

NEWMOA



SETTING A COURSE FOR THE FUTURE

Annual Report 2008



From the Chair

As we send this Annual Report to the printer, the world is facing a major economic crisis. State and local governments, as never before in our lifetimes, are cutting programs and staff, while revenues spiral downward. In terms of state budget cuts, we all understand that everything is on the table, and nothing is sacred. Nonetheless, as NEWMOA's outgoing Chair, I'd like to offer my own perspective on the cost of state agency memberships in NEWMOA and other similar organizations. I believe firmly that NEWMOA, and the other environmental interstates, are part of the solution. They are a proven cost-saving vehicle for addressing the challenges ahead.

First, NEWMOA operates under the direct control and ownership of its member-states. The Association was established to facilitate coordination of state and federal resources to solve common problems. The rationale for this founding principle of NEWMOA remains: that joint state efforts to solve problems and provide services will use less resources and produce better results than if each state has to meet these challenges on its own. This report provides many descriptions of successful collaboration; I think three of the most powerful examples are summarized below.

The Interstate Mercury Education and Reduction Clearinghouse (IMERC), operating under NEWMOA, provides a single point of contact for industry and the public and registers mercury-added products, as required by the mercury reduction laws in most of our states. The resulting data are compiled into reports that help us measure progress and set priorities. The cost to Rhode Island for this service is \$5,000/year in dues. For our state to replicate this service on its own would cost upwards of \$100K in staff time alone, not counting program development and other support costs.

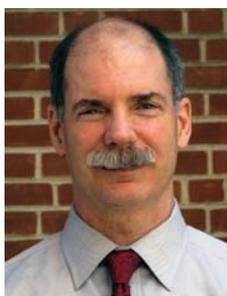
The Common Measures Project provides another example. Our states, working together with funding assistance from the U.S. Environmental Protection Agency (EPA), have trained state environmental inspectors and managers so

they now understand and can use statistically valid techniques to measure the performance of various business groups at a fraction of the cost of traditional inspections. Specialized software has been developed through the Project to assist states in evaluating and presenting results effectively. These tools, combined with programs that engage the selected business sectors in understanding and addressing compliance requirements, represent a major advance in implementing and documenting environmental performance. The Project's tools and training have many applications in helping our states programs address such challenges as climate mitigation and sustainability.

Finally, NEWMOA helps our states perform joint strategic planning to guide future collaborative work on waste-related issues. For over a year, our state program directors, supported by NEWMOA staff, have examined the waste and materials management priorities that should be addressed in a Northeast states' Climate-Waste Action Plan.

This effort responds to a challenge issued to NEWMOA and the air and water quality interstates (NESCAUM and NEIWPC, respectively) by the environmental commissioners of the New England States to advise them on appropriate climate and sustainability mitigation and adaptation measures in their respective areas of expertise. NEWMOA plans to deliver a Proposed Waste-Climate Action Plan to the Commissioners in Fiscal Year 2009.

In closing, I would like to acknowledge that NEWMOA's accomplishments would be impossible without the hard work of many state agency and NEWMOA staff people, and the energetic support of my fellow NEWMOA Directors. I also want to thank our colleagues at the U.S. EPA Region 1, Region 2, and Headquarters for supporting our projects and generously sharing their expertise. We look forward to another year of advancing our states' environmental priorities through the partnership that NEWMOA so effectively supports.



Ron Gagnon

*Rhode Island Department of
Environmental Protection
2008 NEWMOA Chair*

FISCAL YEAR 2008

NEWMOA-by-the-Numbers

- › **38 NEWMOA-sponsored training events** (including web conferences and face-to-face workshops)
- › Approximately **1,540 participants** in NEWMOA-sponsored training events (including web conferences and face-to-face workshops)
- › Approximately **400 participants** in 9 face-to-face training events sponsored by other groups at which NEWMOA staff made a presentation
- › **16 face-to-face meetings** of NEWMOA Directors and Workgroups involving more than 333 people focusing on measurement, mercury, waste management, pollution prevention, oil spill cleanup, and Brownfields activities in the region
- › **11 face-to-face meetings** sponsored by other groups in which NEWMOA staff participated
- › Approximately **114 NEWMOA conference calls** of NEWMOA Workgroups and for Projects
- › **7 national and regional workgroups, task forces, or national meetings** that involved NEWMOA (including the National Pollution Prevention Results Task Force, New England Governors' Conference/Eastern Canadian Premiers' Mercury Task Force, National Pollution Prevention Roundtable, and Quick Silver Caucus) that held approximately 36 conference calls in which NEWMOA staff participated
- › More than **222,235 visits to NEWMOA's website** and more than 992,300 pages downloaded from the website by those visitors
- › Approximately **2,800 Northeast Assistance and P2 News newsletters** distributed (2 issues)
- › **22 other NEWMOA publications or documents** on priority topics, including a report on "Trends in Mercury Use in Products," Mercury-added Product Fact Sheets, P2Rx calendar, IMERC Alert, P2 for Consumers Topic Hub, report on thermostat recycling, and comment letters to U.S. EPA on various topics
- › More than **500 companies** reporting on their mercury-added products to the participating states through IMERC
- › More than **4,350 products** in the online Mercury-added Products Database (not including a single product that was reported by multiple companies)
- › **8 NEWMOA-member states**
- › **21 NEWMOA Directors** that met four times for two days each
- › **9 NEWMOA Fiscal Year 2008 staff**
- › **14 IMERC-member states**
- › **25 NEWMOA Workgroups or Committees**; formed two new Workgroups in 2008 – Hospitality Outreach and Assistance Workgroup and Safer Chemicals Workgroup
- › **3 NEWMOA Networking Groups**
- › **15 NEWMOA Listservs**

For a list of NEWMOA's Fiscal Year 2008 projects, visit www.newmoa.org/publications/projdesc2008.cfm

Improving Hazardous Waste Management through Training & Coordination

Opportunities for training state hazardous waste inspectors have become increasingly scarce as both U.S. EPA and state hazardous waste program budgets and other resources have been trimmed each year by cuts and rescissions to the U.S. EPA Resource Conservation and Recovery Act (RCRA) budget and federal grants to states, as well as by cuts to state budgets. Consequently, the training opportunities provided through NEWMOA have become ever more important to keeping state hazardous waste inspectors up-to-date. NEWMOA provides a forum for combining state and federal resources to meet training needs at a modest cost. NEWMOA also enables state and U.S. EPA Regional professionals to exchange information on particular program issues and concerns, regulatory interpretations, and new state and federal approaches on a regular basis through monthly calls and web-conferences.

To ensure that NEWMOA's training and information exchange plans address current state priorities, NEWMOA polls member-state hazardous waste program managers and staff in August each year to learn about their priorities for the coming year. The results of the polling are discussed in conference calls with state and U.S. EPA managers and staff to build consensus on the training and information exchange topics for monthly training web conferences and conference calls, as well as a day-long "Advanced Hazardous Waste Inspector" face-to-face workshop. The results of these planning efforts are incorporated in a NEWMOA Annual Training Plan. As the Hazardous Waste Program Area Chair, I reviewed and approved the NEWMOA Training Plan for Fiscal Year 2008 and then submitted it for approval by the full NEWMOA Board of Directors at their Annual Meeting.

The annual "Advanced Hazardous Waste Inspector Training Workshops" for 2008 were held at the U.S. EPA Region 2 Laboratory in Edison, NJ and in Sturbridge, MA. Each of these workshops included a presentation by Bob Stewart, a Senior Scientist with Science Applications International Corporation, (an U.S. EPA, Office of Solid Waste contractor

with expertise in waste analysis methods) who spoke about selecting proper waste analysis methods and interpreting laboratory reports. In addition, state and U.S. EPA laboratory and enforcement professionals addressed questions from state participants about waste characterization, analysis, and interpretation of laboratory reports. Each training workshop also featured a panel of state and U.S. EPA experts that reviewed regulatory guidance and technical questions concerning the treatment of hazardous waste in tanks and containers by hazardous waste generators, and another panel on the proper classification of wastewater treatment sludge.

NEWMOA held monthly web conferences on topics selected by state hazardous waste program managers. Topics covered through these calls in Fiscal Year 2008 included:

- › The definition of "site" for regulatory purposes
- › State policies concerning regulation of rust and paint removal from painting of bridges and other structures



Skip Flanders

*Vermont Department of
Environmental Conservation
2008 NEWMOA Hazardous
Waste Program Chair*

- › The U.S. EPA RCRA Hazardous Waste Electronic Manifest
- › State policies regarding hazardous waste inspectors' role in pollution prevention, environmental compliance assistance, and the U.S. EPA Resource Conservation Challenge
- › State and other information resources for substitution of non-hazardous materials and process changes for common industrial processes
- › State and federal regulatory policies concerning the use of contaminated solvents
- › State and federal requirements and compliance and enforcement policies concerning occasional and episodic generation of hazardous waste
- › State and federal enforcement policies concerning training at regulated facilities
- › State and federal compliance assistance and enforcement programs for healthcare facilities
- › The use of off-specification chemicals and contaminated fuel as fuel and related regulatory issues
- › Precious metal bearing wastes and spent photo fixer

Advancing Solid Waste Priorities & Actions

There are many private and public sector players in the solid waste management system, including waste generators, municipalities, haulers, transfer stations, facilities that separate recyclables from waste, and waste disposal facilities. Product manufacturers also have an increasingly important role to play since they design the products that end up in our trash; their decisions affect the toxicity and recyclability of our waste stream. State environmental agencies regulate disposal facilities (and some regulate haulers), to ensure that their work does not pose risks for public health or the environment. State agencies also work with municipalities to support local programs, develop overall state waste management plans, and help to educate the public about proper waste management and recycling. Maximizing waste reduction, reuse, and recycling is a major feature of Northeast states' solid waste programs.

Solid waste is a commodity with local, regional, national, and international markets. States need to address a number of pressing issues that arise as this commodity is managed. Regional coordination is important for NEWMOA members, as we learn from each others' experiences and leverage our scarce resources by developing joint solutions to problems.

In the past year, NEWMOA has continued to move forward on a number of key priorities for our member programs. An important service that NEWMOA has provided for a number of years is the analysis of waste material flows in the region. Over the last decade, NEWMOA has gathered data about the location of sources of municipal solid waste disposed of in each member state, and has identified changes in disposal patterns over time. This analysis has demonstrated that while much of the region's solid waste is managed in the state in which it is generated, significant quantities are also shipped from the generator state to other states for disposal – there is a high degree of interdependence. In 2008, NEWMOA published its latest report

on these analyses (using 2006 data), which found that the interstate flow of municipal solid waste for disposal continues to be dynamic, with quantities imported or exported between any two states changing (sometimes dramatically) from year to year, as facilities open and close.

Also in the last year, NEWMOA has helped solid waste programs by synthesizing, summarizing, and sharing information on state solid waste plans: the broad policy frameworks that each of our member states develops to support policy development for this area. This information has been extremely valuable, particularly as Massachusetts and many other NEWMOA-member states are in the process of updating these plans to address significant changes in our economies, the resulting effects on recycling and waste management markets, and the need to focus our waste management efforts in ways that will support our states' Climate Action Plans. Understanding what our neighbors' priorities and plans are makes it much easier to identify fruitful opportunities for collaboration.



Sarah Weinstein

*Massachusetts Department of
Environmental Protection
2008 Solid Waste
Program Chair*

An example of a valuable collaboration is a project on construction and demolition waste that NEWMOA started in Fiscal Year 2008. The project was designed to help states work together to develop markets for recycling the most common materials in our construction and demolition (C&D) waste stream (thereby reducing the region's need for disposal capacity for this large component of our solid waste stream). For several years, NEWMOA has compiled and analyzed data on the types and quantities of C&D wastes that are generated in the region, and on the components that are available for reuse and recycling. In May 2008, the Association convened a meeting of the state waste program directors to discuss opportunities for recycling C&D materials that are particularly challenging. At the meeting, states identified three specific types of waste – gypsum wallboard, asphalt shingles, and wood – as priorities, and decided to focus initially on gypsum wallboard.

NEWMOA followed up this discussion by initiating a project to facilitate the development of increased capacity in the region for recycling gypsum wallboard, which has become a significant source of odors and potential health threats when it gets wet and decomposes in landfills. Work so far has identified barriers to greater gypsum wallboard recycling. In the coming year, we expect to work collaboratively to encourage recyclers to expand their markets for recycled wallboard and identify state policies and programs that can support these recycling efforts. The project will be designed to divert a significant portion of wallboard from our landfills. For more information, visit www.newmoa.org/solidwaste/cd.cfm.

Other key NEWMOA solid waste program priorities in Fiscal Year 2008 included:

- › developing an improved database of information on state Beneficial Use Determinations;
- › promoting recycling of agricultural plastics (see side bar); and
- › helping to facilitate greater coordination among the state members on improved management of storm and other disaster debris.

NEWMOA's Beneficial Use Determinations (BUDs) database is a great illustration of how sharing information can save state agencies time (and money). With disposal costs on the rise, waste generators are more frequently looking for state solid waste programs to approve various ways to reuse wastes in new products and applications. Each NEWMOA state has developed a program to evaluate these proposals, which are typically called "beneficial use determinations". NEWMOA started working with state program staff in 2002 to develop a searchable database of all the BUDs that have been issued by the NEWMOA-member states, along with information about the approval criteria that each state has adopted. This effort was designed to enable state program staffs that are reviewing BUD applications to see what other states have allowed for materials reuse and to help avoid reinventing the same work.

Due to resource constraints, state programs were not able to keep the original database up-to-date until recently. In Fiscal Year 2008 with funding from the U.S. EPA, NEWMOA improved the database (making it easier to use), and worked with states to bring it up-to-date. In 2009, NEWMOA staff will add BUD information for states outside the NEWMOA region: Florida, Illinois, Minnesota, and Wisconsin. While the BUD information is currently only available to state officials, NEWMOA is also looking for resources to support making some of this database publically accessible, to encourage people to find ways to use waste materials productively and creatively. This project has the potential to encourage the diversion of waste materials from disposal by spurring innovation, which has long been a hallmark of Northeast states' approaches to problems. For more information, visit www.newmoa.org/solidwaste/bud.cfm.

During the last year, there were a number of major floods in New England, which generated significant quantities of storm debris from homes and businesses. These events reinforced the need for state and local officials to better prepare to handle the solid waste component of disaster recovery. In the Northeast, this is a regional issue because many jurisdictions lack adequate capacity to temporarily store, sort, and process significant quantities of waste in a short period of time. In Fiscal Year 2008, NEWMOA using

funding from EPA Region 1, initiated a series of discussions among officials in all levels of government in the region on ways to improve the management of debris from major storms and other disasters. These meetings resulted in a consensus that states would benefit from coordinated efforts to:

- › understand the issues involved with locating areas to stage debris materials;
- › develop ways to increase recycling and divert debris from disposal;
- › help communities with planning development and contract issues; and
- › develop common public outreach messages and materials.

Product manufacturers also have an increasingly important role to play since they design the products that end up in our trash; their decisions affect the toxicity and recyclability of our waste stream.

Hazardous waste field inspectors reviewed, critiqued, and received training on the use of the checklists to ensure consistent interpretations and approaches among the states. By the end of Fiscal Year 2007, most participating states had completed or nearly completed their agreed number of small quantity hazardous waste generator inspections.

During Fiscal Year 2008, the participating states shared the first round of quality-assured environmental performance data from multiple states to support comparisons of environmental results using the ERP approach. The data was gathered and analyzed under the framework of a rigorous quality assurance plan to ensure the validity of reported results.

By the end of Fiscal Year 2008, the participating states had completed preliminary data analyses for the SQG sector and shared preliminary results. The preliminary SQG performance results were presented at an ERP Consortium National Meeting in September 2008. A draft comprehensive report on the Project should be available in the spring of 2009.

In Fiscal Year 2008, the states participating in the Common Measures Project decided to collaborate in measuring performance in another business sector: auto body repair and refinishing shops. Work on developing common performance indicators for the auto body sector began in 2008. The Project participants developed common definitions and a sector universe definition and agreed on a set of auto body indicators. Participants also worked with an EPA contractor to develop a comparison spreadsheet of the new federal area source rule requirements for paint stripping. They compared these rules to the draft auto body indicators submitted by states. The participating states subsequently agreed to adopt several new area source rule indicators to be used for this sector.

NEWMOA re-designed its website to include ERP on its home page, providing direct access to information about the Consortium and related ERP program information. For more information visit: <http://www.newmoa.org/erp/>.

Formation of a New National Association to Advance Environmental Results Projects (ERP)

An initial meeting of interested states in October 2006 led to the establishment of a new association called the Environmental Results Project (ERP) Consortium. Beginning in Fiscal Year 2007, NEWMOA started to provide administrative and management support, made possible by the Common Measures Project funds awarded by U.S. EPA, to the Consortium. Since then the group has grown into an organization of 22 states dedicated to advancing and supporting the development of ERP. The membership also includes U.S. EPA and consultants that have been active in providing technical assistance to ERP programs in

such areas as statistics, measurement, and data management software applications. NEWMOA assisted with planning and managing a second ERP Consortium Meeting in August 2007 to establish priorities and next steps for the group.

During Fiscal Year 2008, NEWMOA acted as a fiscal agent for the Consortium providing administrative and other support as needed. In particular, the Association helped organize and manage the ERP Consortium meeting in September 2008 in Reno, Nevada. For more information, visit: www.erpstates.org.

Safer Chemicals Initiatives

In Fiscal Year 2008, NEWMOA continued to manage the Interstate Mercury Education and Reduction Clearinghouse (IMERC) to assist states with implementation of their mercury reduction laws. Given the current resource constraints of the state agencies, I see an even greater need to utilize the collaborative capabilities of this Clearinghouse in the future. The continued emphasis of IMERC on those aspects of the state laws that focus on product phase-outs and exemptions are critical for achieving our overall regional goal of virtual elimination of anthropogenic mercury releases.

IMERC welcomed Louisiana as a new member in Fiscal Year 2008. Their membership brings the total state membership to 14 – California, Illinois, Minnesota, North Carolina, and Washington State, in addition to the 8 NEWMOA-member states.

The information on mercury use in products in the online IMERC Mercury-added Products Database and the reports that NEWMOA published in Fiscal Year 2008 (see side bars) are particularly useful in helping states set priorities for targeting their mercury reduction efforts going forward. In addition, I have found growing interest on the part of legislators and other policy makers in the online database to help inform policy development and new laws.

In Fiscal Year 2008, NEWMOA supported a year-long effort of the state environmental agencies to develop consistent guidance for households on proper cleanup of broken compact fluorescent lamps (CFLs). This effort was initiated in response to a highly publicized incident when a resident broke a CFL in their Maine home and subsequently received cleanup cost estimates in the thousands of dollars. This led the Maine Department of Environmental Protection to conduct an extensive study of the potential mercury emissions associated with breaking a CFL in a residential environment. The results of this research (available at www.maine.gov/dep/rwm/homeowner/cflreport.htm) led

all of the Northeast states and U.S. EPA to revise their cleanup guidance to be more protective of public health.

This cooperative regional effort, which was facilitated by NEWMOA's Lamp Recycling Workgroup in collaboration with the New England Governors' Conference/Eastern Canadian Premiers' Mercury Task Force, helped to educate the public and allay fears about using CFLs and possible mercury exposure from lamp breakage. NEWMOA organized workshops, web conferences, and meetings of state environmental and public health agency staffs to review the results of the Maine study, share cleanup guidance, and identify and address areas of state and U.S. EPA cleanup guidance that needed greater consensus. For more information, visit: www.newmoa.org/prevention/mercury/conferences/index.cfm.



Gary Gulka

*Vermont Department of
Environmental Conservation
2008 Persistent,
Bioaccumulative, and Toxics
(PBTs) & Other Priority
Chemicals Program Chair*

NEWMOA's involvement assisting the states with developing consistent cleanup guidance was instrumental in avoiding even greater public alarm about what they should do in the event of lamp breakage. The major accomplishment of this effort was to enable state agencies to develop effective outreach strategies. In Vermont, for example, we developed and published fact sheets that we posted on the web for use by first responders that were substantially informed by NEWMOA's efforts.

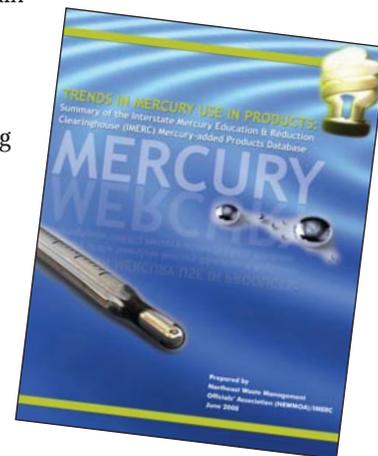
NEWMOA has played a critical role for many years supporting the New England Governors' Conference / Eastern Canadian Premiers' Mercury Task Force. NEWMOA's research and analysis on mercury use in products (see side bars) has helped to inform the Task Force's priorities and helped the region to make progress toward achieving its overall mercury reduction goals. In particular, NEWMOA has made valuable contributions to mercury reduction efforts for certain sectors, including dental clinics and schools.

Now, NEWMOA's Board of Directors is looking beyond what the Association can do on mercury to other toxics of

concern. In Fiscal Year 2008, the Board initiated a Safer Chemicals Workgroup. This Workgroup began a dialogue among member state programs about other toxic chemicals that have public health concerns and are receiving media and legislative attention. States in the Northeast and elsewhere have begun to pass new laws to address high priority chemicals of concern, particularly focusing on their potential impacts on children's health. Some of these include lead, cadmium, brominated flame retardants, phthalates, bisphenol a, in addition to mercury. An important aspect of addressing these and other high priority toxics is to be able to identify safer alternatives. This is a growing area of interest for the states in the region.

The NEWMOA-member states have been leaders in the area of toxics policy and legislation. The challenge is to stay on top of the issues given the limited resources available. I think the continued development of protocols for researching and identifying safer chemical alternatives is critical to

helping important legislative initiatives. A big challenge is closing the data gaps on toxics information. In Fiscal Year 2008, NEWMOA helped states share information on toxics issues. This addresses a critical need of the states, particularly in this time of limited resources. I see the efforts of the Safer Chemicals Workgroup as a growing area of interest for the future, particularly as we gain a better understanding of chemicals in products and commerce. As more and more states face diminishing state resources, they will depend on collaboration through NEWMOA to share information and inform policy development in areas like mercury and toxics in products and commerce.



Mercury Reduction Successes

NEWMOA and its sister organizations, the Northeast States for Coordinated Air Use Management (NESCAUM) and the New England Interstate Water Pollution Control Commission (NEWPCC) collaborated on a series of Reports that describe some of the results of mercury reduction programs in the Northeast that have targeted emissions controls, reduction and management of mercury-containing products, and wastewater discharges. These Reports were published in the beginning of Fiscal Year 2008.

The NEWMOA Report, "Northeast States Succeed in Reducing Mercury and Continue to Address Ongoing Challenges" found that from 2000 to 2006, the states in the region have collected and recycled an estimated 7.5 tons of mercury. Restrictions on product sales in the region during this time have eliminated an estimated 14 tons of mercury. Some of the actions that have contributed to these reductions are the recycling of over 41,500 mercury-containing thermostats, collection of almost 121,000 mercury automobile switches and more than 213,000 mercury ther-

mometers, and removal of over 4,500 pounds of mercury from 456 schools. The full Report is available at www.newmoa.org/prevention/mercury/NEWMOAMercurySuccessStory.pdf.

Mercury Legacy Products

The term "legacy product" refers to a product that is no longer sold as new in commerce, but may still be in use, may be resold as a used or antique product, or if not being used may be stored in homes or businesses. If these products contain mercury, they may be subject to waste disposal restrictions. Some states in the Northeast also restrict the re-sale of these products.

In Fiscal Year 2008, NEWMOA developed a Mercury Legacy Products website to provide information about the past and current uses of mercury-added legacy products. The website includes photographs; descriptions of the types of situations in which the products were typically used and the location of mercury in the product; and information on their proper handling, removal, and disposal.

The website was developed under a contract with the Massachusetts Department of Environmental Protection to assist them with implementing the Massachusetts Mercury Management Act. The products described on the website are those that are affected by the Massachusetts law. The mercury-added legacy products covered on the website are either categorized as commercial or consumer products. Commercial products include hospital equipment, measuring devices, schools, and equipment used in other commercial buildings. Consumer products include antiques, automobiles, household products and appliances, novelties, religious and ritualistic items, and sports/recreational equipment.

There may be mercury-added legacy products about which there is little, if any, available and reliable information that NEWMOA was able to find. NEWMOA is interested in updating the information presented on the website and obtaining information about additional mercury-added legacy products. To view the website, go to: www.newmoa.org/prevention/mercury/projects/legacy/index.cfm.

Review & Assessment of Thermostat Recycling Activities in the Northeast

The Massachusetts Department of Environmental Protection (MassDEP) contracted with NEWMOA to complete an assessment of mercury-added thermostat collection and recycling programs in order to identify mechanisms that could be used to enhance the recycling of these products in Massachusetts and elsewhere. The Report, "Review & Assessment of Thermostat Recycling Activities in the Northeast" focuses on the results of the Thermostat Recycling Corporation (TRC) activities, a voluntary industry-funded nationwide program to collect and recycle end-of-life mercury thermostats, as well as a number of state and local mercury thermostat collection efforts.

TRC is a service that is free for electrical and other contractors to use, and the program does not provide incentive payments to participants. In 2006, the TRC collected over 113,000 thermostats containing 1,082 pounds of mercury nationwide and 3,354 thermostats containing 27.16 pounds of mercury in

Massachusetts. Compared with previous years, this was an increase in mercury thermostat collection – both in Massachusetts and nationwide.

In order to assess overall program effectiveness, NEWMOA compared the TRC collection numbers to the number of eligible mercury thermostats likely to be entering the waste stream and estimated that approximately three percent of the eligible mercury thermostats entering the waste stream in Massachusetts are collected through the TRC program each year with an additional three percent captured through other state programs. Maine, which is implementing legislation mandating thermostat collection with financial incentives for contractors and other program participants, has achieved a recycling rate twice that of Massachusetts.

To help identify possible mechanisms to improve thermostat collection rates, NEWMOA reviewed programs in a number of states, including those based on voluntary collection efforts as well as those with mandated incentive payments. This review of the experience in other states revealed that the most successful mercury thermostat collection and recycling efforts:

- › Include mandated financial incentives (payments), sometimes paid by the manufacturers, for heating ventilation and air conditioning (HVAC) and electrical contractors, and homeowners that collect and recycle thermostats;
- › Effectively inform homeowners and HVAC and electrical contractors about applicable mercury product disposal ban requirements;
- › Engage retailers, household hazardous waste programs, municipal officials, and others in expanding the accessibility and convenience of mercury thermostat collection and recycling locations; and
- › Implement effective outreach and education efforts to increase awareness of the importance and environmental and public health benefits of mercury thermostat collection and recycling.

For a copy of the Report, visit:
www.newmoa.org/prevention/mercury/thermostatrecyclingreport2008.pdf.

to promote safer alternatives to traditional dry cleaning chemicals. Perchloroethylene (also known as perc or PCE) is the solvent used by the vast majority of the approximately 36,000 dry cleaners operating throughout the United States. Increasing evidence of the toxic nature of PCE and the adverse health and environmental impacts of its use in dry cleaning began to emerge in the 1980s. Use of solvents like PCE by dry cleaners and others present a potential hazard in the workplace, to neighbors, and to the environment. There are number of alternatives to PCE for garment cleaning, such as hydrocarbons and siloxanes, but many of these have environmental, health, and safety concerns, or have not been thoroughly studied. Fortunately, safer and green garment care alternatives exist, particularly wet garment cleaning. NEWMOA's newsletter provided an excellent summary of the efforts in the region to promote safer alternatives to PCE. For a copy of this newsletter, go to www.newmoa.org/prevention/newsletters/18_2/vol18_2.pdf.

After NEWMOA held a web conference early in Fiscal Year 2008 on assistance and P2 for the hospitality industry, we decided to form a regional Workgroup on this sector. There is a high degree of interest in and work underway for this sector. A survey of the NEWMOA-member states revealed that for most programs hospitality outreach was a high priority. Several states, including Vermont, Maine, and Rhode Island, have initiated programs to certify green lodging facilities. In Maine and Rhode Island, these efforts have expanded to restaurants as well. Several state programs, particularly in Connecticut and New York, have been interested in learning about the practical experience and lessons learned from the states that had already begun certifying these facilities. The Workgroup convened by conference calls throughout the fiscal year and discussed some of the challenges facing programs interested in measuring the outcomes of their efforts with the hospitality sector and how to address these issues. The Workgroup plans to continue regular conference calls and other information sharing activities in Fiscal Year 2009.

Several states in the Northeast, including my own, have recently initiated programs to promote safer alternatives to traditional dry cleaning chemicals.

When I think of measurement, I think of the old real estate adage: location, location, location. It is the same with any P2 or assistance program: measure, measure, measure. In order to be successful, any program must be able to measure and verify results. That's why our annual regional meetings with U.S. EPA are so important. Being able to hear how others are measuring success is invaluable. This year,

NEWMOA convened meetings for U.S. EPA Regions 1 and 2 state and local programs separately. During the meetings, U.S. EPA Regional staff discussed their efforts on assistance and P2 measurement, particularly related to grants.

NEWMOA staff presented various tools that are now available to assist with assistance and P2 measurement (see side bar). The staffs from state and local programs talked about their activities and the challenges they have been facing collecting credible and meaningful data from their clients, including small businesses, institutions, manufacturers, and others. Lately we have expanded these meetings to include a discussion of how states' and NEWMOA's priorities fit with the U.S. EPA Regional priorities.

My first exposure to the P2 world was with the NJDEP's Facility-wide Permitting (FWP) program beginning in 1993. One of the things that become so clear to me early on with the FWP program was that in order to move forward you needed to know where you are. I was amazed to see how many companies were unaware of their environmental footprint. An important reason for this was that there were no good tools available for them to use. While things certainly have improved, I still think a need exists for good, convenient, measurement tools. That is why I am so excited about the measurement efforts that NEWMOA is involved with, including the Energy and Materials Flow and Cost Tracker (EMFACT™) tool and the P2 Results Data System. EMFACT™ will allow environmental managers, equipment operators, process engineers to see exactly where they are with regards to environmental impacts from their operations.

NEWMOA and the Massachusetts Office of Technical Assistance (OTA) for Toxics Use Reduction have been

Measuring the Results of Pollution Prevention Programs

Starting in Fiscal Year 2007, NEWMOA has compiled and aggregated data on the outputs and outcomes of pollution prevention efforts in the Northeast and posted and summarized the results in the online P2 Results Data System. NEWMOA's efforts are part of a larger National Pollution Prevention Results Data System, which is designed to assist pollution prevention programs by:

- › Providing a data repository for their activity, behavioral change, and outcome measures
- › Providing secure, aggregated program-level reports
- › Providing regional reports aggregating pollution prevention results and showing improvements for each region
- › Providing nationally aggregated results for the National Pollution Prevention Roundtable (NPPR), U.S. EPA, and the federal Office of Management and Budget (OMB)
- › Demonstrating the value-added service provided by pollution prevention program efforts through the implementation of customized cost calculators

NEWMOA's efforts are designed to collect and present readily available data on pollution prevention from public agencies in Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Puerto Rico, Rhode Island, the US Virgin Islands, and Vermont. The System quantifies P2 progress related to air, water, waste, and energy resources. The System is also designed to translate P2 progress into the context of such bigger-picture issues, such as climate change, habitat protection, and sustainability.

By the end of Fiscal Year 2008, NEWMOA had received results for calendar years 2005 and 2006 from at least one pollution prevention program in each state in the region. The following is a summary of the results so far covering calendar years 2005 and

2006 (note: the outcome results for the Massachusetts Toxics Use Reduction Program are not available for 2006 and are, therefore, not included below).

Output or activity results:

- › Approximately 12,070 participants in P2 events
- › Approximately 990 facilities participating in P2 planning
- › Approximately 1,170 technical assistance site visits
- › Approximately 200 documents developed and 77,055 distributed
- › 70 applicants for awards programs
- › 99 participants in leadership programs

Outcome Results:

- › Approximately 505,490 pounds/year of non-hazardous materials reduced
- › Approximately 52,023,250 pounds/year of hazardous materials reduced
- › Approximately 9,838,170 pounds/year of hazardous waste reduced
- › Approximately 8,880,190 pounds/year of toxic air emissions reduced
- › Approximately 2,037,240 pounds/year of CO₂ reduced
- › Approximately 64,637,190 kilowatt hours/year reduced
- › Approximately 504,460,345 gallons/year of water use conserved

To access the online P2 Results Data System, go to: www.newmoa.org/prevention/measurement/index.cfm.

collaborating to develop and test the Energy and Materials Flow and Cost Tracker (EMFACT™) materials use and profitability software tool. This project builds upon the current application of environmental management accounting as a critical aspect of sustainable production and P2.

The primary beneficiaries of this project will be those companies and organizations that implement this environmental management accounting tool to aid them in setting P2 priorities, identifying value-added opportunities for sustainable production, and implementing other materials and energy efficiency improvements. State and local environmental and technical assistance programs and private sector consultants will also benefit by having the tool to help their client companies identify P2 opportunities and quantify the benefits and costs. NEWMOA contracted with Sullivan International Group to develop the EMFACT™ tool and to provide training support. Sullivan was selected by NEWMOA and MA OTA after a lengthy procurement process and competition among a number of highly qualified vendors. In Fiscal Year 2008, NEWMOA, MA OTA, and Sullivan made significant progress on EMFACT™ development. By mid-fiscal year, a beta version of the tool was available for testing by the EMFACT™ Advisory Group and others. During the next fiscal year, NEWMOA will launch version 1 of the tool online and conduct training workshops to help users learn how to use it. For more information on EMFACT, visit www.newmoa.org/prevention/emfact/index.cfm.

P2Rx is a great national "chain" of P2 information centers. I know my staff hand out a P2Rx brochure at every P2 audit they conduct. So many companies want to be able to implement P2, but just do not have the expertise or resources. The information available via P2Rx can be a big help (see

side bar). P2Rx and the other NEWMOA information sharing activities described above provide great educational outlets and a mechanism for folks to talk to each other about emerging environmental issues. For more information on P2Rx activities, visit www.newmoa.org/prevention/p2rxinfo/index.cfm.

Recently, Lisa Jackson the new U.S. EPA Administrator sent an email to all of the Agency's employees. In it, she articulated three values that the President expected U.S. EPA to uphold: science must be the backbone for their programs, the Agency must follow the rule of law, and their actions must be transparent. I think these same values hold true for state programs and NEWMOA. The decisions of NEWMOA and its Assistance and P2 Roundtable must be based on solid science. We must be able to justify our actions and maintain an open, honest process whereby all stakeholder views are treated with respect. We must be able to measure our successes and be able to confidently stand by our decisions.

I believe that climate change and greenhouse gas reduction is the number one environmental issue facing us now. We must define a role for P2 and assistance providers in this issue or we risk becoming marginalized and watching from the sidelines while others lead the way. Sustainability will also continue to grow as an area of concern. To me, this term encompasses such things as safer chemicals, pollution prevention, lean manufacturing, and zero waste.

Another challenge facing us is how to continue to function effectively with ever dwindling resources. This is where NEWMOA's ability to coordinate regional approaches is invaluable. There are tough times ahead, but I feel optimistic that we will rise to meet these challenges.

Lead Sinkers P2Rx Topic Hub™

A sinker is a weight used in fishing to force a lure or bait to sink more rapidly to the bottom of the water, where larger fish typically feed. Lead sinkers and other leaded fishing gear are commonly used by anglers in different types of fishing. However, lead is a toxic substance, and when these lead sinkers fall off the fishing line, the line breaks, or they are improperly disposed of in the water, they can have harmful effects on wildlife. As a result, some states

have implemented regulations restricting the sale or use of lead sinkers for fishing. Many governments and organizations are also focused on promoting the use of safer, non-toxic sinker alternatives. NEWMOA launched a new P2Rx Topic Hub on Lead Sinkers that describes the different kinds of lead-containing fishing tackle, lead-free alternatives, and the regulatory and assistance approaches states and others have taken to limit or eliminate this use of lead. To view the Topic Hub, go to: www.newmoa.org/prevention/topichub/toc.cfm?hub=113&subsec=7&nav=7.

Training to Improve Waste Site Cleanup

NEWMOA's first Waste Site Cleanup Program priority has been to provide training, workshops, and seminars to increase technical capabilities among state program staff and private industry working in the field. We try to run two or three of these sessions annually. We select the topics based on an annual training needs survey that NEWMOA administers each year, which we then discuss with the Waste Site Cleanup Workgroup. We focus our NEWMOA efforts on training because this is a need that all the member states share and have difficulty arranging for on their own. We held workshops on two topics in Fiscal Year 2008.

We co-sponsored with Brown University and organized two "Vapor Intrusion Assessment and Mitigation" Workshops that were held in September 2008. These were a follow-up to vapor intrusion workshops that we ran in 2006-2007. The 2008 Workshops focused on vapor intrusion evaluation and mitigation technologies for commercial and industrial sites. They were well attended by a total of more than 160 participants from U.S. EPA and state regulatory agencies, as well as consultants. For copies of the presentations, go to: www.newmoa.org/cleanup/cwm/vapor2008/.

In April 2008, we organized a successful "Remediation of Chlorinated Solvents Sites" Workshop. This was a follow-up to a "Characterization of Chlorinated Solvent Sites" Workshop that we ran in September of 2007. More than 140 people attended the Workshop. For copies of the presentations, go to: www.newmoa.org/cleanup/cwm/chlor2008/.

Another NEWMOA priority is facilitating information sharing and dissemination. The Waste Site Cleanup (WSC) Program does that in two ways. First, through NEWMOA program staff, we make relevant and up-to-date information available to the state programs on WSC-related issues and topics, including other trainings, grant information, information from other states, and information on national

programs and policies. NEWMOA staff does this through emails, periodic conference calls, and through the NEWMOA website. NEWMOA also organizes meetings among the states and with U.S. EPA to discuss particular WSC issues of interest. For example, in Fiscal Year 2008, NEWMOA organized and facilitated a meeting among the State Brownfields staff and U.S. EPA's Brownfields program. We discussed state grants, and we heard about what is new in each of the states and at the national level, including the concept of greener cleanups.

A third program priority is working on specific WSC issues that the states share in the hope of identifying common solutions. An issue that we have worked on in the past is institutional controls. Institutional controls are restrictions placed on the use of a property, such as a restriction in the deed, because some level of contamination remains at the site after cleanup. In Fiscal Year 2008, NEWMOA submitted a grant proposal to work on identifying better ways to implement institutional controls, including monitoring and oversight. Unfortunately, it was not successful, but we plan to try again.

Another critical issue that NEWMOA's Waste Site Cleanup Program began to spend some time on in Fiscal Year 2008 was climate change and waste site cleanup. We focused on two aspects of this topic: energy use during site remediation and siting renewable energy projects on Brownfields and other contaminated sites (including closed solid waste landfills) (see side bar). Energy and climate change are now a primary focus area for all our programs at the state and national level and will be for a long time to come. It is important that the WSC programs understand how they can contribute to the overall effort of reducing GHG emissions. NEWMOA is helping the state programs to do this, including planning a full day workshop in Fiscal Year 2009. Our programs need to work toward making changes in our approaches to WSC so that our cleanups are conducted in



Jay Naparstek

*Massachusetts Department of
Environmental Protection
2008 NEWMOA Waste Site
Cleanup Co-Chair*

greener, more energy-efficient ways that minimize greenhouse gas emissions.

NEWMOA's WSC accomplishments in Fiscal Year 2008 reflect the important issues affecting the state programs and the overall environmental programs today and into the future. Vapor intrusion is an area all of our programs are realizing requires more attention to ensure that our cleanups are fully protective of public health. We expect that NEWMOA will continue to provide valuable training on this issue in the future.

From a program perspective, managing and maintaining our programs in light of the current economic crises will be our greatest challenge in the next year. Maintaining staff and program funding will be one part. Another challenge will be finding ways to address the expected increase in abandoned sites due to the economic situation and the resulting bankruptcies. Under these conditions, NEWMOA's value to the states becomes even greater.

Facilitating the Siting of Renewable Energy Projects on Landfills & Contaminated Sites

During 2008, NEWMOA held a Workshop to bring renewable energy project developers, consultants, and government energy and environmental officials together to hear about successful renewable energy projects on contaminated sites and solid waste landfills, and to consider how to encourage more of these projects in the Northeast states. Through the Workshop, NEWMOA state environmental agencies established closer relationships with renewable energy stakeholders in the Northeast and learned about their concerns regarding siting projects on contaminated properties. The Workshop participants provided a number of specific recommendations for assistance and technical tools that U.S. EPA, Department of Energy, state agencies, NEWMOA, and others could provide to facilitate renewable energy project siting. The participants, some of whom are considered experts on renewable energy development, commented that the Workshop provided a valuable learning experience that should be repeated as part of an ongoing collaborative effort of states and U.S. EPA to inform and facilitate the siting of renewable energy projects. The use of contaminated sites for these projects, where possible, was favored by

virtually all participants. NEWMOA plans to follow-up on the Workshop recommendations in Fiscal Year 2009. For more information, visit: www.newmoa.org/solidwaste/cwm/renewablesites/index.cfm.

Assisting the Oil Spill Action Plan in Massachusetts

Under a 2008 contract with the Massachusetts Department of Environmental Protection (MassDEP), NEWMOA provided administrative, planning, and management assistance to the Agency as it implements comprehensive state legislation aimed at preventing coastal oil spills from marine transportation and other accidents, and improving the capability of local responders to protect coastal assets from spill damage. NEWMOA assisted with organizing a full day oil spill response training for municipal responders from Buzzards Bay communities in Falmouth, MA; organized a meeting of Oil Spill Act Advisory Committee; prepared the initial draft of the Massachusetts Oil Spill Act 3-5 Year Implementation Plan; investigated options for providing financial assistance to municipalities to offset the cost of training responders; and investigated commercially available training options for tug and oil barge operators.

NEWMOA Funding

NEWMOA relies on dues, grants, contracts, and special contributions for funding. The first and original source is state dues. The New England states request that U.S. EPA Region 1-New England make a portion of their RCRA state hazardous waste program assistance funds available as dues and general support, in the form of a grant to NEWMOA. The NEWMOA Board of Directors determines the specific amount each year in consultation with U.S. EPA Region 1-New England. New York and New Jersey elect to pay their annual dues directly to NEWMOA. IMERC-member states also pay annual dues directly to NEWMOA to fund IMERC's activities.

U.S. EPA grants support solid waste activities, assistance and pollution prevention projects, the Common Measures Project, hazardous waste inspector training, and participation in federal regulatory development. Grants for these activities are awarded by a combination of U.S. EPA Region 1-New England, Region 2, and Headquarters, and occasionally by other agencies and institutions.

Contributions from member states in the form of contracts make up the third source of funding. Several states contribute directly to fund projects of particular interest, as well as to support NEWMOA's mercury reduction, IMERC, oil spill cleanup, and Brownfields programs.

NEWMOA's Balance Sheet

October 1, 2007 to September 30, 2008

Revenue

State Dues, Contracts, Fees, Contributions and In-Kind Services/Match	\$ 365,314
Federal Grants*	709,417
Miscellaneous	5,880

Total	\$ 1,080,611
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Expenditures

Staff Salaries & Expenses	\$ 676,097
Travel & Meetings	80,192
Office Expenses	112,767
Contracts	186,152

Total	\$ 1,055,208
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Net Assets

Net Assets at Beginning of Year	\$ 341,474
Net Assets at End of Year	366,877

Net Change in Assets	\$ 25,403
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**Federal grants include \$142,000 in state assistance grants allocated to NEWMOA at the request of the New England states. Federal grants also include awards to states that were provided to NEWMOA through state contracts.*

Northeast Waste Management Officials' Association (NEWMOA)

About NEWMOA

The Northeast Waste Management Officials' Association (NEWMOA) is a nonprofit, nonpartisan interstate association that has a membership composed of the hazardous waste, solid waste, waste site cleanup, and pollution prevention program directors for the environmental agencies in Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Rhode Island, and Vermont. NEWMOA was established by the Governors of the New England states as an official regional organization to coordinate interstate hazardous and solid waste, and pollution prevention activities and support state waste programs, and was formally recognized by the U.S. Environmental Protection Agency (U.S. EPA) in 1986.

NEWMOA's Mission

NEWMOA's mission is to develop and sustain an effective partnership of states that helps achieve a clean, healthy, and sustainable environment by exploring, developing, promoting, and implementing environmentally sound solutions for:

- › Reducing materials use and preventing pollution and waste,
- › Properly reusing and recycling discarded materials that have value,
- › Safely managing solid and hazardous wastes, and
- › Remediating contaminated sites.

The group fulfills this mission by providing a variety of support services that:

- › facilitate communication and cooperation among member states, between the states and the U.S. EPA, and between the states and other stakeholders;
- › provide research on and evaluation of emerging issues, best practices, and data to help state programs maximize efficiency and effectiveness; and
- › facilitate development of regional approaches to solving critical environmental problems.



**Northeast Waste Management
Officials' Association**

129 PORTLAND STREET, 6TH FLOOR
BOSTON, MASSACHUSETTS 02114-2014
TEL: 617-367-8558
FAX: 617-367-0449
www.newmoa.org