



NORTHEAST STATES POLLUTION PREVENTION NEWS

NORTHEAST WASTE MANAGEMENT OFFICIALS' ASSOCIATION
(NEWMOA)

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NORTHEAST STATES POLLUTION PREVENTION ROUNDTABLE

NOTE FROM THE EDITOR

At the suggestion of Northeast States Pollution Prevention Roundtable participants, I have made some changes in the format of the newsletter. The major change is the appearance of a consolidated calendar of events. In past newsletters, individual states have listed upcoming events in their program updates, and we have published other upcoming events not listed by the states in the back of the newsletter. In this issue, we have added a comprehensive list of all upcoming events in the back of the newsletter with phone numbers for where to get additional information. The individual state program updates also list the events with more detailed information on their content and focus than is provided in the calendar. Please let us know what you think of this format change.

In addition, instead of listing the states alphabetically, I have listed them in reverse order so that state program descriptions that have appeared in the back of the newsletter in the past are in the front. I thought I would stir things up a bit in this issue. This is probably not a permanent change in the newsletter format.

I appreciate comments and suggestions from readers of this newsletter on its format and content. Please write or call the NEWMOA office.

CASE STUDY COMPENDIUM

The NE Roundtable recently published *Pollution Prevention Successes: A Compendium of Case Studies from the Northeast States*. The Compendium brings together the success stories that the assistance programs in the Northeast have documented so that other companies and state agencies can learn from these examples. The purpose of the Compendium is to enhance the ability of state technical assistance programs to promote pollution prevention. The Compendium is organized by industry category and indexed on chemical and manufacturing process. It includes over 100 short case studies.

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Copies of the Compendium are available from NEWMOA for \$30 (\$15 for nonprofits & government agencies outside of the Northeast).

DIRECTORY

The NE Roundtable also recently published a *Directory of the Northeast States Pollution Prevention Roundtable*. This is a phone and address Directory that lists about 20 state and local pollution prevention program staff and contacts plus EPA Regions 1 and 2. Copies of the Directory are available from NEWMOA for \$10 (\$5 for nonprofit & government agencies outside of the Northeast).

GUIDE TO STATE TAPS

In addition, NEWMOA has published a *Guide to State Pollution Prevention Technical Assistance Programs in the Northeast*. This Guide provides detailed descriptions of about 18 public programs in the Northeast that provide free assistance to companies interested in implementing pollution prevention. It describes the mission, activities, funding and staffing of each program. Copies of the Guide are available from NEWMOA for \$15 (\$7 for nonprofits & government agencies outside of the Northeast).

For more information contact: Terri Goldberg, NEWMOA, (617) 367-8558.

VERMONT

VERMONT DEC

Vermont's pollution prevention program is undergoing significant change as a result of reorganization of the Vermont Department of Environmental Conservation (DEC). The former Pollution Prevention Division is now the Pollution Prevention and Education Division and has expanded to include some other non-regulatory functions within the DEC, including solid waste recycling and resource conservation programs, wastewater treatment operator training programs, DEC training, and permit and regulatory assistance functions. This new Division is a result of one of the goals of the reorganization which

was to place more emphasis and resources into non-regulatory functions of the DEC, such as pollution prevention, recycling, education and technical assistance. The air, hazardous and solid waste programs have been consolidated into one office to promote multimedia coordination. Many of the details of this reorganization will be worked out over the next six months by various implementation teams consisting of staff and management.

An industrial coatings conference was held in Rutland on November 10. There were about 80 participants from metal fabrication and finishing, wood and furniture finishing and automotive and autobody businesses. Presentation topics included alternative coatings and applications, spray gun technologies and techniques, and case study presentations by Vermont companies in wood, metal and autobody businesses that have successfully implemented alternative coating systems. Conference materials are available in limited quantities upon request.

Vermont's Pit Stops Project for automotive service and repair businesses is underway, in which more than 30 facilities will receive pollution prevention assistance through on-site assessments. Eight individuals from the Retired Engineers and Professionals (REAP) Program will be trained to conduct these assessments, and will then be available in the future to perform additional assessments in their respective regions of the state. A statewide vehicle service pollution prevention workshop is scheduled for May 18 and will be carried on interactive television at nine sites throughout Vermont. The Vermont Automobile Dealers Association is working in collaboration with the Division on these projects.

The REAP will be teaming up with the Vermont Small Business Development Center in 1994, which has been awarded a grant from the DEC to administer the program for this year. The program is looking to expand its outreach to small businesses and to assist businesses that must develop plans for toxics use and hazardous waste reduction. We are looking forward to working with the Small Business Development Center in further developing and marketing the program.

On December 6 the Division sponsored a 3-hour seminar state-wide on interactive television in conjunction with the Small Business Development Center entitled *Environmental Regulations Affecting Small Businesses in Vermont*. This seminar also addressed pollution prevention.

The Division has recently completed a legislative report that describes the activities of the pollution prevention program in the first two years of its operation in the areas of technical assistance program development and implementation of the plan requirements for toxics use and hazardous waste reduction. Of the 245 plans currently required of Vermont businesses, more than 90 percent of Class A generators (large quantity generators) and more than 60 percent of Class B generators (small quantity generators) have filed plans or plan summaries. Copies of the report will be available shortly for distribution. The Division is beginning an intensive phase of plan review in 1994, and will be receiving the first year's progress reports from companies on plan implementation.

Northeast States Pollution Prevention News

Northeast States Pollution Prevention News is published on a quarterly basis by the Northeast Waste Management Officials' Association's (NEWMOA) pollution prevention program, called the Northeast States Pollution Prevention Roundtable. It is provided free to the northeast states, EPA and other interested individuals. The newsletter is supported by funds from EPA Regions 1 and 2 and by the northeast states.

We appreciate hearing comments and suggestion on the newsletter from our readers. Write or call NEWMOA at the address on the cover of the newsletter. Please use the form at the back of this issue to request an address change or to add your name to the mailing list. We appreciate your cooperation in ensuring that we have your correct address.

Two matching grants have been awarded by the Division to encourage pollution prevention innovation and implementation. A \$5,000 grant has been awarded to Mad River Canoe to investigate pollution prevention measures including the use of pre-impregnated reinforcements of the manufacture of composite canoes. A second matching grant has been awarded to Printing Industries of New England to train employees in pollution prevention techniques and opportunities and to conduct assessments at 35 Vermont printers.

For more information contact: Gary Gulka, VT DEC, (802) 241-3888.

NEW YORK

NEW YORK STATE DEC

Training, Education and Outreach

In partial fulfillment of a grant from the Great Lakes National Program Office, the Pollution Prevention Unit (PPU) completed a guidance document entitled "Pollution Prevention Guidance for Local Governments." The document was created for use by local governments in assisting small businesses in their communities with information on DEC regulations that may pertain to their business, pollution prevention guidance and available technical assistance. This document will be printed and distributed to approximately 130 towns and villages within three counties where workshops were held on the draft document in August 1993. A limited number of additional copies of the document will be printed for DEC Pollution Prevention Unit distribution.

To continue our efforts in developing a teamwork mindset throughout the agency, team-building training workshops were conducted for DEC central office staff in November and December. Two additional workshops are planned for January and March of 1994 to continue this effort. The workshops are conducted by PPU staff who received training in conducting team-building workshops from the Governor's Office of Employee Relations.

THE NORTHEAST WASTE MANAGEMENT OFFICIALS' ASSOCIATION

The Northeast Waste Management Officials' Association (NEWMOA) is a non-profit interstate governmental association whose membership is composed of the hazardous and solid waste program directors in Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Rhode Island and Vermont. NEWMOA is a forum for increased communication and cooperation among the member states, a vehicle for the development of unified positions on various issues and programs, and a source of research and training on hazardous and solid waste management and pollution prevention. NEWMOA's pollution prevention program was established in 1989 to enhance the capabilities of the state environmental officials in the northeast to implement effective source reduction programs. The program is called the Northeast States Pollution Prevention Roundtable (NE Roundtable). The NE Roundtable involves four components: (1) establishing a clearinghouse of information (2) conducting training sessions (3) researching source reduction strategies and (4) organizing NE Roundtable meetings and committee activities. NEWMOA's PP program is supported by grants from the U.S. EPA and by NEWMOA member states.

Although there have been delays in finalizing an agreement with EPA on assistance in M2 Inspection Training, an M2 inspection training program is being developed, including self-learning and classroom components, so that training can begin by early spring for DEC's nine regional office field staff involved in multimedia facility inspections. The classroom training will likely concentrate on M2 inspection procedures.

New York State, through the Western New York Economic Development Corporation, the New York State Department of Economic Development's Division for Small Business, and the New York State Department of Environmental Conservation Pollution Prevention Unit has prepared a booklet entitled "The Environmental Self-Audit for Small Business," which serves as a diagnostic tool for small- and medium-sized companies. This booklet is designed to identify possible compliance problems relating to air, water, land use, solid waste and hazardous materials regulations. Through early identification, companies can address these issues before entering the formal permit application process, thereby reducing approval delays. Copies of the booklet should be available during February 1994. For further information contact Ronald Maylath at (518) 457-2010.

Toxic Chemical Reduction Plans Regulation (Part 378)

Final revisions are being made to New York's proposed regulations that will require facilities that generate hazardous waste and emit, discharge or release toxic chemicals at or above certain thresholds, to reduce such releases to the environment to the extent technically feasible and economically practicable. The formal comment period on the proposed regulation closed on October 8, 1993 after a series of six public information meetings and three public hearings held in September 1993. Oral and written comments were received from over 110 individuals and organizations representing business, environmental and citizen groups, government and the legislature. In addition, the Multimedia Pollution Prevention Advisory Group, which represents these same interests, reconvened in December 1993 and January 1994 to provide additional input to the DEC on certain key issues including source reduction, public participation, administrative costs, redundancy of other state/federal requirements, and POTW issues. The final rule is expected to be promulgated and in effect during the Spring of 1994. For further information on Part 378, please contact William Eberle at (518) 457-2480.

Grant Activity

The New York State Department of Environmental Conservation was one of 52

recipients of Pollution Prevention Incentive for State (PPIS) grants for this year. The total award will support a combined \$500,000 project (with the federal share of \$222,276), which is the second highest award granted by EPA nationwide. The New York project consists of three tasks: a pilot multimedia pollution prevention assistance program for small business; multimedia pollution prevention technical assistance and outreach; and, a grocery store waste prevention pilot project. The funds will be shared by the Department's Pollution Prevention Unit, the Division of Air Resources, and the Division of Solid Waste; The Department of Economic Development; and the New York State Environmental Facilities Corporation. For further information on the PPIS grant, please contact Mary Werner at (518) 457-2480.

Pollution Prevention Conference and Bulletin

The 1994 Annual Pollution Prevention Conference is scheduled for June 1-3, 1994 at the Omni Albany Hotel. This is a conference for New York State industries and other interested parties that focuses on multimedia pollution prevention issues and provides a forum for industries, government officials, citizen and environmental groups and others. Topics that are being considered for the 1994 conference include:

- Case studies of proven pollution prevention technologies;
- Status/progress of DEC's M2P2 initiative;
- Toxic Chemical Reduction Plans Regulation (Part 378) updates;
- Workshops on preparing reduction plans and self-audit or assessments, preparing for multimedia inspections, technical assistance programs, and other pollution prevention technology issues; and,
- Exhibits displaying pollution prevention technologies and hands-on exhibits.

Proceedings from the 1993 Pollution Prevention Conference will be available from the Pollution Prevention Unit shortly.

The Fall 1993 issue of the *Pollution Prevention Bulletin* has been published and features articles on DEC's accomplishments in M2P2, pollution prevention measurement, the Small Business Assistance Program, and other pollution prevention programs at DEC,

Department of Economic Development, Environmental Facilities Corporation, and Erie County.

For more information contact: Linda Shea, NY DEC, (518) 457-2480.

ERIE COUNTY OPP

The Erie County Office of Pollution Prevention (ECOPP) continues to provide technical assistance and information to small and medium-sized businesses as well as other state and local pollution prevention programs.

ECOPP has currently developed six pollution prevention case studies (four vehicle maintenance and two printing). These reports highlight the cost savings and decreased liability from generating less hazardous waste from companies that have implemented pollution prevention.

Erie County will be conducting a pollution prevention training seminar for municipal sewage treatment agency officials on January 14, 1994. This seminar will encourage POTW's to incorporate pollution prevention methodologies into their pretreatment programs and identify the regulatory and cost incentives of doing so.

A standardized list of products and equipment (cleaning agents, parts, washers, etc.) has been developed that are included with the letter of recommendation to businesses. ECOPP updates this list on an as needed basis and does not endorse any specific trade name. Businesses that receive technical assistance from ECOPP are encouraged to work with their suppliers to identify the best product or equipment for their operations.

For more information contact: Thomas Hersey, Erie County, (716) 858-7674.

NEW YORK CITY DEP/ITAC

Within the NYC Department of Environmental Protection (DEP), efforts are ongoing to expand the range and scope of NYC Clean Industries Program (CIP) activities, a

partnership between the NYC Industrial Technology Assistance Corporations (ITAC) and the DEP. Through the DEP P2 Unit and the P2 Task Force, we are exploring mechanisms to incorporate pollution prevention as one of the many tools to be employed to carry out DEP's multimedia environmental protection mission. In addition to developing our general approach to delivering pollution prevention technical assistance services, we are also attempting to develop mechanisms to identify specific pollutants of concern appearing in targeted geographic areas and environmental media. Once these pollutants are identified, we will then attempt to determine likely sources and whether such sources can effectively employ pollution prevention to reduce or eliminate releases of the targeted pollutants. Pollution prevention components are also being incorporated into DEP community based environmental initiatives in Greenpoint/Williamsburg, Brooklyn and in West Harlem, Manhattan.

The NYC CIP is actively promoting collaboration with other New York City organizations. As a direct provider of industrial extension services, the NYC CIP provides a mechanism for delivering specialized pollution prevention assistance to manufacturers. The pollution prevention engineer has established and continues to develop working relationships with Brooklyn Union Gas, Consolidated Edison, NYC DEP Bureau of Water and Energy conservation and the NYC Department of Sanitation. Through our collaboration with these organizations, the pollution prevention engineer has developed key technical and financial resources that broaden our pollution prevention services to include: toxic use reduction, energy conservation, water conservation and solid waste reduction. These resources have enabled us to position ourselves to deliver a comprehensive pollution prevention service.

Industry Projects

In order to maximize our resources where feasible, the NYC CIP will develop projects that will leverage its efforts by providing benefits to a group of firms. In pursuit of industry specific projects, the pollution prevention engineer has been fielding ideas from industry experts for worthwhile research and development projects.

Wood Products P2 Project

The NYC CIP and the New York State DED are sponsoring a series of education programs for the wood products industry of New York City. During initial site visits to wood manufacturing companies (furniture, architectural, etc.), the pollution prevention engineer recognized a recurring need for education and training on options available for operating a safe and clean woodworking shop. Therefore, we have planned to conduct a three-part environmental workshop series to provide information to small and medium sized woodworking companies. The workshops will assist companies in identifying practical ways to reduce or eliminate the release of organics and toxics in wood finishing operations. Building upon ongoing DED sponsored research, the environmental workshop series provides an excellent forum for disseminating essential information to the New York City woodworking community. Collaboration for the project will include the regional offices of DED, NYC DEP, Local Business Development Corporations, industry experts, vendors and suppliers. The environment workshop series is set for March 1994.

Flexographic P2 Project

Flexographic printers of plastic films in New York City, who are attempting to come into compliance with Clean Air Act regulations through water-based ink technology, have had problems in an area that has not been adequately addressed by any of the past or current pollution prevention projects as far as we are aware.

Certain conditions are required to print with water on such nonabsorbent substrates as polyethylene and polypropylene. These include the use of corona treaters to increase the surface tension of the films to make them more receptive of water based inks. The treatment is also intended to disperse the slip compound on the surface of the film to enable the inks to wet out and adhere. Problems have arisen with the slip compound that is being used in the extrusion of the film. Some research material was found that tested this phase of the technology and had identified "good" and "bad" slip compounds. Proving the effectiveness of various slip

compound in film printing remains to be confirmed in production runs.

The research and development project includes two to three film extruders, two ink suppliers and the five to six flexographic printers as participants. Through the efforts of this project, we hope to eliminate some of the "black magic" in printing water based inks on nonabsorbent substrates. The project could have far reaching ramifications for many other firms while promoting pollution prevention.

The NYC CIP and Fred Shapiro from the Flexographic Technical Association have developed a project description and proposal. We have received preliminary support from Consolidated Edison and the Electric Power Research Institute.

Lithographic P2 Project

A second printing project is being developed by a working group that includes the NYC DEP, the NYC Mayor's Office of Operations, the Mayor's Office of Occupational Health and Safety and the NYC CIP. The group is examining possible pollution prevention opportunities in NYC government agency print shops. An initial site visit and waste minimization assessment was conducted at one facility. Currently, there are plans to survey, then conduct waste minimization assessments at other NYC facilities. Early response has been favorable, and we expect to use this project as a model for introducing pollution prevention strategies to other city agencies and the commercial printing industry.

For more information contact: Jeff Potent, NYC DEP, (718) 595-3624 or Kevin Kelly, NYC ITAC, (212) 240-6920.

SUFFOLK COUNTY WATER AUTHORITY

The staff of the Suffolk County Water Authority's Pollution Prevention Program are currently gearing up for a health and safety training program it is offering in 1994 for water utility and vehicle maintenance workers. This training program will be developed through a grant awarded to the Suffolk County Water Authority from the NYS Department of Labor.

Anticipated training will include a series of workshops and the development of an interactive computer-based training program.

A presentation was made by Program staff on September 22 at a dinner meeting for the Long Island Graphic Arts Association on assistance available and pollution prevention measures applicable to the graphic arts industries.

Judy Jakobsen has been selected to participate on the Multimedia Pollution Prevention (M2P2) Advisory Group. The membership of this group consists of a diverse representation from business, legislative, industry, environmental, legal and governmental entities within New York State. The mission of this group is to review and provide input on the impact of draft regulations and related programs on pollution prevention and to promote a multimedia focus toward implementing pollution prevention.

Program staff have submitted a pre-application for an EPA Environmental Education Grant that would enable the Program to offer a workshop for local secondary education teachers on "Understanding Pollution Prevention and Its Role In Educating Secondary Education Students in Groundwater Protection Strategies".

Representatives from InMagic provided a presentation to Authority staff on their text-based computer library database program in November. The Authority is considering purchasing a software database to enable them to track requests for information and documents from the Pollution Prevention Program's library. An in-house computer program is being developed to track the number and type of Program information requests.

The Suffolk County Water Authority's Pollution Prevention Program has over the past few months provided assistance to local business, industry and institutions in the following areas:

- Pollution prevention information and copies of documents on alternatives to solvents and waste minimization information for metal spray painting operations were sent from the Program's library to a metal finisher located in Suffolk County.

- A local lithographer and another individual involved in a truck washing business requested information on discharge regulations.
- A representative from a local civic group requested information on grant sources.
- A representative from the main office in Detroit for Frank's Nursery & Crafts, Inc. requested information on energy conservation and water conservation for their stores located in Suffolk County.

For more information contact: Judy Jakobsen, SWCA, (516) 563-0306.

NEW JERSEY

NEW JERSEY DEPE

The following are the latest developments in New Jersey's Pollution Prevention Program:

- *Distribution of Industrial Pollution Prevention Planning*, the guidance document prepared by the Office of Pollution Prevention, has been completed. A copy was mailed to each of the eight hundred facilities covered under the Pollution Prevention Act. Close to one hundred additional copies have been provided to consultants, to companies outside the state, and as extra copies for covered facilities. Copies are available from the DEPE for \$10.00. The guidance document has been well received, although initial outreach telephone calls to 50 covered smaller businesses indicates that few of them have begun their planning process as of the end of December.
- The Office is in the midst of an outreach campaign, targeted particularly at smaller companies, pushing for them to begin planning early. Central to this effort is the idea that a well thought out pollution prevention plan will lead to easier reporting and that plans will be less effective if left until they are driven by reporting deadlines. Other outreach efforts include a seminar attended by 150 people and site visits to about 12 facilities during the last quarter. In the next quarter, more specific trainings are planned, including two more introductory workshops, an "intermediate" workshop to tackle difficult

subjects (such as unusual units of product and how to account for the use of intermediate products), and some smaller more focused sessions centered around case studies for four to five hazardous substance user categories. Further down the road, the Office will conduct a seminar on total cost assessment and pollution prevention reporting.

- New Jersey's Pollution Prevention Plan Summary forms are in fine tuning stage. They are comprised of a single page for one time facility information, a page of facility-level information (filled out for above-threshold hazardous substance at the facility), a page describing processes that use one or more hazardous substances (filled out for each process), and a hazardous substance use and nonproduct output reduction goal page (filled out for each targeted process).

- The fifteen companies for the pilot project in facility-wide permitting have been selected from among 25 volunteer companies. Meetings with representatives of these facilities are underway. They are being presented with information about how their pollution prevention plan can form the basis for a grand scale facility plan to simplify facility-wide permitting. The volunteer facilities are:

Monsanto, Brigeport
 Ausimont USA, Thorofare
 Huntsman Polypropylene, W. Deptford
 Hoffman-LaRoche, Belvidere
 Chevron, Perth Amboy
 Geon, Pedricktown
 Oxford Textile, Oxford
 Degusso, South Plainfield
 Hargro Packaging, Flemington
 Dri-Print Foil, Rahway
 Frigidare, Edison
 Miller Plating, Belleville
 Fabricolor, Paterson
 Johnson and Johnson, North Brunswick
 Bond Adhesives, Newark

- A minor proposed revision to the Pollution Prevention Rule has been signed by the DEPE commissioner. Its most significant provision is to keep opinion letters from the Department to facilities concerning the substance of a Pollution Prevention Plan confidential.

For more information contact: Thomas Ballantine, NJ DEPE, (609) 984-7339.

NEW HAMPSHIRE

NEW HAMPSHIRE DES

Outreach

Dr. Gwen Frazier, Curriculum Supervisor for the NH Department of Education, is working with the NHPPP to incorporate pollution into the junior high school Home Economics curriculum. A project with the NHPPP has been generated to conduct a one and a half to two-day workshop in August to provide pollution prevention concepts and teaching aids for teachers. The focus will be on an environmentally safe home, possibly looking at the home from a pollution prevention approach as a manufacturing/processing facility with inputs and outputs. Lifecycle analysis, home ecology, P2 hierarchy, and process and product substitution are among the topics to be considered. The result will be to help teachers produce a permanent curriculum with funding from an EPA Environmental Education grant.

Training

As a foundation for the Department's Pollution Prevention Strategy, P2 training for the DES began in November with the Hazardous Waste Compliance Inspectors. The entire DES is to be trained, from the Commissioner to the general office staff. The training is customized for each audience with the most technical training being provided to site inspectors, who are familiar with inspectional/enforcement work. Training will also be provided to such support staff as secretaries who need to be familiar with basic P2 concepts.

Pit Stops

The NHPPP, in cooperation with the NH Auto Dealers Association, is organizing a series of automotive workshops for May. The targeted audience will be those service stations listed as inspection stations and automobile dealers. Workshops will be provided at Concord, Manchester, Portsmouth, Keene, and a fifth location yet to be decided. Sessions will focus on

regulatory information, techniques for waste reduction, and resources for information and assistance. Thanks to funding from EPA, the workshop will be kept inexpensive and a valuable (hopefully) waste reduction resource booklet will be provided. By keeping the workshops short and inexpensive, it is hoped that smaller facilities will participate.

Multi-Media Task Force

Along with the department-wide P2 training and coordination of the various "P2 in Media" projects, the Task Force is busy integrating P2 into the DES's regulatory activities. The Task Force has composed wording to be included in Letters of Deficiency (LOD) indicating P2 to be preferred method of achieving compliance along with a referral to P2 assistance. The first on-site assistance visit resulting from such a referral was completed last month following a LOD referral from a POTW pretreatment coordinator. Several other contacts have been established based on LOD referrals, and P2 recommendations will eventually be included in all of the DES's regulatory correspondence.

Annual Pollution Prevention Conference

The NHPPP will hold its second annual Pollution Prevention Conference in March at the UNH New England Center in Durham, NH. The conference is co-organized by UNH and the Business & Industry Association of NH along with help from various sponsors such as GZA, Inc. and Public Services of New Hampshire. Workshops will be provided on pollution prevention assessment and implementation, solid waste laws and policies, tracking systems, opportunities for printers, water conservation, regulatory concerns, electronic manufacturing, and life cycle analysis. Along with the workshops, there will be exhibitors of P2 products and services.

Intern Projects

Sue Gruchoe, a Tufts University graduate student, is drafting a thesis that will attempt to evaluate the effectiveness of the NHPPP. The evaluation will be based on telephone interviews, site visits and written surveys with companies who have used NHPPP

services. Sue will attempt to find out which of the services (on-site assistance, information research or conferences) has resulted in the most amount of changes within the company. The thesis will be completed by May.

John Gruchot, former intern for the NHPPP, has completed a Master's thesis titled, Active State Pollution Prevention Programs: Common Program Elements. For the thesis, John contacted over 50 P2 assistance programs throughout the country in an attempt to correlate amount and effectiveness of a program's activity to the different services offered (research assistance, on-site assessments, etc). A rather unsurprising result was that better funded programs tend to see more activity with their business community. On the other hand, after making adjustments based on the density of businesses in each state, it was determined that the well-balanced programs (those that offer research services, on-site assistance, newsletters, conferences and database/libraries) tend to be more active than the programs that concentrate on only one or a few services regardless of funding.

On-Site Assessments

The NHPPP (still looked upon as part of a regulatory organization) continues to garner voluntary on-site assistance requests at the rate of about one per month. As mentioned previously, however, regulatory referrals have suddenly started to result in increased requests for services. Since the PPIS grant, which funds the NHPPP, expires in about a year, there is serious talk of "throwing in" with the regulators as part of a new grant request. Since the regulators tend to find the companies that need the most amount of help, it was thought that providing NHPPP services as part of the regulatory process could be very effective in establishing P2 where it is most needed.

For more information contact: Paul Lockwood, NH DES, (602) 271-2956.

MASSACHUSETTS

MASSACHUSETTS DEP

Toxics Use Reduction Planner (TURP) Certification Program

The TURP certification program is now underway. This program certifies two kinds of TURPs: TURPs who certify plans for only their facilities and TURPs who are independent and may certify any Toxics Use Reduction (TUR) plan in Massachusetts. Both groups must submit a TURP application to the DEP. Only those in the second group must take the Toxics Use Reduction course offered by the Toxics Use Reduction Institute (TURI) and pass a uniform certification exam. Since the inception of the program in November 1992, 102 TURPs have been certified.

The second TURP certification exam will be offered February 5, 1994 in two locations. People who want to become TURPs are encouraged to submit their applications to the DEP before they take the exam. In this way, the certification process may be expedited.

Toxic Use Reduction Planning

DEP is working with TURI and the Office of Technical Assistance in the development and implementation of the Plan Enhancement Project. One component of this effort will be the development of a planning guidance that interprets the planning regulations. This guidance will feature model plan sections designed to show by example the range of approaches that firms can employ in the planning process and in the written plan. This document will be available by the end of January 1994.

Toxics Use Reduction Data

The 1991 toxics use reduction data will be available to the public by the end of January 1994. Standard reports have been developed and will be available to the public when the data is released.

We are in the process of reviewing the 1992 reports. All reports will be reviewed and ready for data entry by February 1994. We are

planning to release the 1992 data in Spring of 1994.

Waiver Regulations

We are currently developing regulations allowing companies to obtain temporary waivers from environmental laws and regulations provided that they implement TUR techniques and meet certain other criteria. These regulations will be final in Spring 1994.

For more information contact: Susan Green, MA DEP, at (617) 292-5582.

MASSACHUSETTS OTA

Governor's Awards for Toxics Use Reduction

Toxics users who have implemented beneficial, innovative, or broadly applicable TUR strategies in Massachusetts since the 1989 enactment of the Massachusetts Toxics Use Reduction Act will be recognized for their efforts in May. The Act establishes "Governor's Awards" to reward outstanding achievements in TUR — efforts that have resulted in benefits:

- to industry by reducing the cost of toxics use and waste disposal;
- to government by reducing needs for compliance and enforcement, and
- to the public by reducing the hazards to health, safety and the environment posed by the use of toxic and hazardous substances.

Awards will be made to individuals or organizations demonstrating outstanding examples of TUR in the following categories: industry; other private sector — hospitals, laboratories, consulting firms, individuals; schools/academic institutions; public sector — POTWs, municipal or state agencies, advocacy groups.

The TURA Advisory Board plans to announce award criteria and the nomination/application process early in 1994, thus beginning a process scheduled to culminate in the presentation of the awards in May. For further information call the Toxics Use Reduction Institute at (508) 934-3275 and ask for the TURA Award Program.

Site Visit Highlights

OTA technical assistance teams are increasingly directly involved in the nuts and bolts of their clients' pollution prevention efforts. The following are recent examples: 1) At a company that had been visited by a technical assistance team, the team later spent a day videotaping spray paint operators. The edited tapes will be viewed with the workers and the equipment manufacturer and used to critique and analyze spray techniques. The goal is to maximize coverage and application efficiency, and to reduce or eliminate overspray — and produce a training tool that can be used by other companies; 2) An effort to determine the feasibility of ferric chloride etch bath regeneration has raised a number of questions about the chemistry of the etching process that need to be answered before acid use can be reduced. OTA chemists are working on site doing the chemical analysis to determine whether maintaining a new bath or regenerating a spent bath is more achievable, to learn the parameters within which the bath performs at an acceptable level, and to understand whether it is contaminants or acid degeneration that is critical in causing bath effectiveness to deteriorate. 3) A company performing nickel plating followed by chrome plating, wants to reuse its rinsewaters from the chrome plating step. OTA is working with them to determine the necessary parameters for the plating solution and the effects of contaminants.

OTA teams have been making site visits at the rate of 30 or more a month since early March. They continue to make regular site visits to hospitals, schools, state police barracks, MDC and transportation facilities, and other state facilities as part of the "Clean State" initiative to bring all state operations into compliance with the state's environmental regulations and to make state facilities as "green" as possible. OTA provides help in assessment of procurement practices, identifying and finding ways to overcome institutional barriers, what to do with stored hazardous materials and identifying pollution prevention opportunities. Workshops are planned for MDC (landscaping and swimming pool concerns), colleges and universities, and state run hospitals, at which health and safety issues will be addressed.

Conferences

On September 30, more than 120 participants attended "**Pollution Prevention for the Printing Industry**," a day-long conference sponsored by U.S. EPA, Printing Industries of New England (PINE) and OTA. Morning presentations included EPA speakers who discussed agency programs, summarized federal regulations and presented a progress report on the Design for the Environment Printing Project. The Project, in which TURI is a participant, has focused on three areas: blanket washes in lithography; screen reclamation in screen printing, and inks in flexography. The afternoon was devoted to case presentations in four concurrent sessions: offset lithography, screen printing, flexography and rotogravure. Following the presentations, OTA staff facilitated group discussions during which printers, vendors and government representatives shared experiences and discussed the barriers and unmet needs impeding pollution prevention in their business. The participant registration package contained several of the presentations and a number of case studies; notes from the afternoon case study presentations and discussions are to be prepared for distribution. Further information about the DfE Printing Project is available from EPA's Pollution Prevention Information Clearinghouse (PPIC), (202) 260-1023.

At an October 20 **Military Specifications Roundtable**, Maureen Sullivan, Office of the Deputy Assistant Secretary of Defense (Environment), repeatedly stressed the willingness of the Department of Defense to fully cooperate with any contractor or subcontractor for military goods and services seeking contract specifications (or to modify specifications) that encourage or permit pollution prevention and toxics use reduction. The day-long OTA/EPA co-sponsored meeting at EPA Region 1 headquarters in Boston brought 28 EPA, industry, military, state regulators and technical assistance personnel together to review the results of a survey sent in advance to 285 Massachusetts businesses, to hear and discuss the DOD perspective, and to hear and discuss several case studies. The companies responding to the survey and the case studies reported mixed experiences in their efforts to adjust contract specifications in order to meet local compliance requirements. Prime contractors, however, are

usually especially unwilling to consider requests from subcontractors. Proceedings, ready by the time you read this (contact OTA), include findings, contact names and methods for subcontractors to get better information about the status of mil spec changes from the Pentagon. OTA will act as broker for sub-contractors who would like to avoid using non-compliant materials that are required in contract specifications.

Upcoming Workshops

January 26/February 16: Coastal Zone Management Toxics Use Reduction program will repeat a recent "Right to Know/Tier 2" reporting requirement workshop January 26. The handout was a comprehensive and well organized package of literature and summaries on hazardous materials management and chemical reporting. Sustainable Manufacturing will be the subject for the following CZM workshop on February 16. Both workshops will be in New Bedford at sites still to be determined. Call the Buzzards Bay Project TUR program: (508) 748-3600.

February 3: MBEN Clean Air Workshop, 8:30 am - 4:00 pm - Sheraton Hotel, Lowell MA. The Merrimack Business Environmental Network (MBEN), an organization of businesses in the Merrimack River watershed committed to environmental excellence and economic viability, will sponsor a workshop focusing on some of the most critical compliance issues business will face in dealing with new clean air regulations: Operating Permits — this new permit will be required for all "major sources" of VOCs or NOx emissions; Refrigerants — how will your present AC or refrigeration system be maintained? MA DEP, NH DES and EPA personnel will present regulatory information; pollution prevention tips will be presented by MA OTA and the NH DES Pollution Prevention group. Case studies will be presented by businesses who have already dealt with the problems and by consulting firms with expertise in air issues. For information, call George Frantz (MA OTA) at (617) 727-3260 or in NH, Stephanie D'Agostino (603) 271-3503.

February 8: A joint NEWMOA/OTA training seminar for technical assistance staff from all the northeast states will focus on P2 opportunities in the printing industry, with presentations on screen printing, offset

lithography, some advanced technologies in printing and a plant tour of an offset litho facility. Training will be at the EPA Labs in Lexington, Massachusetts.

TUR Plans — PEP Talk

There are now six months remaining for Massachusetts TURA (Toxics Use Reduction Act) filers to prepare a TUR plan to meet the July 1, 1994 deadline. The January 1 employee notification deadline has passed for TURA filers. Assistance is available from the Plan Enhancement Program (PEP) staff at workshops and walk-in planning clinics.

The next round of PEP sponsored workshops will be for the *Metal Working Industry*; future workshops are being considered for other industries, including electronics manufacturing, chemicals and plastics. The workshops will review the planning requirements for option identification and assessment for a specific industry. Following a morning overview, the afternoon breakout sessions for the metal working series will cover: plating operations (nickel plating), conversion coating (zinc phosphating) and surface coating (spray painting).

Workshop Date and Location

The free day-long metal working workshop (8:15 am - 3:30 pm) will be presented on January 20 at Best Western TLC, 477 Totten Pond Road, Waltham, (617) 890-7800.

The planning clinics, begun in August, are informal sessions offering one-on-one assistance in preparing a TUR plan from OTA and DEP staff. The clinics will continue to be held monthly in 1994 at eight locations around the state. Central Region clinics will continue to alternate between Worcester and Gardner; the Western Region clinics will be held every month in Chicopee in the morning (9:00 a.m. - 12:00 p.m.), and will alternate between Pittsfield and Greenfield for the afternoon (1:30 - 3:30 p.m.). The clinics at all other locations will continue to be held from 9:00 a.m. to 4:00 p.m. There is no registration fee for attending a clinic, and refreshments will be available.

Information about the January 1, 1994 employee notification deadline [310 CMR Section 50.42(5)] is available in excerpts from the TUR plan regulation guidance document being prepared by DEP.

Clinic Dates and Locations

Chicopee	Ramada Inn, 357 Burnett Road. (9:00 - 12:00 pm) - 1/25, 2/22, 3/22, 4/26, 5/24, 6/14.
Gardner	Mount Wachusett Community College, Room 113, Matthews Street - 1/26, 3/30, 5/25.
Greenfield	Greenfield Community College, Room C-129, College Drive (1:30 - 3:30 pm) - 2/22, 4/26, 6/14.
Haverhill	Northern Essex Community College (Haverhill Campus), Library Conference Room C - 1/19, 2/17, 3/15, 4/20, 5/18, 6/15.
Pittsfield	Berkshire Community College, Susan B. Anthony Building, Room G-9 (1:30 - 3:30 pm) - 1/25, 3/22, 5/24.
Taunton	Silver City Galleria, Rt. 140 Exit 11-B, Community Meeting Room - 1/12, 2/9, 3/9 (April - June dates to be determined).
Waltham	UMass Cooperative Extension Service Field Station (Eastern Agricultural Center (UMass), 240 Beaver Street -1/6, 2/16, 3/16, 4/5, 5/3, 6/7.
Worcester	Mass. Highway Dept. Facility, 2nd floor conference room, 403 Belmont Street (Rt. 9). - 2/23, 4/27, 6/8.

For further information regarding the workshops and clinic program, employee notification, or TUR planning in general, call the MA OTA, (617) 727-3260, or the PEP Hotline at TURI, (508) 934-3144.

Clean State Initiative

EOEA/OTA recently received an EPA grant to develop a comprehensive Clean State Environmental Audit Team that will perform audits at selected state facilities — a "green team" trained to look for opportunities in water conservation, energy efficiency, toxics use

reduction, solid waste recycling, environmental procurement and other pollution prevention and resource conservation areas. OTA will coordinate the project.

Grant Projects

The POTW *Critical Parameters Grant Study* has developed a 20-minute consumer video intended to educate people about the problems created by improper disposal of hazardous household wastes. It will be broadcast weekly at various times over Greater Media Cable in the Worcester area; an accompanying consumer guide will also be available. A primary school curriculum about wastewater treatment and pollution prevention should be completed by April.

Pit Stops, an OTA/DEP project funded by EPA, will combine outreach and technical assistance to automobile service businesses — service, maintenance and repair — and use the experience gained to create a curriculum to be used by the state's vocational/technical high schools to bring the concepts and methods of pollution prevention to students learning how to maintain cars.

OTA will be busy soon with a \$20,000 grant to assist in the establishment of a permanent program in Haverhill for the collection of recyclable household hazardous waste (used oil and paint to begin with), and on the development of a pollution prevention "self audit" checklist.

New Case Studies Available

Americraft Carton, Inc., in Lowell, a \$30 million a year folding carton manufacturer and printer has *eliminated isopropyl alcohol (IPA)* from the fountain solution for its offset printing presses. Introduction of a \$108,000 new fountain solution delivery system has resulted in the elimination of IPA, cost savings that will yield full payback (in materials costs alone) in less than two-and-one-half years, and an end to toxic use reporting.

Hampden Papers, Inc., reformulated a brass-based coating used on paper products and *eliminated its copper discharges* from this coating application. The Holyoke, MA company avoided

both potential U.S. EPA fines of \$5,000 per day per violation, and an alternative solution — construction of a \$250,000 to \$500,000 waste treatment plant.

The Greater Lawrence Sanitary District (GLSD) added an aeration system to its septage treatment tank and *eliminated the noxious odors* that previously emanated during the treatment process — *and large quantities of potassium permanganate* used to control the odor as well. GLSD's payback on a \$77,000 investment came in less than four months, and the facility can now accept septage up to the treatment facility capacity of 100,000 gallons per day. The odor problem prevented acceptance of more than 40,000 gallons per day.

Standard Uniform Services, an industrial laundry, wanted an efficient, cost effective replacement for the sulfuric acid used to adjust the pH of its wastewater to the levels required in its discharge permit. The company, working with OTA, identified an easy to install carbon dioxide system that achieves the required results for about the same dollar cost and that will *end TURA filing for H₂SO₄*, eliminates odor problems from hydrogen sulfide emissions and is much safer and healthier for the company's employees and for the environment.

A Case Study to be Published Soon

In order to eliminate increasing environmental costs and health concerns associated with toxic chemicals, V.H. Blackinton, the largest U.S. manufacturer of medals, badges, figurines, service pins, etc., began a program of replacement and reduced use of chemicals, that resulted in *elimination of freon from one procedure*, the replacement of some other toxic chemicals and substantial reductions in the uses of others, and significant savings in costs for water and energy.

Miscellaneous

OTA is working with the dry cleaning trade association, as the requirements of the Clean Air Act phase in, to help the dry cleaners introduce new nontoxic and nonhazardous cleaning agents and technology.

The Clean Air Act deadline of January 1, 1996, ending production of chlorofluorocarbons, chemicals that destroy stratospheric ozone, adds urgency to the search for and testing of alternative degreasers, vapor cleaning agents, and universal solvents to replace 1,1,1 trichloromethane (TCA), the most widely used material of its kind. Many companies, at least for the near term are returning to halogenated solvents, which are not ozone depleting chemicals, but which do present serious concerns because of human toxicity, and as a result require extensive precautions while in use, are expensive to handle and dispose of, and greatly increase regulatory permit and compliance procedures. OTA is preparing a series of fact sheets on the options available to businesses that need to replace TCA. The first in the series, which should be printed early in 1994, will discuss the long and short term regulatory and manufacturing implications for Massachusetts businesses considering reintroduction of these halogenated solvents: trichloroethylene (TCE), perchloroethylene (PERC), and methylene chloride.

For more information contact: Michael Frishman, (617) 727-3260 ext. 674.

MASSACHUSETTS TURI

Education

The Education Cluster has been heavily engaged with the state Office of Technical Assistance and the Department of Environmental Protection in the implementation of the jointly-managed Plan Enhancement Program (PEP). In November the "PLANNERS HOTLINE" was established at the Institute to provide companies with direct access to the TUR support agencies. Over one hundred and fifty calls have been answered since its opening. Another one hundred firms have been contacted through the Institute's "PLANNERS OUTREACH" telephone contact program to identify the progress and needs of firms that do not actively participate in state TURA sponsored events. The second edition of the newsletter, PEP Talk, was published and distributed to all TURI planners in December. A special "Workshop on Process Characterization/Getting Started" was conducted six times at locations around the state

in August and November of 1993. In total, over 350 people attended these workshops.

As of December 1993, the Institute has conducted 15 Toxics Use Reduction Planners (TURP) courses state-wide, with 403 participants. These courses are each 48 hours in duration representing an estimated 19,000 participant-hours of training. This spring the Institute will offer five more courses, state-wide, with an anticipated total enrollment of approximately 170. In addition, the Institute will be contracting with the Massachusetts Water Resources Authority to conduct a TURP course, also this spring.

The Education staff is currently planning to offer TURP Refresher sessions for those planning to take the state TURP Certification Exam in February.

Research

All seven of the matching grants projects are under implementation and the five Research Fellows are moving forward with their research projects.

The Research staff has won a competitive grant of \$300,000 from the federal Environmental Protection Agency's Risk Reduction Engineering Laboratory for a three year project called the "Evaluation of Alternative Cleaning Materials". This study will conduct technical, economic and environmental analyses of four alternatives to the most common chlorinated solvents used in metal parts cleaning operations.

A special report entitled "The Cost of Changing" providing a total cost analysis on solvent alternatives was completed in December and will be published in January.

The Research staff have awarded contracts to private consultants for two additional studies: one on measuring performance in toxics use reduction programs and the other on the development and use of substitution analysis methodologies for assisting firms in converting to safer alternative processes than those involving listed toxic chemicals.

The Surface Cleaning Testing Laboratory has finally begun operations. An official opening and open house was held in November, and the laboratory staff is now engaged in discussions with several firms interested in using the facilities.

Representatives from the Education and Research staff have worked with the Northeast Waste Management Officials' Association and the Environmental Protection Agency in the establishment of a new network called the "Pollution Prevention Consortium of New England Universities" involving eleven regional institutions.

Technical Support

The final results of the printing press blanket wash evaluation has been completed and will be mailed out to printers in January. Results of the study were presented in November at both the National Roundtable on Pollution Prevention in Nashville and the Research and Engineering Council of the Graphic Arts Industry Conference in Washington. The project evaluated performance of 14 blanket washes at a commercial printer and at the Graphic Arts Technical Foundation's testing facility.

In December the Technology Support staff commenced a new study funded by the United Nations Environment Programme to assess equipment availability and needs in the development of the clean production technologies industries.

The Technology Transfer Center (TTC) maintains a steady acquisition rate of 30 new reports and abstracts an additional 60 articles each month. During this fall there have been 105 users of the TTC bringing the total number of users for the year to 326. About 65 percent of these users are from Massachusetts and of these, about 35 percent are from private firms and 30 percent are from government (the remainder are from university or non-profit settings).

For more information contact: Beverly Johnson, TURI, (508) 934-3298.

MAINE

MAINE DEP

In November, staff from the Office of Pollution Prevention (OPP), Air, Water and Hazardous Waste bureaus of DEP, along with the State Planning Office, the Maine Waste Management Agency, and a consultant hired by the Maine Marines Trade Association (MMTA) visited eight marine related operations ranging from small boatyards to major recreational shipbuilders. This non-regulatory program, coordinated by the OPP, provided a two-way opportunity to educate not only the marine industry but DEP staff as well. The OPP staff provided site managers with pollution prevention information; the Waste staff and marine consultant focused on cost-effective Nonpoint Source reduction measures; Air and Hazardous Waste team members advised on compliance issues; and the MWMA coordinator addressed solid waste recycling possibilities. The visits provided a great deal of education for DEP staff on the operational requirements of these industries, and input as to the feasibility of Best Management Practices (BMPs), which will be included in a BMP manual for marine-related industries being prepared over the next year by the NPS program. A complete report will be available by mid-February.

In late November, President Clinton announced the second round of awards under the Technology Reinvestment Project (TRP). We are pleased that the Maine Metal Products Association's proposal on Environmentally-Conscious Manufacturing (ECM) is an awardee. The OPP is a project partner with direct responsibility for certain tasks and will begin project work later this winter. The proposal is designed to enhance the competitiveness of Maine's small metal working firms that presently rely on defense-related work, by providing them access to dual-use technologies that support environmentally-conscious manufacturing.

The OPP and Maine Auto Dealers Association project of testing alternative solvent degreasers is complete; a project write-up is available.

Beyond the project, the OPP is in touch with others who are testing degreasing

products on their own. We are very excited about a microbial cleaner that is being used by the U.S. Postal Service Fleet Management in Portland, Maine.

The first issue of the OPP's newsletter "New Directions" is available. We are building our mailing list. Please let us know if you would like your name added.

The P2 Library has officially opened, and work in In-Magic will begin in March. We presently hold over three hundred articles and document.

The software package "P2 Finance" has now been distributed to over 40 Maine companies. Feedback from the companies has been very positive.

Lastly, the OPP staff is busy! We are coordinating and participating in multimedia TQ teams at 12 - 15 facilities at any one time, as well as single-media assistance at more than 10 facilities, and we are not keeping pace with demand.

For more information contact: Anne Pistell, ME DEP, (207) 287-7881.

CONNECTICUT

CONNECTICUT DEP

Pollution Prevention Public Information Project for Water Bureau Permit Categories

The Department's Office of Pollution Prevention and the Pollution Prevention Center of the University of Connecticut are initiating a technical assistance project for selected industries in conjunction with a public information campaign for the Water Bureau's general permit program.

The Water Bureau general permit categories for this project are furniture manufacturing and refinishing, mobile cleaning, printing, and laboratories. Multimedia guidance materials on pollution prevention options, best management practices, and regulatory compliance will be developed for these industries.

A site visit program will be initiated for a small sample of companies in each category. These companies will participate in assessments and plan implementation. Measurable results will be published and disseminated at public forums at the end of the year.

For more information contact: Mary Sherwin, CT DEP, (203) 566-5217.

CONNATAP

ConnTAP recently moved to new offices at 50 Columbus Blvd., 4th Floor, Hartford, CT 06106. The telephone and fax numbers remained the same.

Rita Lomasney was recently elected to represent Region 1 on the Board of Directors of the National Roundtable of State Pollution Prevention Programs. If you have any concerns or issues you would like brought to the Board's attention, please contact Rita.

Andrew Vecchio has left ConnTAP to join a local consulting firm. ConnTAP is interviewing candidates to fill the vacant technical specialist position.

An Ozone Layer Protection Conference and Exposition was cosponsored with EPA Region 1 in Hartford on September 8-9, 1993. There were 165 attendees at the exposition on the 9th, somewhat fewer for the conference on the 8th. About half of the manufacturers attending the expo brought soiled parts for testing by the vendors. Evaluations from both vendors and attendees were positive.

ConnTAP's annual Pollution Prevention Conference was cosponsored with the CT Association of Metal Finishers, the CT Department of Environmental Protection, CT Institute of Water Resources, and the University of Connecticut Environmental Research Institute. The event on October 27, 1993 drew approximately 200 attendees from metal finishing and other manufacturing companies. The afternoon featured three concurrent workshops: a training program on financial analysis, a modified "green square" exercise, and a panel discussion on regulatory issues affecting pollution prevention initiatives.

ConnTAP has made available \$30,000 in Matching Challenge Grant funds to CT businesses and organizations for projects to be conducted in 1994. This is the sixth year of the grant program. A record number of applications (19) were received, requesting almost \$100,000 in funds. Final selection of recipients is scheduled for early February.

ConnTAP is working with the University of Connecticut to conduct a pilot project, using graduate students as part of its Site Visit Program. The students are part of a retraining program for displaced defense workers. They are majoring in environmental engineering, with a focus on pollution prevention. They have been working in teams with ConnTAP's retirees, to conduct on-site assessments. If the pilot phase is successful, ConnTAP and the University of Connecticut hope to make the student internships a permanent part of both organizations' programs.

For more information contact: Rita Lomasney, ConnTAP, (203) 241-0777.

EPA REGION 1

National Issues

- Massachusetts' F.I.R.S.T. program and Maine's Androscoggin project will be featured in a national report on the first major year of EPA's efforts to encourage **P2 activities in traditional media grant workplans.**
- Pollution Prevention staff in HQ are assisting the **National Roundtable of State P2 Programs** in inviting senior EPA officials (including Mike Stahl of the Office of Enforcement, Lynn Goldman of OPPTS, and Carol Browner) to the April meeting in Seattle. Region 1 and others had conveyed to HQ the states' disappointment in not seeing much high level EPA interest in the November meeting in Nashville.
- EPA's Pollution Prevention Division and Regional P2 programs are attempting to gain better access to the **Office of Research and Development's** goal-setting and project solicitation/selection processes, in the hope of making ORD research more relevant to Regional

and state needs and less redundant with others' efforts.

- EPA Administrator Carol Browner sent letters in early December to all Large Quantity Generators (LQGs) of hazardous waste under EPA's **Draft Strategy on Waste Minimization and Combustion.** Over 33,000 letters were sent to facilities and the CEOs of their parent corporations reminding them of the waste minimization requirements of RCRA and asking them to make details of their waste minimization programs publicly available. In the subsequent two week period, 6,500 calls were received by the RCRA Hotline regarding the Administrator's letter. A list of the facilities that have certified they have a waste minimization program will be published next spring. EPA Region 1 is planning a number of activities to supplement this initiative, including a direct mailing to facilities.

Training

- This Fall, Region 1 toxics, emergency planning and P2 staff staged workshops in three states to introduce federal facility staff to the **executive order on federal facility compliance with EPCRA and pollution prevention requirements.** A concern raised by those attending was that any guidelines for federal P2 planning requirements be compatible with state requirements.
- Region 1 is staging monthly **technical seminars on P2** opportunities in a variety of industries for EPA inspectors and other enforcement/compliance staff. Our inspectors received basic P2 training last Spring and asked for technical training to help them understand industrial processes and recognize opportunities. We appreciate the help we have received from state staff in framing issues, presenting, and recommending industry speakers.
- Staff of the Waste Management Division provided training for state and federal RCRA Inspectors on pollution prevention and waste minimization at the **Advanced RCRA Institute Training** in Boston, MA.

PPIS Grants

In early January, EPA will decide how to allocate among the Regions the \$6 million in Pollution Prevention Incentives for States (PPIS) grant funds to be awarded this year. Last year, the PPIS program was delegated to the Regions late, so the funds were simply divided equally; this year, the Regions hope to develop an allocation "formula" to use for the foreseeable future. The national PPIS guidance should appear in the Federal Register in late February, once each Region has developed its own guidance.

Green Lights

Shaw's Supermarkets of East Bridgewater, MA became the first national grocery chain to join EPA's Green Lights program. Shaw's 85 stores in New England will upgrade to energy-efficient lighting where feasible, which could result in the reduction of hundreds of thousands of pounds of air pollutants associated with electricity generation. Shaw's won an EPA Stratospheric Ozone Protection Award in 1993 for recycling CFCs and adopting refrigeration that does not require CFCs.

PINE Pollution Prevention Program

The Printing Industries of New England (PINE), a non-profit trade association for New England print shops, received an EPA grant in October 1993 to undertake a comprehensive pollution prevention program. This program includes providing shop-by-shop compliance assistance and technical assistance in pollution prevention to 75-100 small printing businesses in Massachusetts. In addition, PINE will negotiate a group hazardous waste management contract that will provide businesses with an affordable, reliable and environmentally sound means of disposing their hazardous waste, as well as making recycling services available. This program is one of four P2 programs to be implemented under the New England HHW/CESQG Waste Management Improvement Project.

The Massachusetts Attorney General's Office and EPA's Office of Enforcement provided a 'no action' assurance letter to PINE, assuring PINE that it will not be subject to a

Superfund enforcement action (as an "arranger" for disposal of hazardous substances) if its members' waste ever become the subject of a Superfund clean-up. The specter of Superfund liability prevented PINE from undertaking a similar program in the late 1980s. While such an assurance is a significant departure from past EPA policy, in this instance the Superfund liability scheme presents a barrier to an environmentally beneficial project.

Pit Stops Project

Planning is under way in five New England states (except MA) for workshops that will be conducted for small auto repair shops this winter and spring. Technical assistance programs have been funded in VT and MA in FY94. A poster for auto repair shops has been designed, and EPA is taking steps to print it in January for distribution to states and industry groups in February. The slide show and audio tape are slated for production and distribution to the states in March 1994.

Calendar

What: National 33/50 Program / Pollution Prevention meeting -- what's working, what isn't?
Who: Industry, states, tribes, environmental groups, EPA.
When: June 1-3
Where: Arlington, VA
Contact: Lee Dupont, (202) 260-9499

For more information contact: Sally Mansur, EPA Region 1, (617) 223-5529.

EPA REGION 2

Brochure

In October, Region 2's Office of Policy and Management released a brochure entitled, "Non-Regulatory Technical Assistance for Implementing Pollution Prevention". The document (EPA 902-F-93-002) lists Region 2's technical assistance programs, ORD's pollution prevention guides and manuals, and information on accessing PIES.

Alternative Transportation

On February 10, 1994, Nancy Hazard, Director of Tour de Sol (Tds), will be speaking at 26 Federal Plaza. Ms. Hazard will be talking about the 1994 Tds, an electric and solar-powered vehicle race, that will run from New York City to Philadelphia in May. In conjunction with Tds, a teacher workshop on electric vehicles will be held in Federal Plaza on February 5. EPA is providing the space for the workshop and NYC Department of Telecommunications and Energy is sponsoring the educational events themselves. The workshop will:

- assist teachers in holding a vehicle design contest for students in grades 6 - 9; and
- review the teachers' curricular materials.

Other agencies involved in this initiative are: the New York City Department of Environmental Protection; Consolidated Edison; New York Power Authority and New York State Research and Development Authority.

Pollution Prevention Opportunity Assessment Workshop

From November 30 to December 2, 1993, EPA Region 2 and the Air Force Center for Environmental Excellence (AFCEE) jointly sponsored a Pollution Prevention Opportunity Assessment Workshop, financed primarily by EPA's 1993 Pollution Prevention Set-Aside Funds. The workshop was held at Griffiss Air Force Base and was attended by approximately 60 people, including environmental, operations, and facilities staff from the Air Force, National Guard, Army, EPA, Department of Energy, and the Postal Service. The workshop covered pollution prevention policies, initiatives, enable students to readily implement what they learned. Toward that end, the workshop included instruction on the pollution prevention process, site visits to facilities to assess waste generating processes and identify pollution prevention opportunities, and a review of case studies and techniques for implementing recommended pollution prevention opportunities.

Additionally, the attendees identified more than 60 recommended pollution prevention opportunities for various facility activities during the field exercises.

Region 2 and AFCEE will be hosting another session of the course in New Jersey in March. The workshop will be open to EPA and other federal agency staff. Additionally, the Air Force is willing to conduct the workshop in cooperation with other EPA Regions.

Workshop on Executive Order 12856

Region 2 conducted three one-day workshops on implementing Executive Order (EO) 12856. Assistance was provided to assist federal agency personnel in determining the applicability of provisions in the EO, EPCRA, and P2 Act to their respective facilities.

Supplemental Environmental Beneficial Expenditures

The Toxic Substances Section has issued two consent agreement orders that include source reduction projects. Summaries of the projects follow:

- Rich Products Corp.: Installation of Clean in Place System for recycling phosphoric acid. Reduces the utilization of phosphoric acid and emissions by 70 percent.
- Saratoga Spa & Bath: The company replaced and/or upgraded equipment that allowed the discontinuation of styrene-fiberglass backings for spas and steps, and the use of an acrylic/ABS plastic laminate instead. None of the latter materials is on the TRI list, safety for their personnel has increased, environmental impact is lessened.

For more information contact: Janet Sapadin, EPA Region 2, (212) 264-1925.

NEW POLLUTION PREVENTION PUBLICATIONS

The following is a list of new publications on P2:

Industrial Pollution Prevention Planning, Meeting Requirements Under the New Jersey Pollution Prevention Act, New Jersey Department of Environmental Protection and Energy, July 1993, (609) 984-2249.

Industrial Cleaning Source Book, Edited by David Liebl, University of Wisconsin Extension, Solid and Hazardous Waste Education Center, September 1993, (608) 262-0385.

Pollution Prevention Options Fact Sheets for Industry, Connecticut Department of Environmental Protection, June 1993, (203) 566-5604.

Best Management Practices for the Protection of Ground Water, A Local Officials' Guide to Managing Class V UIC Wells, Connecticut Department of Environmental Protection, November 1992, (203) 566-5604.

Vehicle Maintenance: A Self-Assessment Guide to Waste Prevention, Education and Management, Hazardous Waste Minimization Program, Wisconsin Department of Natural Resources, PUBL-SW-188, 1993, (608) 266-2621.

Pollution Prevention Opportunities in the Fish Processing Industry, Pacific Northwest Pollution Prevention Research Center, 1993, (206) 223-1151.

Pollution Prevention Opportunities in the Oil and Gas Production, Drilling and Exploration, Pacific Northwest Pollution Prevention Research Center, 1993, (206) 223-1151.

Transfer Efficiency and VOC Emissions of Spray Gun and Coating Technologies in Wood Finishing, Pacific Northwest Pollution Prevention Research Center, 1992, (206) 223-1151.

Total Quality Management/Pollution Prevention Integration Study for the Printed Circuit Board Manufacturing Industry, City of Los Angeles, Hazardous and Toxic Materials Office, 1993, (213) 237-1209.

Clean Production Strategies, Developing Preventive Environmental Management in the Industrial Economy, Edited by Tim Jackson, Stockholm Environment Institute, Lewis Publishers, 1993, (800) 272-7737.

New, Efficient and Environmentally Benign for Automobile Air Conditioning, Jostein Pettersen and Gustav Lorentzen, PB93-201382, December 1992, NTIS, (703) 487-4650.

Report of the National Technical Forum on Source Reduction of Heavy Metals in Municipal Solid Waste, U.S. EPA Region 1, EPA 901-R-93-001, 1993, (617) 223-5531.

NEWMOA would like to thank the following people for helping to write and produce this newsletter: Mary Sherwin, Rita Lomasney, Ann Pistell, Susan Green, Michael Frishman, Beverly Johnson, Paul Lockwood, Tom Ballantine, Sally Mansur, Judy Jakobsen, Louise Inglis King, Tom Hersey, Kevin Kelly, Jeff Potent, Janet Sapadin, and Terri Goldberg. Special thanks to Lois Makina at NEWMOA for typing the newsletter. Terri Goldberg managed production of the newsletter.

NEWMOA'S P2 PUBLICATIONS

Source Reduction of Toxic Metals in Household Batteries: Federal, State & Industry Initiatives, 1991 Report and 1993 Update, \$30 (\$15 for nonprofits & government agencies).

Lead, Cadmium & Mercury in Hospital Solid Waste: A Scoping Study, July 1992 Report, \$30 (\$15 for nonprofits & government agencies).

Costing & Financial Analysis of Pollution Prevention Projects: A Training Packet, 1992, \$40 (\$20 for nonprofits & government agencies).

Measuring State Pollution Prevention Program Effectiveness in the Northeast: A Working Paper, 1992, free.

A Practical Guide to Pollution Prevention in the Northeast, 1993, we have a limited supply of free copies.

Northeast States Pollution Prevention Roundtable Training Handbook, 1993, \$80 (\$40 for nonprofits & government agencies).

Pollution Prevention Measurement at Facilities: Status of the Northeast States' Programs, 1993, we have a limited supply of free copies.

CALENDAR

Title	Sponsor	Date/Location	Contact
Metal Working Industry	MA OTA	January 20 -- Waltham, MA	(617) 727-3260
Right to Know/Tier 2	Coastal Zone Management TUR Program	Jan. 26 -- New Bedford, MA	(508) 748-3600
MBEN Clean Air Workshop	MBEN	Feb. 3 -- Lowell, MA	(617) 727-3260 (603) 271-3503
Electric Vehicles	EPA Region 2	Feb. 5 -- NY, NY	(212) 264-1925
Printing Industry Workshop	NEWMOA & NE States	Feb. 8 -- Lexington, MA	(617) 367-8558
1994 Tour de Sol	EPA Region 2	Feb. 10 -- NY, NY	(212) 264-1925
Sustainable Manufacturing	Coastal Zone Management TUR Program	Feb. 16 -- New Bedford, MA	(508) 748-3600
P2 Assessment	WRITAR	Feb. 16-18 -- Minneapolis, MN	(612) 379-5995
Train-the-Trainer	WRITAR	March 7-9 -- Minneapolis, MN	(612) 379-5995
Annual Pollution Prevention Conference	NH DES/UNH	March 16 -- Durham, NH	(603) 271-2956
Greening Academia, From the Inside Out	Tufts Univ.	March 25 -- Medford, MA	(617) 627-3486
New England Environmental Conference	Tufts Univ.	March 26-27 -- Medford, MA	(617) 627-3451
Integrating P2 -- Organizational Roles & Opportunities in Reg. Agencies	WRITAR	April 4-5 -- Minneapolis, MN	(612) 379-5995
National Roundtable of State Poll. Prev. Prog.	NRSPPP	April 6-8 -- Seattle, WA	(206) 223-1151
New England Environmental Expo	Longwood Env. Man.	April 25-27 -- Boston, MA	(617) 489-5728
P2 Tech. Ass. for Paint & Coating Applications	WRITAR	Spring 1994	(612) 379-5995
A Life-Cycle Environmental Approach for Electronics Products	IEEE	May 2-4 -- San Francisco, CA	(908) 562-3878
Statewide Vehicle Service P2 Workshop	VT DEC	May 18 -- Vermont (interactive TV)	(802) 241-3888
National 33/50 Program/P2 Meeting -- What's Working, What Isn't?	EPA	June 1-3 -- Arlington, VA	(202) 260-9499
1994 Seventh Annual P2 Conference	NYS DEC	June 1-3 -- Albany, NY	(518) 457-2480

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