finalize commitments to participate with firms at Pease International Tradeport, and has recently interviewed consulting EMS trainers for the project.

6th Annual P2 Conference & Governor's Awards

Planning for the 6th Annual Pollution Prevention Conference has been finalized, and the brochure has gone to print. Mark your calendars for April 13, 1998 at the New England Center in Durham, NH. This year's conference will feature a presentation of the 1998 Governor's Awards for Pollution Prevention, a keynote address by Andy Lietz, CEO of Hadco Corporation, and nine sessions ranging from Environmental Self-Awareness and Compliance Through P2, to Building a Bridge Between Quality and P2.

Lead Sinkers Initiative

The Department's Household Hazardous Waste Coordinator, Lakes Coordinator, and the "Green Team" are working with the Loon Preservation Committee of the Audubon Society of New Hampshire to develop a method to collect lead fishing sinkers from anglers. Lead poisoning has been found to be the leading cause of death of loons in the state of New Hampshire, and a collection system to exchange lead sinkers would be a good step to protect the loons. One suggestion to facilitate the collection is to have volunteers exchange lead sinkers for steel sinkers at Household Hazardous Waste collections.

Small Business Environmental Assistance Alliance

NHDES (NHPPP and SBTAP) is partnering with EPA Region 1, UNH and the Small Business Development Center (SBDC) to establish a Small Business Environmental Assistance Alliance (SBEA2). Through this project, a small business environmental counselor (Andrea O'Brien) has been hired by the SBDC to set up a process to screen clients for their

environmental assistance needs, coordinate assistance, obtain regulatory and P2 information and make referrals to the appropriate assistance programs. Part of this project will also be to provide a three day training session (beginning in February) on P2 and environmental awareness to all SBDC counselors (there are six regional offices in NH) and other interested organizations. Other project participants include NH WasteCap, NIST Manufacturing Extension Program, NH P2 Partnership and the Department of Resources and Economic Development.

DES Green Team

The DES Green Team continues to meet regularly and work on a variety of projects. Recent projects involving the Green Team include: supporting America Recycles Day; developing a draft policy for in-house battery recycling; developing an in-house cardboard recycling program; expanding the in-house aluminum recycling program; researching alternative fuel vehicles for use by the Department; and researching the use of elemental chlorine free paper for the Department. The Green Team will also be developing an action plan which will be complementary to the DES Strategic Plan.

Strategic Planning

The Department of Environmental Services has recently begun an effort to update its strategic plan. The P2 Task Force has been assigned to develop measurable objectives and indicators for the draft DES P2 goal, one of twelve strategic goals developed by the Department's Senior Management Team. The goal as currently stated reads: "That every reasonable effort is made to eliminate or reduce waste stream toxicity and absolute waste volumes, eliminate accidental pollutant releases to the environment, and conserve materials, energy, water, and other resources".

The P2 Coordinator will also be participating on the Compliance Assurance Goal Team, which is primarily made up of enforcement staff. Objectives for all 12 goals are targeted for completion by March 1, 1998. When this task is finished the results will also be incorporated into a revised version of the Department's Pollution Prevention Strategy, which is due to be updated in 1998.

Eco-Industrial Park

P2 staff have been actively involved in the

Londonderry Eco-Industrial Park Advisory Board since its inception. Londonderry Town Planner Peter Lowitt will hold a facilitated meeting of stakeholders and experts to actually design the layout of the park. Participants will include architects, regulatory officials, engineers, environmental experts and construction experts who will be broken into small groups who will be responsible for designing components of the park. It is expected that by early March, plans for the park, final covenants, a new advisory board and a development team will be complete. As property owner, the Town of Londonderry recently signed a purchase and sale agreement with the Andover Consulting Group, Inc. which will develop the park. Andover Consulting will start site testing immediately, market the property through the winter and hopes to start construction late Spring. American Energy Systems, a co-generation company would like to construct an energy plant on the site and this would act as the "anchor" facility for the park.

NHPPP Staff Update

The last New Hampshire update in this newsletter reported that Kathy Blake had left the P2 Program after the birth of her daughter. Well, she's back in a part-time capacity to help out with the Wastelines newsletter and the Governor's Award for P2. Sara Johnson, who replaced Kathy as P2 Program Specialist, came on board in October 1997. In only a short time, Sara has already proven herself to be a great asset to the program. Please welcome her to the NHPPP the next time you call (603) 271-6460 or send an e-mail: nhppp@des.state.nh.us.

For more information, contact: Stephanie D'Agostino, DES P2 Coordinator (603) 271-6398 or Vincent Perelli, NHPPP Manager (603) 271-2902, perelli@deswmdpl.mv.com

NEW YORK

NEW YORK STATE DEC

Networking

The P2 Unit has been participating along with representatives of the NYS Empire State Development, Environmental Facilities Corp., Energy Research and Development Authority, Governor's Office of Regulatory Reform and the NYC Industrial Technology Assistance Center, on the Steering Group for New York's Manufacturing Extension Partnership (MEP) Environmental Assistance Project. The planning and

initial implementation of this project, which is funded by a NIST grant, is directed toward developing an overall strategy for addressing the needs of NYS manufacturers and environmental service providers. For more information contact: Anne Dillenbeck at (518) 465-8975.

Outreach

P2 workshops for auto recyclers and repair shops were held in Plattsburgh on December 17 and in Queensbury on December 18. These workshops were focused on automobile recyclers to coincide with the agency's initiative to bring automobile recycling yards into compliance. Overall attendance was 157.

The P2 Unit coordinated a P2 video conference for printers on December 9, 1997, which was down linked at six locations in NYS. This broadcast was sponsored by the Printers National Environmental Assistance Center (PNEAC), US EPA, Univ. of Wisconsin Solid and Hazardous Waste Education Center, Graphic Arts Technical Foundation, Printing Industries of America, Illinois Waste Management and Research Center, Great Lakes Protection Fund, National P2 Roundtable, and the Great Printers Project, and co-sponsored in New York by the Department of Environmental Conservation, Environmental Facilities Corporation, Empire State Development, Association of Graphic Communications, Foundation of Flexographic Technical Association, Printing Industries

Association of NYS, Inc., SUNY Morrisville, Rochester Institute of Technology, Long Island Forum for Technology (LIFT), Erie County Office of P2, and NYS Center for Hazardous Waste Management. Total attendance was 95, much higher than its predecessor, which was down linked at a similar number of sites in June 1996.

The 11th Annual P2 Conference has been scheduled for June 17 - 19, 1998, and will be held at the Omni Hotel in Albany, NY. The 5th Annual Governor's Awards for P2 has commenced; completed applications are due to DEC by April 3 and awards will be presented June 18 at the Conference. For more information on the Conference contact: Dottie O'Hare; for information on the Awards program contact: Carlos Montes (518) 457-2553.

Publications

A 12-page document on NY's Comparative Risk Project has been published that describes the project and its overall goal, which is to develop a strategy for reducing risks to human health and the environment through P2. In addition to a general project description, there are sections on the activities of each of three work groups that are evaluating and characterizing the risks posed to human health, ecosystems and quality of life from harmful or toxic substance releases to the environment. The document is a product of a fourth work group that is responsible for ensuring public participation in the project. Copies can be obtained by calling (518) 457-2553.

Great Lakes Basin Mercury Study

A mercury inventory database of air and water mercury release data within the Great Lakes Basin has been completed. A final qualitative review of the data is being performed, and a report is being developed to include this mercury release data as well as additional information regarding mercury contaminated waste generated from treatment, storage and disposal facilities and other hazardous waste generators located in the Great Lakes area.

The greatest release of about 7,000 lbs. annually occurs to the air. Municipal waste combustors contribute 40 percent of this amount with coal and oil fired electricity generating facilities contributing about 35 percent. Publicly Owned Treatment Works contribute 84 percent of the 750 lbs. discharged to surface waters.

The next step in the process is to identify facilities to target for P2 efforts. The formal part of this activity is expected to be completed by June 30, 1998 but it will

continue informally as part of the northeast mercury reduction program.

Automobile Recycling Facilities

DEC is initiating a program to work with automotive recycling facilities to obtain compliance with environmental standards and to implement Best Management Practices in managing wastes generated at their facilities. These facilities are frequently locations of contaminated sediments and groundwater because of spillage of automotive fluids. It is expected that this program will result in the facilities reviewing the handling and storage of automotive fluids and implementing management practices that will eliminate contamination resulting from the mis-handling of these materials. The P2 Prevention Unit participated in a two day convention in eastern New York State in the fall as part of this effort. It is the intent to take the program statewide over the next year. The Department has been working with the Automotive Recyclers Association of New York in implementing this program.

For more information contact: Mary Werner, NYS DEC (518) 457-2553.

RHODE ISLAND

RHODE ISLAND DEM

RI Environmental Compliance Incentives Act

A new chapter has been added to RI's General Laws that encourages business owners (or "regulated entities") to voluntarily self-evaluate their compliance programs and management systems. The *Rhode Island Environmental Compliance Incentive Act* has been enacted to promote environmental compliance by providing regulated entities that "properly and timely report the findings of such self-evaluations to the regulatory authority(ies) responsible for protecting the environment of the state" by eliminating certain monetary penalties and by protecting the privacy of certain communications between the business and its environmental consultants. In essence, any company that a) discovers an environmental regulatory violation on their premises during a planned self-inspection (audit), and, b) follows the procedures spelled out in the Act, and, c) is properly held accountable for the reporting and rectification

of the violation, may be eligible to receive some regulatory relief.

The incentives for businesses to participate in voluntary self-evaluations, such as environmental audits or standard management practices that monitor compliance status, include the following: 1) DEM will not assess gravity-based penalties. 2) DEM will not refer the business “to the attorney general or other governmental authority for civil or criminal prosecution relating to the violation(s) disclosed by the regulated entity [business].” 3) DEM will not “request or use a regulated entity’s environmental audit report(s) as a regular means of investigation or as a basis for initiating administrative, civil or criminal actions.”

In order for a company to take advantage of the *Rhode Island Environmental Compliance Incentive Act*, a business must meet the following three qualifications: 1) Discovery of Environmental Noncompliance. The discovery of an environmental violation must be the result of a prearranged audit or due diligence activities. The Act does not apply to violations discovered as a result of monitoring, sampling or reporting prescribed by environmental law, judicial or administrative order, or consent agreement. 2) Disclosure of Noncompliance. In order to qualify for the environmental compliance incentive, written disclosure for each specific violation must be submitted to DEM within 15 days of discovery with all the pertinent information spelled out in the Act that is related to the violation. 3) Compliance, Remediation and Mitigation of Violations. “A regulated entity must correct the violation within sixty (60) days from the date said violation was reported to the department, certify in writing that the violations have been corrected, and take appropriate measures, as determined by the Department, to remedy any environmental harm or threat to public health or safety resulting from the violation.” The business must agree to take steps to prevent a recurrence of the violation.

A business may not be entitled to relief under the *Rhode Island Environmental Compliance Incentive Act* where: 1) it fails to comply with the Discovery, Disclosure, or Mitigation provisions of the Act; 2) it has violated the terms of or failed to abide by any compliance agreements with DEM in a timely manner; 3) it demonstrates a willful disregard, gross negligence, or concealment; 4) the violation creates serious, actual harm or results in imminent and substantial endangerment to human health, public safety or the environment; 5) the violation(s) in question is a “repeat violation” that has occurred within the past three years, or 6) it fails to

cooperate with the department by not providing it with all relevant documents or access to the facility(ies) in investigating the violation. In a nutshell, a company that cannot qualify may have a history of deficient work practices to start off with and may not have been eligible to take advantage of the Act in the first place.

DEM Plans to Integrate P2 into ISO 14,000

The RI DEM is working on a project that seeks to integrate P2 planning into a facility’s development of an ISO 14,001-certified environmental system. The project, entitled *Integration of Pollution Prevention into an ISO 14,000 Management System, Implementation and Measurement*, also seeks to determine the environmental benefit(s) of both the P2 implementation and the overall establishment of ISO 14,000 by measuring the facility’s progress against an established baseline. This project will give EPA and RI DEM better insight into the direct environmental effects of ISO 14,000 implementation. Based on the results, DEM will explore the potential for regulatory relief for organizations that implement ISO 14,001-certified environmental management systems.

By demonstrating the benefits of implementing an environmental management system, and the insertion of a P2 component into that system, DEM seeks to work towards the following goals and milestones of Rhode Island’s Performance Partnership Agreement:

- **Toxic-Free Communities:** By relying on P2 in the way they produce, consume, reuse, and recycle materials, all Rhode Islanders will live in toxic-free communities.
- **Reduction in pollution emissions, discharges, loadings and improperly managed substances.** (OECA performance measure, August 1995).
- **By 2005, industrial facilities will reduce by 25 percent from 1992 levels the quantities of toxic chemicals in waste reported as released, disposed, tested, or combusted for energy recovery.** Half of this reduction will be achieved through P2 practices.

For more information contact: Joe Antonio, RI DEM (401) 222-4700 x4410.

P2TRAINER DATABASE

State and local P2 programs have a wealth of expertise designing and conducting professional training for a wide variety of audiences. The P2Trainer database is designed to capture this expertise in a single location so that everyone can share this knowledge. The purpose of the P2Trainer Database is to provide individuals conducting P2 training with access to current information on what others in the field have accomplished. This project is funded under a grant from EPA Headquarters. The NE P2 Roundtable is piloting P2Trainer in the Northeast in 1997 and is collaborating with the National P2 Roundtable Education, Training and Learning Workgroup on the design and development of this database.

The audience for P2Trainer is federal, state and local government assistance and regulatory officials involved in organizing training sessions on P2 topics. The database focuses on workshops that this audience has conducted on P2 topics for government and industry personnel, environmental groups, consultants or the general public.

A prototype of P2Trainer is located on the world wide web at <http://www.p2.org/p2trainer>. To add training sessions to P2Trainer or to review the database contact: Rob Guillemin at NEWMOA, (617) 367-8558 x309.

Materials Management Plan with a number of initiatives to promote resource conservation and P2. The Council has been instrumental in developing environmental procurement practices for office copy paper throughout state government. The primary dual purpose copy paper now available for use in state government under contract is a processed chlorine free (PCF) 100 percent recycled (75 percent post-consumer) paper (Rolland - New Life). This paper has a much higher brightness than the previous Unity DP (Hammermill) paper, which it replaces, and in addition, has a higher post-consumer recycled content. The increased brightness will help to overcome resistance to using PCF paper that existed in the past with Unity DP, which has since been discontinued by the manufacturer. The Clean State Council will also focus its attention on paper use reduction this year, targeting a 5 percent reduction in usage throughout state government.

Other initiatives of the Clean State Council this year include developing and supporting policy changes in state vehicle purchase to encourage energy efficient vehicle purchases; developing environmental procurement criteria that go beyond recycled content and identifying products that meet these criteria; and increasing food waste composting at state government buildings and cafeterias. The EAD presented workshops in October to municipal officials on environmental procurement practices.

The Vermont Agency of Natural Resources has developed a P2/Resource Conservation Plan as part of the Clean State Initiative that began in 1994. An initiative of the plan this year is to target a 10 percent reduction in heating energy usage at the Waterbury State Office complex. Last year the energy bill for the Waterbury complex was over \$260,000 for the purchase of number two and number six heating oil and for wood chips.

Business Environmental Partnership

The EAD is continuing its "Green Hotels in the Green Mountain State" initiative. Over 30 facilities, including large hotels, resorts and inns have signed up for the program and are working toward achieving status as "Environmental Partner" and "Green Hotel" designation. Facilities that achieve Green Hotel designation will be required to develop an environmental management system that is appropriate to the size and scope of the facility. These facilities will be assisted through EMS

VERMONT

VERMONT DEC

Compliance/P2 Guides

"A Printer's Guide to Vermont's Environmental Regulations" has been distributed to Vermont printers. This document contains compliance audit checklists and P2 information in a concise format. For a copy contact: EAD (802) 241-3626. A similar guide for vehicle service and repair facilities has been drafted and is currently being reviewed internally. Written materials are reviewed by the Small Business Compliance Advisory Panel.

Clean State Council

The Vermont Clean State Council is implementing a

implementation workshops that are currently under development and will be conducted this winter and spring. Larger facilities that participate in the program will be monitored and tracked through EMS development and implementation to document environmental performance improvements, as a part of an EPA grant on environmental management systems. The VT Small Business Development Center (SBDC) is partnering with DEC in the implementation of the program. A steering committee of businesses, trade associations, DEC regulatory programs and environmental interests are overseeing the program and its expansion to other business sectors.

Conferences/Workshops

A conference on process wastewater reuse and closed loop recycling is being developed in conjunction with the VT SBDC and the Green Mountain Water Environment Federation. The conference is planned for mid-May and will target several manufacturing sectors and municipal wastewater treatment operators.

Publications

The Agency of Natural Resources has published *Environment 1998*, the theme of which this year is the environmental consequences of the changing landscape, growth and suburbanization in VT. This is the 5th consecutive annual environmental indicators report of the Agency. For a copy contact: Doug Kievit-Kylar (802) 241-3626.

The EAD has published three P2 case studies on health care facilities addressing: (1) solvent recycling and water use reduction in a histology laboratory; (2) dry laser technology for film processing in a radiology department; and (3) waste reduction in conventional wet film processing in a radiology department. Fletcher Allen Health Care in Burlington is the subject of all three case studies, which were a result of participation in the Environmental Leadership Program.

For more information contact: Gary Gulka, VT DEC (802) 241-3626, garyg@wasteman.anr.state.vt.us.

EPA REGION I

Events & Projects

EPA Region I hosted a very successful Technology Open House on October 21 at S&A Paramount Printing, Lincoln, RI. The event featured printers teaching other printers about the near-zero VOC printing ink/solvent

system they have been using for a few years. Attendees "networked" and learned about waste reduction and industry technologies. For more information contact: Sally Mansur (617) 565-1378.

EPA Region 1 is undertaking a grant project with the Center for Ecological Technology (CET) in Northampton, MA to develop a compost from food and farm waste in the local area. Thirty farmers, ten food waste generators and three transporters are involved in the project. The project presently results in diversion of 50 tons of waste each week from landfills and incinerators and diversion of 170 tons per week is anticipated by 1999. For more information contact: Joe DeCola (617) 565-3276.

EPA Region 1's Chris Jendras has served as an advisor to a student working on his graduate school project at Antioch College in NH. The project, which was completed this week, was the production of a 30-minute video "Industrial Systems of Tomorrow: Finding Sustainability Through Natural Cycles." The focus is on companies (Stoneyfield Yogurt, Digital, Tom's of Maine, The Robbins Company) that have found improving their operating efficiency (by eliminating waste and preventing pollution) is good for their bottom line. The video draws comparisons between natural cycles and industrial cycles. For more information contact: Chris Jendras (617) 565-3283.

A congratulatory letter, certificate, decal and press release were sent to each of Region 1's 21 Partners for Change. Press releases announcing their new Partners' participation in the program were sent to over 50 newspapers and trade publications. This past year, 29 applicants sought recognition as Partners for Change. Of these, 21 are being recognized as Partners, three applications need follow-up, and the remaining five applicants either did not qualify or failed to provide additional information as requested. For more information contact: Chris Jendras (617) 565-3283.

Region 1 held two Innovative Stormwater Technology Trade Shows the week of November 17 in Hartford, CT and Portland, ME. The events were a huge success with over 200 people and 30 exhibitors in attendance at both the Hartford and Portland Shows. For more information contact: JoAnne Vizziello (617) 565-3261.

Region 1 conducted two workshops during the week of November 17: One with municipal officials

on conducting on-site assistance for auto shops, and another for auto repair, body shops and DPWs that covered compliance and P2 issues. For more information contact: Mary Dever (565) 9408.

Region 1 conducted a Financial Management workshop for MA municipal and industrial wastewater personnel. The course covered the basics of financial management, budgeting and decision making.

Region 1 sponsored a conference December 9th to showcase its newly created Environmental Technology Verification (ETV) program. The ETV program is intended to assist in the commercialization of innovative technologies through EPA and vendor supported performance verification. The conference was the kick off event for the additional outreach work to promote ETV that Region 1 will be undertaking. For more information contact: Carole Kilbride (617) 565-9175.

Region 1 and NEWMOA, conducted an auto repair assistance workshop for the MA Health Officers Association on December 11. The goal of the workshop was to encourage officers (HOs) to consider EPA's NEEAT Team as a resource and potential partner in their efforts to reach auto repair and body shops in MA and to encourage the health officers to make referrals to NEEAT for on-site assistance and future workshops. For more information contact: Mary Dever (617) 565-9408.

Region 1 conducted Sewer Use Ordinance Review workshops in Millbury, MA and Brunswick, ME for municipal and industrial wastewater treatment staff. The audience were from non-pretreatment communities that have not had the benefits that EPA has provided to pretreatment communities, including updating local sewer use ordinances and strengthening their legal authority. For more information contact: Jack Healey (617) 565-3542.

Region 1 hosted a EPCRA workshop in Norwich, VT on January 13, 1998 at the Montshire Museum. The workshop covered TRI, Chemical Inventory Reporting, the One Plan, and small business assistance.

Upcoming Events

Region 1 is working on producing two Innovative Wastewater Technologies Trade Shows this Spring. The object of the shows is to provide a forum where manufacturers of innovative on-site wastewater treatment systems/components (for single-family residential applications) can present their technologies to local planners, designers, engineers, public works officials, and others who are faced with remediating failed systems on

severely constrained sites or with providing enhanced treatment (e.g., nutrient removal) to protect shellfish or groundwater resources (not to help with making unbuildable lots buildable). Current plans call for March '98 shows in Worcester, MA and Concord, NH. Exact sites and dates to be determined shortly. For more information contact: JoAnne Vizziello (617) 565-3261.

Region 1 has launched a compliance initiative to support the chemical industry in complying with relevant environment regulations. As part of this effort, EPA Region 1 is hosting four free workshops in February 1998 on Emergency Planning and Community Right to Know (EPCRA) reporting requirements. The Toxics Release Inventory (TRI) is a new requirement for SIC code 5169, Chemical and Allied Products, not elsewhere classified: engaged in the wholesale distribution of acids, industrial and heavy chemicals, dyestuffs, industrial salts, rosin and turpentine, and those facilities involved in the warehousing, storage and refrigeration of chemical products. The reporting deadline for the annual chemical inventory requirements, Sections 311/312 of EPCRA is March 1 of each year. In addition to the new sectors there have been changes to TRI that will affect reporting by SIC codes 2869 and 2899 effective January 1, 1998. For more information contact: Len Wallace (617) 565-3286.

For more information contact: Jack Healey, EPA Region I (617) 565-3542.

EPA REGION 2

Supplemental Environmental Projects

An Administrative Civil Complaint with seven counts and a total proposed penalty of \$119,000 was issued to Austin Productions, Inc. in Holbrook, NY on January 2, 1996. As a result of a settlement agreement on October 8, 1997, the company agreed to perform an SEP for P2, which involved the substitution of non-toxic water soluble chemicals for toluene, acetone and methyl ethyl chloride that were used at its facility. As a result of the chemical substitution, 12,602 lbs. of methyl ethyl ketone, 28,786 lbs. of toluene, and 12,662 lbs. of acetone were removed from the environment. For more information contact: Linda Hall (732) 321-6742.

An Administrative Civil Complaint, alleging violations of the PCB regulations by the NJ Department of Corrections under TSCA, was issued on July 15, 1996, with a proposed penalty of \$1,755,000. The case was resolved via a Consent Agreement and Consent Order (CA/CO) on November 12, 1997, and the respondent agreed to pay a penalty of \$476,196 in addition to completing three separate SEPs. The SEPs include removal, disposal and replacement of the PCB Transformers at these two facilities, an electrical upgrade at an additional facility (which will include removal, disposal, and replacement of PCB contaminated equipment), and a facility PCB audit for nine additional Department owned facilities. As a result of these projects, 13,460 lbs. of PCBs were removed from the environment. For more information contact: Linda Hall (732) 321-6742.

Green & Profitable Printing Conference

On December 9, 1997, the Printers' National Compliance Assistance Center (PNEAC) sponsored its second live satellite video conference to help small-to-medium sized lithographic printers gain a better understanding of environmental compliance requirements and proven waste reduction strategies. It was very similar to the 1996 PNEAC video conference whereby 92 percent of the surveyed participants noted they have improved the environmental compliance of their shop over the past year and 97 percent have adopted one or more waste reduction strategies featured in the video conference.

T

he video conference was broadcast to more than 80 downlink sites across North America; seven of which were located in the New York-New Jersey area, including the US EPA Region 2 NYC Office. Key topics discussed included environmental compliance issues, rag management, ink waste

P2 PRINT

P2PRINT is an electronic mailing list for printing professionals in the northeast interested in reducing or eliminating the use of hazardous chemicals in printing. The goal of P2PRINT is to help printers find answers to questions about environmental issues related to printing. P2PRINT subscribers include printers and other professionals who work with the industry, including assistance organizations, trade associations, industry suppliers and regulators. P2PRINT is maintained by NEWMOA under a grant from the U.S. EPA Environmental Technology Initiative. There is no charge to join P2PRINT. Anyone can subscribe by sending an e-mail message to: p2print-request@great-lakes.net. For more information contact: Lisa Regenstein, NEWMOA (617) 367-8558 x304.

reduction, reduction of alcohol in dampening solution and reduction of volatile organic compounds (VOCs) from various sources, including press cleaning. Video footage featured interviews with several printers who have incorporated waste reduction into their business practices. Hosts at the Region 2 site locations were on hand to answer state specific questions and discuss their outreach programs to help printers. Nearly 100 people attended the conference in Region 2, thanks to the active support and networking efforts of our cosponsors, which included state regulatory agencies, trade associations, universities and other technical assistance providers.

Copies of the Green and Profitable Printing '97 Video conference Course Notebook can be obtained from Deborah Craig, EPA Region 2, (212) 637-3521, e-mail-craig.deborah@epamail.epa.gov. To learn more about PNEAC, a partnership between

EPA, industry, university and other government service providers, visit the Internet web site at <http://www.pneac.org>.

PNEAC Printing Technology Seminar

EPA Region 2 and the Printers' National Compliance Assistance Center (PNEAC) have teamed-up to provide a one day training seminar on printing technology. PNEAC will provide the training on February 26, 1998 at the Region 2 NYC 290 Broadway Office, Room 27 A. The seminar will provide an overview of the four main printing processes, a discussion of compliance issues and P2 opportunities for each printing technology. The target audience includes regulatory personnel, P2 coordinators, small business assistance providers, trade associations and community organizations. This training is intended to maximize EPA's and other stakeholders' compliance and P2 outreach efforts to printers. To ensure seat availability and course materials, register by February 17. For more information contact: Deborah Craig (212) 637-3521, e-mail-craig.deborah@epamail.epa.gov.

Federal Facility P2 Opportunity Assessment

A P2 Opportunity Assessment (PPOA) was performed at the U.S. Coast Guard Training Center in Cape May, New Jersey, from August 25-29, 1997. The PPOA was conducted at this facility because of the spectrum of operations, including ship and helicopter maintenance, that take place at this facility and many other Coast Guard stations. Thus, it is expected that the P2 opportunities identified will have potential for being implemented nationwide by the Coast Guard. The National P2 Coordinator for the Coast Guard took part in the planning sessions and will review all recommendations for their potential implementation nationwide.

The final report, issued December 1997, recognizes several P2 facility accomplishments, and also identified several opportunities for P2 improvements. For example, more than 50 P2 facility accomplishments were recognized including:

- Household hazardous waste collection day;
- Reuse jet fuel;
- Use of 20 percent post-consumer recycled content paper;
- Installed low flow shower heads/ toilets;
- Elimination of halon from shipboard fire fighting system;
- Use of low-VOC paints; and
- Use of an oil filter crusher.

The following are selected opportunities for P2 improvements at the facilities:

- Implement a shop towel laundry service;
- Purchase reusable spill absorbent materials;
- Establish base wide antifreeze recycling programs;
- Purchase oil analysis equipment;
- Investigate use of battery maintenance system;
- Purchase an electric floor scrubber; and
- Purchase an aerosol can puncturer.

For FY'98 the Region 2 Federal Facilities Program will be working with other federal facilities in the region to conduct additional P2 Opportunity Assessments. For more information contact: Jeanette Dadusc (212) 637-3492, e-mail-dadusc.jeanette@epamail.epa.gov.

For more information contact: Janet Sapadin, U.S. EPA Region 2 (212)

NORTHEAST STATES P2 ROUNDTABLE

P2 for Metal Coating Operations

NEWMOA will publish a comprehensive manual on P2 for metal painting operations in late February 1998. The purpose of the manual is to provide technical assistance and regulatory program staff with a complete reference on P2 technologies for metal coatings processes. The manual covers conventional spray coating operations and surface preparation and clean up techniques and the major P2 options to reduce air emissions and waste generation from them. Copies of the manual will be provided free to state and local P2 programs in the Northeast. All others should contact the NEWMOA office to order copies.

Advanced Financial Assessment Workshop

NEWMOA plans to pilot a two-day advanced workshop on financial assessment of P2 programs for state and local P2 program staff in March 1998. The goal of the advanced course is to expand the pool of individuals and programs that can help companies conduct financial assessment of P2 projects. It is intended to bring assistance staff up to a level where they can use the tools of activity-based cost analysis and capital budgeting techniques to perform complete analyses of P2 investments. To

prepare for offering the workshop, NEWMOA is developing the advanced workshop curriculum, revising its training manual, and developing new training activities. The workshop will include a computer-based module focusing on P2 Finance.

Northeast Mercury Report

NEWMOA has been collaborating with the Northeast States for Coordinated Air Use Management (NESCAUM) and the New England Interstate Water Pollution Control Commission (NEIWPCC) for the past two years on the development of a regional report on mercury deposition. NESCAUM has taken the lead in writing and producing most of the report. NEWMOA conducted a survey of the states on their P2 and control strategies and drafted a chapter of the report covering these activities. The report is scheduled to be released in mid-February. The New England Governors Council/Eastern Canadian Premiers Environment Committee is developing a mercury action plan for the region with the assistance of the three interstate associations. This action plan will be discussed at a meeting of the Environment Committee in February. To request a copy of the report contact: NESCAUM (617) 367-8540.

NE P2 Directory

NEWMOA will be publishing a directory of federal, state and local P2 programs in the Northeast in early February. The Directory includes a listing of the names and phone numbers of P2 program managers and staff throughout the region. To order a copy of the Directory contact the NEWMOA office.

New Staff & Interns

NEWMOA recently hired one full time staffperson and two part time interns to assist with several P2 projects. Andy Bray started at NEWMOA as an intern this past summer and was recently hired as a full time staffperson to assist with developing a P2 website, writing a manual on P2 for metal fabrication and several other projects. Andy recently completed a masters program in environmental engineering at the Univ. MA Lowell and worked for over a year with the Toxics Use Reduction Institute.

John Bearley, MLS, started working part time as a librarian intern at NEWMOA helping to organize the library and conduct research for NEWMOA projects. John brings a wealth of expertise in P2 having spent over one year at the Toxics Use Reduction Institute Technology Transfer Center. John has already made a great contribution to NEWMOA's P2 database and the P2 resource center.

Paul Barressi is a Ph.D. student at Boston University with a strong environmental law background. He joined NEWMOA as an intern to develop a matrix of state environmental regulations for auto repair shops. He has been busy pouring over state regulations already and translating them into plain English.

NEWMOA is excited that these highly qualified and talented people have joined the staff. The other staff at NEWMOA who work on P2 projects are:

- Terri Goldberg, P2 Program Manager
- Lisa Regenstein, P2 Project Manager, (manages P2 information projects)
- Jennifer Griffith, P2 Project Manager, (manages Joint NEWMOA/NESCAUM Hazardous Air Pollution Prevention Project)
- Rob Guillemain, P2 Staff, (develops databases and reports)
- Sam Perkins, P2 Project Manager (part time), (manages training and research on financial assessment of P2)
- Susan Green, P2 Staff, (part time), (coordinates auto repair and auto body projects)

The NEWMOA staff welcome requests for information, and questions about the activities of the P2 Program and the staff.

For more information contact: Terri Goldberg, NEWMOA (617) 367-8558 x302, NEPPR@TIAC.NET.

NE P2 CALENDAR--FALL 1997

| Title | Sponsor | Date/Location | Contact |
|--|--|---|--|
| National Meeting of Environmental Practitioners | US EPA, GMIED | February 8 - 11, Annapolis, MD | (802) 229-6070 |
| Seminar on Printing Technology | U.S. EPA Region 2 | February 26, New York, NY | (212) 637-3571 |
| Toxics Use Reduction Planners Mini-Conference | MA TURI | April 7, Taunton, MA | (978) 934-3144 |
| NH P2 Conference | NH DES | April 13, Durham, NH | (603) 862-4243 |
| Life-Cycle Environmental Stewardship for Electronic Products | IEEE | May 4-6, Oak Brook, IL | (732) 562-3875 |
| Toxics Use Reduction Planners Mini-Conference | MA TURI | May 5, Springfield, MA | (978) 934-3144 |
| New England Environmental Expo | EnviroExpo New England | May 5-7, Boston, MA | (617) 489-2302 |
| National P2 Roundtable 1998 Spring Conference | NPPR | April 28-May 1, Cincinnati, OH | (212) 466-7272 |
| The 10th Annual Tour de Sol | The Northeast Sustainable Energy Association (NESEA) | May 7-15, Kickoff in New York City, Finish in DC. | Nancy Hazard (NESEA) at (413) 774-6051 |
| 11th Annual P2 Conference | NYS DEC & the Business Council of NYS, Inc. | June 17 - 19, Albany, NY | (518) 457-2553 |

NEWMOA'S P2 PUBLICATIONS

Wood Furniture: The Clean Air Act and Pollution Prevention Opportunities, 1997, \$40 (\$20 for or non-profits & government agencies).

Pollution Prevention for the Metal Finishing Industry: A Guide for Technical Assistance Programs, 1997, \$30.

Pollution Prevention for the Printing Industry: A Guide Technical Assistance Programs, 1997, \$30.

Guide to Accessing Pollution Prevention Information Electronically, 1997, \$15.00 (\$7.50 for non-profits & government agencies).

High Solid Topcoats and HVLP Spray Guns: Ethan Allen Case Study, 1997, \$2.00.

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