Celebrating 25 Years of NEWMOA

September 22, 2011
Sheraton Harborside
Portsmouth, NH
Who’s a NEWMOAN?
Environmental Challenges: 1980s

- Implementation of RCRA - enacted 1976
- Implementation of CERCLA - enacted 1980
- Cleanup of Love Canal, Woburn, & 1000s of other waste sites
- Limited SW recycling
- Huge piles of scrap tires & white goods
- Closing of unlined solid waste landfills
- Cross media pollution the norm
- Waste reduction & P2 just ideas
- Hazardous waste capacity issues
Pre-NEWMOA: 1975 - 1986

Annual States - EPA Waterville Valley meetings to discuss waste issues & implementation of RCRA & CERCLA
NEWMOA Formed - 1986

Established by the Governors of the New England states as an official regional organization to coordinate interstate activities related to:

- hazardous waste
- solid waste
- pollution prevention
- waste site cleanup

Formally recognized by US EPA

Board of Directors formed

Annual meeting held in Waterville Valley
“Over the course of 25 years, NEWMOA has shown leadership in making New England a greener, healthier, & safer place to live. Your strides in P2, mercury reduction, toxic chemicals, & solid waste management are tremendous because you bring everyone to the table. Thank you for all of your hard work.”
1987 Highlights

- First Executive Director hired
- Board met regularly
- Annual Conference held
- States - EPA Solid & hazardous waste policy discussion held
- Definition of waste debated
1988-1989 Highlights

- Annual Conferences held
- Solid waste program started
- Staff hired
- New Jersey joined NEWMOA
- P2 grant awarded & program started
- Studies on tires & white goods started
- HW Capacity Assurance meetings held
“Since the late 1980s, NEWMOA has been instrumental in bringing P2 to the forefront in state programs & assisting the Northeast States become P2 leaders in many areas.”
1990 Highlights

- Annual Conference held
- New York joined NEWMOA
- NE A & P2 Roundtable formed
- Multi-Media P2 meetings held
- P2 clearinghouse initiated
- Research on metals in waste initiated
- P2 for pulp & paper conference held
- Capacity assurance meetings held
1991 Highlights

- Annual Conference held
- *NE States P2 News* initiated
- P2 for Inspectors workshop held
- TUR workgroup formed
- Studies on management of batteries & tires published
- P2 Train-the-trainer workshops held
- P2 Roundtable meetings held
INTRODUCTION

Welcome to "Northeast States Pollution Prevention News!" NEWMOA is initiating this periodic bulletin to provide an ongoing update on the pollution prevention (PP) activities of the Northeast (New England states, New York and New Jersey) state and federal agencies and programs. The appearance of these bulletins will be designed to correspond with the quarterly Regional meetings of the state PP programs. Several state PP programs involved in these meetings requested that the Northeast Multi-Media Pollution Prevention Program (NEMPP) of NEWMOA start a bulletin to facilitate interstate communications on PP activities.

Each state and EPA Regional office in the Northeast has contributed a brief program update to this issue, and NEWMOA appreciates their cooperation and support. We have organized this bulletin in alphabetical order by state with updates from EPA Regions 1 and 2 after the states. We welcome your comments and suggestions on the format and content of this initial issue of "Northeast States Pollution Prevention News."

NEMPP UPDATE

Training Opportunities

NEWMOA’s NEMPP program has initiated a number of training activities for this fall. The following is a list of the upcoming training opportunities for state PP staff:

- October 9-10 PP Instructor Training for Region 1 state and EPA staff to be held at the EPA Regional Laboratory in Lexington, MA. Training limited to 20 participants.
- October 24-25 Financial Analysis for PP Projects Workshop to be held at the Tufts University Center for Science and Technology in Medford, MA for Region 1 and 2 state and EPA staff.
- December 4-5 PP/CAAB Instructor Training for Region 2 state and EPA staff to be held in Albany, NY. Training limited to 20 participants.

Report Available

NEMPP recently completed a report on financial analysis techniques for PP, called "Total Cost Assessment: An Overview of Concepts and Methods." This report will be used in the workshop on financial analysis methods described above. They are completing two case studies and

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SCRAP TIRE MANAGEMENT
IN THE
NEWMOA STATES

Carole J. Ansheles
Solid Waste Program Manager
Northeast Waste Management Officials Association
(NEWMOA)

May, 1991

- 1991 - Tom Getz, RI DEM
- 1990 - Al Prysunka, ME DEP
- 1989 - John Maltor, VT DEC
- 1988 - John Minichiello, NH DES
- 1987 - Stephen Hitcock, CT DEP
1992 Highlights

- Annual Conference held
- 1st Annual Report published
- Comments on EPA’s proposed Hazardous Waste Identification Rule submitted
- Strategic planning process developed
- Waste Site Cleanup Workgroup formed
- P2 Roundtable meetings held
# AGENDA
**10/19/92**

**Annual NEWMOA States/EPA Training and Technology Transfer Meeting**

**November 17 - 18, 1992**  
*Waterville Valley, NH*

**Tuesday, November 17, 1992**

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<tr>
<td>8:30 - 9:00</td>
<td>Registration</td>
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| 9:00 - 9:05 | Call to Order and Welcome  
*Bill Cass, NEWMOA; Mel Hoehn, EPA Region I* | 5 min |
| 9:05 - 9:15 | Opening Remarks  
*Julie Belaga, EPA Region I Administrator* | 15 min |
| 9:15 - 10:30 | **SESSION 1 PLENARY**  
**C, D+ WASTE ISSUES, AND THE AFTERMATH OF THE TC RULE**  
Moderator: Tom Epstein, RI DEM  
**Topics:**  
- EPA Guidance and Decisions on C, D + Wastes and Newly Identified Wastes  
  *Speakers:* Sylvia Lowrance, Director, OSW EPA HQ | 25 min |
- State Experiences with Newly Identified Wastes  
  *Speakers:* Bill Sirull, MA DEP  
  Larry Nadler, NY DEC | 20 min |
- Waste Sampling and Analysis Issues  
  *Speakers:* Mike Dowling, EPA New England Lab | 15 min |
| 10:30 - 11:00 | Break |
| 11:00 - 12:30 | **SESSION 2 CONCURRENT TRAINING SESSIONS**  
**2A WASTE AND CONTAMINATED MEDIA SAMPLING AND ANALYSIS TECHNOLOGY**  
Moderator: Gerry Sotolongo, EPA Region I  
**Topics:**  
- Sampling, Analysis and Data Interpretation for Auto Shredder Residue  
  *Speakers:* Jim Miller, MA DEP | 25 min |
- Interpreting Data to Identify Environmental/Ecological Damage  
  *Speakers:* Susan Sivinski, EPA Region I | 25 min |
- Region I Tier Approach for Sample Analysis  
  *Speakers:* Bill Andrade, EPA New England Lab | 25 min |
NORTHEAST WASTE MANAGEMENT OFFICIALS' ASSOCIATION (NEWMOA)

ANNUAL REPORT FOR FISCAL YEAR 1992
October 1, 1991 to September 30, 1992

Patricia Deese Stanton (MA DEP), 1992 NEWMOA State Chair

William F. Cass, Executive Director
Carole J. Ansheles, Solid Waste Program Manager
Terri L. Goldberg, Pollution Prevention Program Manager
Financial Analysis of P2 Training
1992

COSTING AND FINANCIAL ANALYSIS OF POLLUTION PREVENTION PROJECTS:
A TRAINING PACKET

WORKSHOP AGENDA
WORKSHOP CURRICULUM
CASE STUDIES AND REPORT

by
The Northeast Waste Management Officials’ Association
The Massachusetts Office of Technical Assistance

1992
MEASURING STATE POLLUTION PREVENTION PROGRAM EFFECTIVENESS IN THE NORTHEAST: A WORKING PAPER

September 1992

The New England states, New Jersey and New York (Northeastern states) pollution prevention programs have begun to develop methods for measuring the effectiveness of their activities. To assist the states in this effort, the Northeast States Pollution Prevention Roundtable (NE Roundtable), a program of the Northeast Waste Management Officials’ Association (NEWMOA), has developed this working paper. NEWMOA and the states anticipate that we will update and revise this paper in the future as we develop better methods of measuring state pollution prevention program effectiveness.
1993 Highlights

- Annual Conference held
- CERCLA & Superfund reauthorization position developed
- Comments on proposed Environmental Leadership program submitted
- Comments on transportation of hazardous waste policy submitted
- MOU on scrap tire management signed
WHITE GOODS MANAGEMENT

IN THE NEWMOA STATES

Prepared by
Ronald Gagnon
Rhode Island Department of Environmental Management

Prepared For
Northeast Waste Management Officials’ Association (NEWMOA)
With Input and Review from NEWMOA and NEWMOA-State Staff

February, 1993
A Practical Guide To Pollution Prevention In The Northeast

January 1993

Adapted from the Massachusetts Office of Technical Assistance Manual, "A Practical Guide to Toxics Use Reduction"
Sources of Hazardous Waste Shipped for Incineration, Landfill or Stabilization:

Using Biennial Report Data in the Design of Waste Reduction Services in New Hampshire

March 1993

Submitted by
Cummings Consulting, Inc.
Concord, MA

Prepared for
Northeast Waste Management Officials’ Association
85 Merrimac Street
Boston, MA 02114

and

Waste Management Division
New Hampshire Department of Environmental Services
Concord, NH
POLLUTION PREVENTION SUCCESSES:  
A Compendium of Case Studies From The 
Northeast States

Compiled by 
Terri Goldberg 
Pollution Prevention Program Manager

NORTHEAST WASTE MANAGEMENT OFFICIALS' ASSOCIATION 
(NEWMOA)

December 1993
NORTHEAST STATES POLLUTION PREVENTION ROUNDTABLE TRAINING HANDBOOK

First Edition

Edited by Terri Goldberg
Northeast Waste Management Officials’ Association
85 Merrimac Street
Boston, MA 02114
(617) 367-8558

January 1993

Printed on Recycled Paper
1994 Highlights

- Annual Conference held
- Managing Discarded Appliances & Vehicles published
- Solid Waste Flow in the NEWMOA States published
- Measuring Solid Waste in the NEWMOA States published
- P2 Successes: A Compendium of Case Studies published
1994 Highlights

- Financial Analysis of P2 curriculum & training developed & held
- P2 consortium of New England Universities formed
- National 1994 Toxics Release Inventory (TRI) Data Use Conference held
- Development of a regional mercury reduction strategy initiated
“One of my fondest memories of my work at CT DEP was my participation in NEWMOA’s Mercury Task Force. I always looked forward to those meetings because I knew that the people who gathered for them were well-informed, interested in the effort to reduce mercury in the environment, & committed to working together as apolitically as possible. We believed that a small group of state officials could affect national policy. Thanks to the leadership of Terri Goldberg & others, that is exactly what happened. I congratulate NEWMOA on this anniversary & am sure that its efforts continue to be important to coordinating & strengthening environmental policy among the Northeast states.”
# Board of Directors’ Meeting 1994

**Annual NEWMOA Directors’ Meeting**  
W. Alton Jones Campus - University of Rhode Island  
Whispering Pines Conference Center  
September 8-9, 1994

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<td>9:30</td>
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| 10:00 | Introductions, opening remarks, review agenda and minutes of June 16, 1994 meeting  
      |   Gary Sandermeyer (FY-94 NEWMOA Chair), Bill Cass                      |
| 10:20 | NEWMOA Annual Business Meeting  
      |   Confirmation of NEWMOA officers for FY-95  
      |   Highlights of FY-94 accomplishments and review spending  
      |   Bill Cass, Carole Ansheles, Terri Goldberg                     |
|       |   Review of FY-95 Budgets and grant applications  
      |   Bill Cass, Carole Ansheles, Terri Goldberg                       |
|       |   Review NEWMOA staff performance and set staff objectives for FY-95  
      |   NEWMOA Director and staff as requested                   |
| 12:00 | Working Luncheon - Review FY-95 Workplans  
      |   Opening discussions and decisions on overall NEWMOA strategies including  
      |   funding programs                                              |
|       |   Bill Cass, Carole Ansheles, Terri Goldberg                           |
| 1:00  | State-by-state program updates and discussion of priorities  
      |   State Directors                                                  |
| 2:00  | Review EPA issues with Regions I and II program managers including: lead program;  
      |   grant flexibility; EPA reorganization; and the Environmental Technology  
      |   Initiative                                                      |
| 3:00  | Critique draft agenda for Annual NEWMOA State/EPA Training and Technology  
      |   Transfer meeting. Identify speakers and moderators               |
| 4:00  | Review detailed plans for solid waste and joint solid/hazardous waste activities  
      |   including: scrap tires, shredder project, flow control, incinerator ash, lead,  
      |   fluorescent lamps etc.                                          |
|       |   Carole Ansheles                                                       |
| 5:00  | Adjourn                                                                  |
| 7:30  | Evening session on NEWMOA business and FY-95 plans (if necessary)       |

**September 9, 1994**

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| 9:30  | Review plans for NEWMOA's role in RCRA rulemaking including: definition of  
      |   Waste/Recycling; contaminated media, and exit/entry for contaminated waste.  
      |   Review status of HMTUSA reauthorization; state pilot projects and DOT rulemaking  
      |   and discuss other hazardous waste issues for possible NEWMOA involvement  
      |   Bill Cass                                                               |
| 10:15 | Review status of CERCLA reauthorization and EPA Headquarters/Regional reform  
      |   and discuss workgroup activities for FY-95  
      |   Bill Cass                                                               |
| 11:00 | Review P2 Program plans for FY-95 including: P2 Legislative Committee; P2 training  
      |   programs, P2 financing activities; P2 Clearinghouse program, TRI conference and  
      |   NE P2 Roundtable                                                      |
| 12:00 | Working Luncheon: State-by-state commentary on NEWMOA's priorities and  
      |   workplan for FY-95 and beyond. Discuss NEWMOA ETI proposal           |
| 1:30  | NEWMOA Strategic Plan and frame agenda for meetings with congressional staff  
      |   during FY-95                                                          |
| 3:00  | Adjourn                                                                  |
1994 TRI Conference

Jodi Segall, MA TURI

Ihab Farag, UNH
with conference participant
1994 TRI Conference

Lynn Goldman, EPA HQ OPPT
1994 TRI Conference

Terri Goldberg, NEWMOA
Toxics Release Inventory (TRI) Data Use Conference: Building TRI and Pollution Prevention Partnerships

Boston, Massachusetts December 5-8, 1994

Sponsored by the Northeast Waste Management Officials' Association (NEWMOA)

In conjunction with the U.S. Environmental Protection Agency (EPA) and American Petroleum Institute (API) Chemical Manufacturers Association (CMA) INFORM, Inc.
National Association of State Title Three Program Officials (NASTTPO) National Pollution Prevention Roundtable (NPPR) New England Interstate Water Pollution Control Commission (NEIWPCA) Northeast States for Coordinated Air Use Management (NESCAUM) Toxics Use Reduction Institute, University of Massachusetts Lowell
Student-Faculty Conferences
1994 - 1996

Changing the Course of Production
A Student-Faculty Conference on Pollution Prevention in Manufacturing & Services

February 9 and 10, 1996
John F. Kennedy School of Government
Harvard University
Cambridge, Massachusetts

Reinventing Environmental Protection:
A Student-Faculty Conference on Pollution Prevention
1995 Highlights

- Annual Training & Technology Transfer Conference held
- “Solid Waste Volume Source Reduction” published
- Comments to EPA on Hazardous Waste Identification Rule submitted
- NE & P2 Roundtable Steering Committee formed
- Innovative site remediation workshop held
1995 Highlights

- Initiative to improve management of universal wastes launched
- *Financing P2 Investments* published
- “Skillful Change Agents” curriculum developed & workshops held
- Research on mercury in products conducted
Financial Assessment Workshop
1995

The Northeast Waste Management Officials' Association
(NEWMOA)

Financial Assessment
of Environmental Projects
Workshop

Thursday, March 16, 1995
9 am to 4 pm
Factory Mutual Conference Center
Norwood, MA

Commonwealth of Massachusetts
Executive Office of Environmental Affairs
Office Of Technical Assistance
“NEWMOA should be proud of its 25 years of accomplishments, which are numerous. To mention a few wouldn’t do justice to the many, so I’ll simply say what a pleasure it was to be New Hampshire’s representative to the Association over a period of 13 years.”
1996 Highlights

- Annual Training & Technology Transfer Conference held
- Performance Partnership workshop held
- Regional study on mercury deposition & contamination launched
- States-EPA Brownfields meeting held
- Letter of intent for collaboration on universal waste programs signed
1996 Highlights

- Brownfields conference held
- Strategy on tire management developed
- *P2 & Profitability* published
- *P2 in Regulatory Activities* published
- *P2 for “Metal Finishing” & “Metal Coatings”* published
- *P2 for Wood Furnishing* published
- “Reinventing Environmental Protection Conference” held
NEWMOA Annual Conference
1996

Sally Mansur, EPA Region 1
NEWMOA Annual Conference
1996

Bill Cass, NEWMOA;
Phil O’Brien, NH DES;
Helen Waldorf, MA DEP

Jay Naparstek, MA DEP &
John Iannotti, NYS DEC
P2 & Profitability
1996

Pollution Prevention and Profitability
A Primer for Lenders

Northeast Waste Management Officials’ Association
Motivating P2 Concepts

1996

Motivating Pollution Prevention Concepts:

Homework Problems for Engineering Curricula

Editors:

Monica Becker
Toxics Use Reduction Institute (TURI), University of Massachusetts at Lowell, Lowell, MA 01854

Ihab Farag
Department of Chemical Engineering, University of New Hampshire, Durham, NH 03824

Nancy Hayden
Department of Civil and Environmental Engineering, University of Vermont, Burlington, VT 05405

August 1996
NEA & P2 News Through the Years

1996 Partnership Grants

Spring 2006 Toxics in Chemicals

Fall 2001 National P2 Week
1997 Highlights

- Annual Training & Technology Transfer Conference held
- Meeting on enforcement & assistance coordination held
- Workshop on innovative technology for waste site assessment & cleanup held
- *P2 for Metal Finishing* published
1997 Highlights

- Meeting on policies on the use of contaminated soils held
- Performance Partnership grants meeting
- Guide to Accessing P2 Information Electronically published
- Wood Furniture manual published
- Online P2 databases developed
“NEWMOA represents one of the very best models of how government can still carry out its important mission in these difficult economic times. They enable multiple states to pool intellectual as well as limited financial resources, delivering better results than any one state can achieve on their own. By providing regional training, database management, & compilations of best practices, NEWMOA creates efficiencies & strengthens the competence of each state while helping them avoid the costly mistakes learned by others in the past.”
Environmental Assistance Meeting
1997
Environmental Assistance Meeting
1997

Mary Werner, NYS DEC; Terri Goldberg, NEWMOA; & John Iannotti, NYS DEC
GUIDE TO ACCESSING POLLUTION PREVENTION INFORMATION ELECTRONICALLY

Northeast Waste Management Officials’ Association
129 Portland Street, 6th floor
Boston, MA
(617) 367-8558
February 1997
P2 Manuals for Metals Industry
1997 - 1998
1998 Highlights

- **NE States & Eastern Canadian Provinces Mercury Study published**
- Regional Mercury Action Plan adopted
- Coordination on BUDs started
- Agreement on cooperation on site assessment & cleanup signed
- **P2 Programs in the NE published**
- **P2 in Metal Painting & Coating published**
1998 Highlights

- P2 Resource Exchange (P2Rx) Center started
- Information sharing on BUDs coordinated
- Compliance tool & brochures on waste oil regulations for auto repair published
- “P2 in Enforcement” workshop held
- “P2 Rule & Policy Development” workshop held
- “Advanced Financial Assessment” workshop held
P2 Progress in the Northeast
1998
NEWMOA Annual Conference 1998

Allan Ball, ME DEP; Bill Cass, NEWMOA; & Senator Bob Smith R-NH
Ron Gagnon, RI DEM & John James, ME DEP
NEWMOA Annual Conference
1998

Judy Shope, MA DEP; Gary Gulka, VT DEC;
& Stephanie D’Agostino, NH DES
“I feel very fortunate to have had the opportunity to be part of NEWMOA during my time at NYSDEC. It was both professionally rewarding as well as extremely helpful in carrying out my responsibilities as a waste management program director. The ability to find out how other states were addressing similar issues allowed us to take advantage of other state experiences in managing our state specific issues. The RCRA C program training that NEWMOA provided was excellent. NEWMOA’s various workgroups were invaluable.”
“NEWMOA's ability to be proactive in helping states figure out how to set policy was critical. This was particularly evident in the solid waste management arena where energy considerations & other factors shifted the thinking to a materials management approach. NEWMOA is a great organization that has continued to stay focused on its mission. It has been able to do this because of the active involvement of the dedicated state program directors as well as the great NEWMOA executive leadership & its fantastic staff, which is its heart & soul. I hope NEWMOA's next 25 years are as productive & as effective as the first 25 years."
Used Oil Brochures 1998
National P2 Network 1998
NEWS!!!
It's never too late to be up-to-date.

Set up your own news aggregator or republish national P2 news

- 1998 - Helen Waldorf, MassDEP
- 1997 - Philip O’Brien, NH DES
- 1996 - Dick Barlow, CT DEP
- 1995 - John Iannotti, NYS DEC
- 1994 - Gary Sondermeyer, NJ DEP
- 1993 - Bill Ahearn, VT DEC
- 1992 - Pat Deese-Stanton, MassDEP
1999 Highlights

- Annual Training & Technology Transfer Conference held
- Summit on Mercury Action Plan held
- P2 Metrics Menu developed
- BUDs Workgroup formed
- HW Inspector workshop held
- EMS workshop held
- SW financial assurance workshop held
1999 Highlights

- Medical waste management workshop held
- Regulating C&D facilities workshop held
- NEWMOA website launched
- P2 Topic Hubs launched
- P2 Programs Directory launched
- Low VOC Compliant Coatings for Auto Body Shops published
- Pressure Sensitive Tapes & Labels published
NEWMOA Annual Conference
1999

Dwight Peavey, EPA Region 1
NEWMOA Annual Conference
1999

Carl Dierker, MA DEP &
Joel Hirschhorn, National Governors’ Assoc.
Pollution Prevention Train-the-Trainer

National Pollution Prevention Roundtable
Tuesday, April 6, 1999
Washington, DC

Participant Materials


Trainers
Jody Hensley
Toxics Use Reduction Institute
University of Massachusetts Lowell
One University Avenue
Lowell, MA  01554
(978) 934-3275

Terri Goldtharg
Northeast Waste Management Officials Assn.
129 Portland Street
6th Floor
Boston, MA  02114
(617) 367-8558
P2 in Permitting Programs 1999

NESCIAUM/NEWMOA

Pollution Prevention in Permitting Programs

November 2 & 3, 1999
Pressure Sensitive Tapes & Labels

THE CLEAN AIR ACT AMENDMENTS OF 1990
AND POLLUTION PREVENTION OPPORTUNITIES

NEWMOA & NESCAUM

Northeast Waste Management Officials’ Association and
Northeast States for Coordinated Air Use Management
Automotive Compliance Outreach
1999

The Finishing Line

Q & A on
Low VOC Compliant Coatings
for Auto Body Shops
2000 Highlights

- Annual Training & Technology Transfer Conference held
- Mercury model legislation published
- NEGC resolution on mercury product legislation signed
- *MSW Flow* published
- E-waste stakeholders meeting held
2000 Highlights

- Environmental Merit Award for Technology Review Committee awarded
- Multi-regional conference on mercury-added products held
- *P2 for Lithographic Printers* CD published
- *RCRA Compliance for Metal Finishers* video distributed
2000 Highlights

- “Energy Efficiency & P2” workshop held
- Marina Workgroup formed
- P2 Projects database launched
- Meeting on “Hazardous Waste Identification Rule & Mixed Waste Regulations” held
P2 for Lithographic Printers CD-Rom 2000
2001 Highlights

- Annual Training & Technology Transfer Conference held
- IMERC launched
- *Solid Waste Action Plan* published
- WSC partnership to improve site characterization initiated
- Technology Review Committee advisory opinions developed
2001 Highlights

- Email listservs launched
- Mercury Reduction database launched
- Advanced RCRA Inspector workshop held
- NEPSI dialogue on e-waste launched with NEWMOA participation
- Cleanout of mercury from Massachusetts public schools started
2001 Highlights

- P2 for Machining & Metal Fabrication published
- Database for P2 metrics initiated
- Workshop on PBT reduction held
- P2 Integration workshop held
- Contaminated sediments meeting held
- Marina Workshop held
- EMS workshop held
POLLUTION PREVENTION IN
Machining and Metal Fabrication

A Manual for Technical Assistance Providers

NEWMOA
The Northeast Waste Management Officials’ Association
School Mercury Cleanout Initiative 2001

John Alphin, SCRAM with mercury barometer

Karen Thomas, NEWMOA recycling a mercury blood pressure gauge at Gardner High School
School Mercury Outreach, Education and Clean-Out Pilot Project and Community and Institutional Mercury Pollution Prevention and Outreach Pilot Project

Final Report June 2001

NEWMOA Northeast Waste Management Officials' Association
Mercury Public Service Campaign

Lori Segall, MassDEP; Karen Thomas, NEWMOA; Mark Oram, Ashland High School
Taping a Public Service Announcement for Community Cable Television
Bay Path Technical High School
2001

John Lafleche, Bay Path & John Alphin, SCRAM

Karen Thomas, NEWMOA
at Regional Business Managers Meeting
IMERC Launched 2001

Mercury Reduction Laws & Programs
Starting in 1999 the Northeast states began pursuing enactment of legislation focused on reducing mercury in products and waste. As of early 2003 Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont have passed some mercury education and reduction legislation. At least two of these states have enacted the following as of January 2003:

- Interstate Mercury Clearinghouses: Authorizes the establishment of IMERC. (Enacted by Connecticut, Maine, New Hampshire, and Rhode Island)
- Notification: Requires manufacturers, distributors, and importers to provide written notification about mercury-added products that will be offered for sale in the state. (Enacted by Connecticut, Maine, New Hampshire, and Rhode Island)
- Restrictions on the sale of certain mercury-added products: Bans the sale of certain mercury-added products and may include novelty items, fever thermometers, thermostats, and dairy manometers, and the use of mercury in school classrooms. (At least some portions enacted by Connecticut, Maine, Massachusetts, New Hampshire, and Rhode Island)
- Phase-out and exemptions: Institutes a gradual phase-out of mercury-added products with a process for applying for exemptions. (Enacted by Connecticut and Rhode Island)

- Labeling: Requires certain mercury-added products and their packaging to have a label that indicates the presence of mercury and the products should be disposed of or managed properly. (Enacted by Connecticut, Maine, Rhode Island, and Vermont)
- Collection Plans: Requires manufacturers to submit for approval by the state plans for collection systems that they will finance for the mercury-added products they sell in the state. (Enacted by Connecticut and Rhode Island)
- Disposal Bans: Requires the recycling of hazardous waste disposal of certain mercury-added products. (Enacted by Maine, Rhode Island, and Vermont)
- Limitations: Limits the sale of elemental mercury to medical and industrial use. (Enacted by Connecticut, Maine, New Hampshire, and Rhode Island)

Mercury-Added Products Database
IMERC has created an online “Mercury-Added Products Database” of information on the amount and purpose of mercury in consumer products reported by manufacturers under the notification requirements of the states’ mercury reduction legislation. The database informs consumers, recyclers, solid waste facilities, policy makers, and others about:
- products that contain intentionally added mercury
- the amount of mercury in specific products
- the total amount of mercury used in specific product categories that were sold in the US in a given year (first reporting year was 2003)
- the manufacturers of mercury-added products

Online Information
http://www.newmoa.org/prevention/mercury/imerc offers additional information about IMERC and contains the manufacturer, wholesaler, and trade association notification forms.
http://www.newmoa.org/prevention/mercury/educational.cfm provides general information about mercury and some mercury-added products and alternatives.
http://www.des.state.ct.us/epw/mercury/mercury.htm provides specific information about Connecticut’s “Act Concerning Mercury Education and Reduction.”
http://www.state.me.us/dp/mercury/legreg.htm provides information about all of Maine’s laws that are specific to mercury-added products.
http://www.des.state.nh.us/shpg/registration.htm provides information about all mercury legislation in New Hampshire.
http://www.state.nh.us/dam/topics/mercury.htm provides information about Rhode Island’s “Mercury Reduction and Education Act.”
http://www.merc.org provides information about Vermont’s Mercury-Added Product Labeling Law

For more information on IMERC contact:
IMERC, c/o NEWMOA
129 Portland Street, 6th floor
Boston, MA 02114
(617) 367-8558 (phone)
(617) 367-0449 (fax)
www.newmoa.org/prevention/mercury/imerc

Printed on recycled paper with soy-based ink.
Total mercury sold in products in the U.S. was ~129.4 tons in 2001 & ~69.2 tons in 2007, a decline of ~46 %

Reductions in product categories:

- Measuring devices = 77 %
- Thermostats = 73 %
- Switches & Relays = 48 %
- Dental amalgam = 46 %
- Button cell batteries = 25 %
- Mercury-added lighting = unchanged
2002 Highlights

- Annual Training & Technology Transfer Conference held
- IMERC Database launched
- “Breaking the Mercury Cycle” conference held
- 8 Good Ideas for Reducing Mercury Exposure & Pollution published
- Workshops on waste site characterization held
2002 Highlights

- Corrective Action conference held
- “Emergency Response After 9/11” meeting held
- 1st P2 webinar held on EPP
- 1st P2 & Compliance Assistance Metrics software released
- *Interstate Flow of Municipal Solid Waste* published
2002 Highlights

- *Waste Tires in the NEWMOA States* published
- P2 metrics software released
- C & D materials interstate flow report initiated
- Salvage yard workgroup formed
- Mercury-added product bans & phase-outs supported
2002 Mercury Conference

Breaking the Mercury Cycle

Long Term Management of Surplus & Recycled Mercury & Mercury-Bearing Waste

May 1-3, 2002

Hynes Convention Center

Boston, MA
2003 Highlights

- Board’s Strategic Plan developed
- National P2 Results Task Force launched
- Greening government conference held
- Dioxin - Burn Barrel Workgroup formed
- P2 innovative technology profiles developed
2003 Highlights

- Advanced Hazardous Waste Inspector workshop held
- Research brief on management of pressure treated wood developed
- Solid waste flow report published
- Site characterization fact sheets initiated
- IMERC membership expanded beyond the region
Greening Government Conference 2003

Sponsored by U.S. EPA Regions 1, 2, 3 & NEWMOA

Research Triangle Park - an EPA Green Facility

June 4-6, 2003
Sheraton Rittenhouse Hotel
18th and Locust Streets
Philadelphia, Pennsylvania
“The value that NEWMOA brings to the states cannot be overstated, especially the open communication that allows us to learn from both each others successes & failures.”
2004 Highlights

- Outreach materials on effective & less costly waste site cleanups published
- Common measures project initiated
- Data analysis on mercury use in products started
- Recommendations to EPA for improving compliance assistance provided
2004 Highlights

- Case studies of institutional controls at waste sites developed
- “Improved Quality of Site Characterization” workshops held
- Innovations Summit held
- Advanced Hazardous Waste Inspector workshop held
- Lamp Recycling Workgroup formed
- Meetings on C & D management held
Deadline for Mercury-added Phase-Outs & Exemption Applications – July 1, 2004

IMERC has posted guidance on its webpage — www.newmoa.org/prevention/mercury/imerc/phaseoutinfo.cfm — for manufacturers of mercury-added products to help them comply with phase-out and collection plan requirements in Connecticut, Maine, and Rhode Island. The states have enacted specific mercury product phase-out and collection system plan laws, and the guidance material on the website describes how companies can comply with them. The first deadline for mercury-added product phase-outs is July 1, 2004 in Connecticut and applies to mercury-added products with more than one gram or 250 parts per million (ppm) of mercury. Manufacturers of these products must either phase-out the sale of these products in Connecticut or submit a “Phase-out Exemption Application” that meets the criteria specified in the state’s law. Manufacturers can find the Application on the IMERC webpage identified above.

For more information contact: Terri Goldberg, NEWMOA (617) 367-8558 x302, tgoldberg@newmoa.org.

Guidance on Compliance with Product Bans for Mercury-added Products Sold & Distributed in the US

IMERC has posted guidance on its webpage — www.newmoa.org/prevention/mercury/imerc/productban.cfm — that is designed to help manufacturers, importers, and distributors of mercury-added products understand how to comply with specific mercury-added product bans in the United States.

This guidance document covers product bans enacted in the IMERC and non-IMERC member states. The mercury-added product bans enacted in the applicable states generally focus on the following categories of products: mercury-added fever thermometers, dialy temperature thermometers, and other measuring devices that have widely available non-mercury alternatives. These product bans do not allow manufacturers to apply for an exemption.

For more information contact: Terri Goldberg, NEWMOA (617) 367-8558 x302, tgoldberg@newmoa.org.

Requirements for Updating Mercury-added Product Notification Forms

The deadline for updating Mercury-added Product Notification Forms will be April 1, 2005, including reporting total mercury use for US sales of mercury-added products in calendar year 2004. Mercury-added product manufacturers or their representatives are required to submit an updated Mercury-added Product Notification Form if (1) there is a change in any of the information required for the Notification (e.g., increase or decrease in the amount of mercury); (2) the mercury is eliminated from the product; (3) the manufacturer stops manufacturing the mercury-added product or product category; (4) the mercury-added product or product category is no longer sold in states requiring Notification; or (5) the manufacturer begins to produce additional mercury-added products. Every three years the total mercury use information is required to be updated and reported for a full calendar year.

For more information contact: Terri Goldberg, NEWMOA (617) 367-8558 x302, tgoldberg@newmoa.org.
2005 Highlights

- Common Measures Project training held
- EMFACT™ project launched
- Advanced Hazardous Waste Inspector workshop held
- C & D materials reuse meeting held
- Awareness campaign to eliminate burning of waste in outdoor barrels started
2005 Highlights

- Brochures on improving site investigations published
- National mercury reduction conference held
- NE Environmental Summit held
- Initiative on emerging chemicals of concern launched
Open Burning of Waste 2005

Burning trash is DANGEROUS!

SO PLEASE PUT TRASH WHERE IT BELONGS.

For more information: www.dec.state.ny.us

New York State Department of Environmental Conservation

Burning trash can contribute to asthma attacks, emphysema and other health related illnesses in your family and neighbors.

Transfer Station and Recycling Center
Region 2 Science Day 2005

Non-Regulated Pollutants
Brominated Flame Retardants and Pharmaceuticals
Approaches to Emerging Chemicals Issues

October 25-26, 2005
EPA Region 2
290 Broadway
New York, NY

Additional Information:
www.epa.gov/region2/events

Organized by:
U.S. EPA – Region 2
Northeast Waste Management Officials’ Association

NEWMOA
EPA Region 2 Science Day 2005

Walter Schoepf, Nora Lopez, Marian Olsen, & Ariel Iglesias
EPA Region 2
“Congratulations on reaching this milestone. NEWMOA was an important part of the P2 effort in the Northeast when we were all starting out on uncharted paths. The ability to exchange information & experiences among the various state programs was invaluable. We all gained from those relationships which NEWMOA fostered through its meetings & workshops.”
Don’t trash fluorescent lamps! *Recycle them.*

Fluorescent and High Intensity Discharge (HID) lamps contain mercury. Improper disposal releases mercury into our air, water and soil, harming human health and wildlife. For more information on state regulations and required management options visit http://www.newmoa.org/lamprecycle

Recycle Your Lamps.
Proper lamp management minimizes your liability.

Sponsored by the Northeast Waste Management Officials’ Association (NEWMOA). This is an EPA Funded Project.
Lamp Recycling Outreach 2005

How to recycle mercury lamps in 8 easy steps:

Highly efficient fluorescent lighting is an excellent choice for both financial and environmental reasons. Fluorescent and HID lamps contain mercury, however, and must be managed properly, especially when they become a waste. Tossing mercury lamps in the trash is no longer a lawful option. Disposal of lamps as hazardous waste can be expensive. Recycling spent lamps, however, is a cost-effective disposal alternative.

1. Assess your facility
   How many fluorescent and HID lamps do you use? How many do you dispose of each month, or each year? What do your employees do now with spent or broken lamps?

2. Choose a recycling company
   See www.nwmo.org/lampcycle for a list of recyclers operating in the Northeast. Your recycler will explain how to properly store spent fluorescents and prepare them for shipping, as well as provide storage containers, transportation, and a certificate of recycling. See the back for alternatives to recycling companies.

3. Establish a process for collecting and managing used lamps as Universal Waste
   Designate a safe, dry storage area where the lamps won’t be broken. Make sure employees know whom to call when a lamp breaks out, or what to do if one breaks.
   If your building generates small amounts of waste lamps, consider recycling through a “box program.” In this type of program you collect spent lamps in a prepaid, labeled shipping container, purchased from a recycler or distributor. When the container is full, you simply mail it to the recycler. Note: Maine does not permit box program recycling.
   If your building generates large amounts of waste lamps, recyclers can make regular pickups. Also, consider relamping in bulk. This could save you money.

   Mark each container with “Universal Waste - Lamps,” “Waste Lamps” or “Used Lamps,” and the date accumulation begins. Get lamps to the recycler within one year.

5. Properly manage broken lamps
   Clean up broken lamps promptly, placing shards and spilled powder in a puncture-resistant sealed plastic bag, or bucket. Wear gloves and use a damp cloth to sweep up the powder. Place all cleanup materials in a separate sealed container. Never vacuum lamps; it will simply spread the mercury vapor. You may recycle broken lamps at the same facility as your intact lamps. Do not throw them in the regular trash.

6. Save records
   Save recycling certificates and bills of lading or invoices that track your lamps, particularly if you do not work directly with a recycler.

7. Include recycling costs in your annual budget
   See back for cost estimates.

8. Let your tenants know you are recycling
   They’ll appreciate your concern for the environment! Encourage them to recycle too.
8 Good Ideas

for Reducing Mercury Exposure and Pollution in your Community

A GUIDE FOR MUNICIPAL OFFICIALS

As a municipal official with responsibility for some aspect of public health or environmental protection, you have many complex and important issues vying for your attention. This brochure is intended to assist you in dealing with one of these issues - MERCURY. Because mercury has been getting a great deal of media coverage recently, it is a good time to implement new outreach, education and enforcement programs. Here are 8 Good Ideas to assist you.

Getting Mercury Out of Schools & Communities

Why it's a problem. Where it is. What to do.

The Commonwealth of Massachusetts

Jane Bell, Governor

Executive Office of Environmental Affairs

Ned Davis, Secretary
2005 Mercury Conference

Carol Hubbard, MN PCA with “Clancy” - a mercury-sniffing dog
2005 Mercury Conference

Leeann Hanson, Carole Cifrino, Terri Goldberg, & Jeri Weiss
2005 Mercury Conference

Malcom Burson,
ME DEP
“NEWMOA has provided an indispensable service to the region. No one else has so effectively knitted together all the preventive & innovative initiatives going on in the states, so that we all know about what is going on & have a chance to coordinate with each other to produce more effective results. No one else has shown so much leadership, on a regional & national basis, on the cutting edge, which is so crucial to progress. Few can rival NEWMOA’s record in achieving so much benefit for the public & the environment with so few resources.”
Pharmaceuticals Workshop 2005

Ken Geiser, UMass Lowell Center for Sustainable Production
Board of Director’s Meeting
2005
Northeast Environmental Summit 2005

Shelley Metzenbaum, ECC & Bill Cass, NEWMOA
Northeast Environmental Summit 2005

Rob Guillemin & Beth Termini, EPA Region 1
Northeast Environmental Summit 2005

Lee Dillard Adams, MassDEP

Paul Richard, MA OTA
Northeast Environmental Summit 2005

Peter Cooke, ME DEP & Stephanie D’Agostino, NH DES
Northeast Environmental Summit 2005

Linda Darveau, EPA Region 1; Patricia Carrier, NH Ball Bearing Co; & Judy Wlodarczyk, Conntep
Northeast Environmental Summit
2005

David Aucion,
Narragansett Bay Commission

Professor John Warner,
UMass Lowell
Northeast Environmental Summit
2005

Gary Gulka
VT DEC
EMFACT Launched 2005

EMFACT
Energy & Materials Flow and Cost Tracker
“It would have been hard to predict 25 years ago just how much states would benefit from the scope & the depth of NEWMOA’s activities on their behalf.”
NEWMOA Chairs: 1999 - 2005

- 2005 - Anthony Giunta, NH DES
- 2004 - Sarah Weinstein, MassDEP
- 2003 - Mark Hyland, ME DEP
- 2002 - Dick Barlow, CT DEP
- 2001 - Skip Flanders, VT DEC
- 2000 - Terry Gray, RI DEM
- 1999 - Allan Ball & Mark Hyland, ME DEP
2006 Highlights

- Interstates ERP meeting held
- Vapor intrusion workshop held
- In-situ chemical oxidation workshop held
- Avian Flu workshop held
- Outreach to generators on lamp recycling conducted
- MSW Flow Analysis published
2006 Highlights

- Advanced Hazardous Waste Inspector workshop held
- Nation RCRA Corrective Action Conference held
- NEWMOA - NERC meeting on reuse & recycling of C & D held
- Assistance for mercury removal from schools provided
Improving Site Investigation

A guide for property owners, buyers and sellers, attorneys, bankers, insurance representatives, and their environmental consultants.

The 4C’s of Successful Site Investigations

1. **Comprehensive planning** at the beginning of the project.
2. **Collection of sufficient data**, both on and off the property.
3. **Clear reporting** about what was done and why.
4. **Compliance** with state Site Investigation (SI) report requirements.

A site investigation (SI) determines whether a property has been affected by chemical contamination and whether the contamination is at levels that require cleanup under state regulations. The concepts promoted in this brochure may or may not be required by state regulations. However, following the 4C’s is more likely to result in a project that moves through the system faster and is more resource-efficient for all involved – responsible parties, consultants, and state regulators.
First U.S. Conference on
Characterizing Chemicals in Commerce:
Using Data on High Production Volume (HPV) Chemicals

December 12-14, 2006
Radisson Inn, Austin, Texas

Presented by the U.S. EPA Office of Pollution Prevention & Toxics and
The Northeast Waste Management Officials’ Association (NEWMOA)

Exchanging Ideas and Information
Conference Co-Sponsors: Environmental Council of the States, National Pollution Prevention Roundtable, and
Lowell Center for Sustainable Production
For more information: www.newmoa.org/HPV and www.epa.gov/HPV
High Production Volume Chemicals 2006

Ginger Jordan-Hillier, Maine DEP
High Production Volume Chemicals
2006

Paul Richard,
MA OTA
**DOING OUR PART**

*We collect, manage, and recycle all amalgam waste to protect the public and the environment.*

**WE WILL NEVER**
- Rinse scrap amalgam down the drain
- Dispose of scrap amalgam in the regular garbage
- Dispose of scrap amalgam or extracted teeth filled with amalgam in the red biohazard bag

**WE WILL ALWAYS**
- Use only pre-encapsulated alloys and remove all elemental mercury from our office
- Collect and recycle ALL amalgam wastes including:
  - Used amalgam capsules
  - Extracted teeth containing amalgam (disinfected first)
  - Disposable amalgam traps and contaminated reusable traps
  - Used vacuum pump filters
  - Waste amalgam sludge from amalgam separator filters
  - Install and maintain appropriate amalgam separators
  - Keep all records showing proof of mercury and amalgam waste recycling
  - Collect and recycle previously settled mercury and amalgam sludge when replacing or repairing plumbing

*It’s the law in New York State, and it’s the right thing to do!*

For more information contact the NYS Department of Environmental Conservation at (518) 402-8705 or visit: www.dec.state.ny.us/website/dshq/recycle/mercury.htm
BMPs for Dental Amalgam 2006

DENTISTS ARE DOING THEIR PART TO PROTECT THE ENVIRONMENT
They collect, manage, and recycle all mercury amalgam waste

WHAT CAN YOU DO?
Ask your dentist about alternatives to amalgam fillings

The New Jersey Department of Environmental Protection’s Best Management Practices for Amalgam Waste

DO
DO use mercury-free materials, when appropriate.
DO recycle all amalgam waste containing mercury. Store amalgam waste in airtight containers.
DO use precapsulated alloys. Recycle used disposable capsules containing mercury.
DO disinfect and store amalgam pieces from removal and restoration with amalgam waste.
DO install chair-side traps in each operator and filters in the vacuum system of every operatory when restoration work is done.
DO change and clean chair-side traps and vacuum filters.
DO have a licensed recycling contractor, apply for service of hazardous waste hauler removal amalgam waste.

DON’T
DON’T use bulk elemental mercury.
DON’T place traps or vacuum pump filters over drains or in the sills.
DON’T throw or place the disposable trap, skidde from reusable trap, or vacuum pump filter or contents with regular garbage.
DON’T throw or place the disposable trap, skidde from reusable trap, or vacuum pump filter or contents into sharps containers or biohazard bag.
DON’T flush amalgam waste down the drain.
DON’T use cleaners with bleaches or chlorines to clean vacuum system lines.

Protecting the Environment

For more information visit
www.cleanwaterNJ.org

NDA

145
Tanning Lamp Recycling Outreach 2006

Tanning Bed Lamps Out?

RECYCLE.

All generators of used fluorescent and other mercury-containing lamps ARE RESPONSIBLE BY LAW for their proper management.

STEP 1: CONTACT A LAMP RECYCLING COMPANY. Visit www.newmoa.org/lamprecycle for a list.

STEP 2: CAREFULLY REMOVE SPENT LAMPS according to the tanning bed manufacturer's directions.

STEP 3: DO NOT CRUSH OR BREAK LAMPS - lamps that contain mercury pose significant health risks.

STEP 4: PLACE LAMPS IN THE BOX provided by your lighting sales company or a lamp recycler.

STEP 5: Once the box is full, HAVE YOUR LAMPS PICKED UP FOR RECYCLING.

For more information, contact Tom Metzner at the Connecticut Department of Environmental Protection at 860-424-3242.

Look for the \( \text{(Hg)} \) symbol, which means the lamp contains mercury and must be recycled.

Printed on recycled paper.
2007 Highlights

- Climate - Waste Action Plan initiated
- Training on school chemical cleanouts held
- Comments to EPA’s on revisions to the definition of solid waste submitted
- BUD database improvement started
- National Chemicals in Commerce Conference & workshops held
2007 Highlights

- Paperless meetings initiated
- “Environmental Insurance & Brownfields” workshops held
- Vapor instruction workshops held
- Characterization of chlorinated solvent sites workshops held
- Advanced Hazardous Waste Inspector workshop held
- Common Measures Project implemented
“NEWMOA has served the residents & communities of its collective states on many efforts vital to their environmental & ecological sustainability. The worthiness & value created by these efforts is a reflection of the dedication of the NEWMOA staff & the representatives from the States. People make the difference & in the case of NEWMOA, the collaboration has been excellent over its timeline. There are many to thank for their work.”
“The accomplishments are markers for history that provide those who follow with guidance & wisdom as they too strive to help our society create a sound quality of life for future generations. I hope that the "Spirit of NEWMOA"….its wonderful people… can weather the storms ahead & continue to provide quality help on its important, worthy goals.”
Since 2000, states in the Northeast have enacted major legislation to address mercury use in products and ultimately in solid and hazardous waste. This legislation includes bans and phase-outs on the sale of certain products, requirements for product labeling, and requirements for manufacturers to report on their use of mercury in products that are sold in the region. These laws affect a wide variety of products, including mercury thermometers, thermostats, switches and relays, and products that contain these components, various measuring devices, linear and compact fluorescent bulbs, button batteries, and others.

In addition to these requirements, state environmental agencies have initiated mandatory and voluntary programs for collecting certain mercury-containing products at their end-of-life. Mercury-added products that have been targeted for collection and recycling include convenience light switches in cars, linear and compact fluorescent bulbs, fuse thermostats, thermostats, dental amalgam in wastewater, and various measuring devices, such as dairy manometers and sphygmomanometers (i.e., blood pressure cuffs). Finally, state programs have also focused on eliminating or reducing the use of mercury and mercury-added products by various types of facilities, such as schools and hospitals, and removing the existing inventory of these products at those locations.

This paper presents a brief quantitative summary of the mercury reduced from the waste or wastewater stream as a result of these key initiatives in the Northeast, where data are available. Overall, the state programs collected and recycled approximately 7.5 tons of mercury through product collection and recycling initiatives in the region from 2000 to 2006. The states’ best estimate of the mercury that has been eliminated through restrictions on product sales in the region from 2000 to 2006 is approximately 14 tons. This is the first attempt by the states in the region to quantify the overall results of their regulations and programs, and this paper outlines the methods NEWMOA used to estimate these reductions and describes some of the associated uncertainties.

The reduction estimates presented here are conservative because, while state and local governments have initiated a number of programs to reduce and collect mercury, they have not been able to fully quantify the associated reductions in mercury from all of these efforts. Furthermore, the estimates of the impacts of the state phase-out requirements and product bans are conservative because the estimates are based on information from manufacturers of the products, and the states continue to find additional products that must be phased out and to identify product manufacturers that have not been reporting their mercury use as required by state laws. Also, if a company reported that it was at some point in the middle of a year that it stopped selling its product or eliminated the use of mercury in its products, NEWMOA used a conservative approach in estimating the reduction for that year.

Overview of Major Sources of Mercury in Waste

A recent report, titled Mercury in Products in Massachusetts Summary and Analysis of the Mercury-added Products Database, June 2006, (available at...
Board of Director’s Meeting
2007
The first paperless Board of Directors’ meeting was in June 2007. Instead of using traditional binders full of meeting materials, the Board used laptop computers. The average amount of paper used in each quarterly Directors’ meeting was over 14,000 sheets of paper.

Since June 2007, NEWMOA has saved 252,000 sheets of paper.
NE A & P2 Roundtable
2007
2008 Highlights

- EPP Consortium launched
- Research on gypsum wallboard recycling started
- Training program on agricultural plastics recycling started
- ERP inspections for SQGs completed & data collected
- Performance indicators for auto body sector developed
2008 Highlights

- *Trends in Mercury Use in Products* published
- “Northeast States Succeed in Reducing Mercury” published
- Disaster debris management coordination meetings held
- Safer Chemicals Workgroup started
- Hospitality Workgroup formed
2008 Highlights

- Advanced Hazardous Waste Inspector workshop held
- Remediation of Chlorinated Solvents workshop held
- Workshop on renewable energy on waste sites held
- P2 Results for the Region reported
- Workshops & meetings on cleanup of broken CFLs held
NYS School Chemical Cleanout
2008

Deb Knight,
NYS DEC
with HW contractors
Reducing Mercury in the Northeast 2008

REDUCING MERCURY IN THE NORTHEAST UNITED STATES
by Susannah King, Paul Miller, Terril Goldberg, John Graham, Stephen Hochmann, Adam Wiener, and Meg Wilcox

Over the past 10 years, the states in the Northeast United States—for purposes of this article, the Northeast States are Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Rhode Island, and Vermont—have put tremendous effort into regional approaches to reduce mercury in the environment. In 1998, the New England Governors (NEG) and Eastern Canadian Premiers (ECP) Committee on the Environment formed a regional mercury task force with a goal of virtually eliminating all in-region human-related sources of mercury emissions and discharges. This initiative was instrumental in jump-starting mercury reduction programs across the region.

The states added momentum in 2007 when the six New England states and New York developed a regional proposal to establish a Northeast Mercury Total Maximum Daily Load (TMDL) under the U.S. Clean Water Act. The U.S. Environmental Protection Agency (EPA) approved the regional Northeast Mercury TMDL request in December 2007.

The Northeast States, through their state mercury reduction programs, are achieving significant and rapid reductions in mercury releases from in-region pollution sources, and are beginning to see indications that these reductions are resulting in lower accumulated mercury levels in the environment.

The primary concern associated with mercury is human exposure through the consumption of fish contaminated with this toxic metal. The mercury that accumulates in fish primarily originates from air emissions; sources include the burning of coal at power plants, burning of mercury-containing products at municipal waste combiners and medical waste incinerators, burning of sewage sludge that contains mercury from dental and other uses, and releases attributable to broken mercury-containing products (e.g., thermometers). Mercury that is released to the air returns

Susannah King is an environmental analyst and Stephon Hochmann is the communications manager for the New England Interstate Water Pollution Control Commission, Lowell, MA. Paul Miller is deputy director and John Graham is a project manager with the Northeast States for Coordinated Air Use Management, Boston, MA. Terrill Goldberg is deputy director, Adam Wiener is the Interstate Mercury Education and Reduction Clearinghouse coordinator, and Meg Wilcox is a former project manager, all with the Northeast Waste Management Officials’ Association, Boston, MA. E-mail: pmiller@newcum.org.
"I have appreciated, over the last 14 years in P2, the Roundtable as a place where I could hear about the experiences of other states & how various challenges could be met. The most rewarding times were when we had annual face-to-face meetings. Sometimes you learned as much or more over a meal than in a structured environment. As a public servant, it has been my pleasure to participate in the NE A & P2 Roundtable for these many years. Thanks NEWMOA & wishing you many more years as an effective & helpful organization."
Board of Director’s Meeting
2008
MA Oil Spill Response Training
2008
MA Oil Spill Response Training 2008
NE A & P2 News Through the Years

Fall 2009
Greening Government

Spring 2008
P2 for Hospitality

Spring 2010
20 Years of P2
2009 Highlights

- Interstate Chemicals Clearinghouse (IC2) started
- *Climate-Waste Action Plan* published
- *Construction & Demolition Waste Management* published
- Updated BUDs database launched
- Gypsum wallboard project launched
- *Review of CFL Recycling* published
2009 Highlights

- Advanced Hazardous Waste Inspector workshop held
- Region 2 P2 meeting held
- P2 Internship Topic Hub published
- Common Measures Report published
- Greener cleanup workshop held
- Contaminated sediments workshop held
- Annual Brownfields meeting held
Using the P2 Results Data System, programs in Regions 1 & 2 documented that they have worked with companies, institutions, government agencies, and others to reduce their operating costs by an estimated $1.6 billion.

They also documented the reductions in materials and wastes:
- 75,706 tons of hazardous materials
- 9,982 tons of hazardous waste
- 2,503 tons of non-hazardous materials
- 2,714 tons of solid waste
Board of Director’s Meeting
2009
2009 Mercury Science & Policy Conference

WELCOME

2009 Mercury Science & Policy Conference
With a Special Focus on the
Great Lakes & Northeast Regions

Union League Club of Chicago
November 17-18, 2009
2009 Mercury Science & Policy Conference

Terri Goldberg, NEWMOA
Beverly Migliore, Rhode Island DEM
2009 Mercury Science & Policy Conference

Mark Smith, MA DEP
2009 Mercury Science & Policy Conference

Stephanie D’Agostino, NH DES
THE STATES COMMON MEASURES PROJECT

Final Report

Revised: December 3, 2009

Prepared by: Steven DeGabriele, Massachusetts Department of Environmental Protection, Susan Peck, Massachusetts Department of Environmental Protection and Tara Acker, Northeast Waste Management Officials Association.


An electronic copy of this report and other supporting materials can be found at http://www.newmoa.org/hazardouswaste/measures/index.cfm
2010 Highlights

- Commercial Waste Paper Recycling Summit held & Workgroup formed
- Advanced Hazardous Waste Inspector workshop held
- 20th Anniversary of P2 celebrated
- Mercury-Added Products Found at Drinking Water & Wastewater Treatment Facilities published
2010 Highlights

- P2 & Sustainability conference in Puerto Rico held
- *Promoting Greater Recycling of Gypsum Wallboard* published
- BUD database improvements completed
- ERP for Auto Body Shops in Region 5 initiated
2010 Highlights

- Mercury Science & Policy Conference held
- “Enhanced In-Situ Bioremediation” workshop held
- “Remediation of Contaminated Sediment Sites” workshop held
- Annual States-EPA Brownfields meeting held
Real-Time Data Collection
2010
Real-Time Data Collection
2010
2010 Conference to Advance P2 in Puerto Rico & US Virgin Islands

EXPANDING BUSINESS VALUE
THROUGH POLLUTION PREVENTION & SUSTAINABLE PRACTICES

A Green Business Conference Focused on the Manufacturing & Hospitality Industries in Puerto Rico & the U.S. Virgin Islands

MAY 18 - 19, 2010
CARIBE HILTON
SAN JUAN, PUERTO RICO

SPONSORED BY

WWW.NEWMOA.ORG/PREVENTION/CWM/PR/
2010 Conference to Advance P2 in Puerto Rico & US Virgin Islands

Carl Axel-Soderberg,
Director of the
Caribbean
Environmental Protection Division,
US EPA Region 2
2010 Conference to Advance P2 in Puerto Rico & US Virgin Islands

Andy Bray, NEWMOA
2010 Conference to Advance P2 in Puerto Rico & US Virgin Islands

Joe Bergstein,
US EPA Region 2
2010 Conference to Advance P2 in Puerto Rico & US Virgin Islands

Erik Garcia, Pfizer; Rafael Pagan, PRMA; & Paul Lockwood, NH DES
“My earliest recollection of NEWMOA goes back to the 1990’s when I was working on New Jersey’s Facility-Wide Permit project and Terri, Jennifer, & Andy were leading discussions on integrating P2 into single-media programs. Which we’re still talking about! Over the years, I have come to depend on NEWMOA for support, encouragement, & technical & policy expertise. I have also developed a deep respect for NEWMOA & a strong friendship with staff, particularly Terri & Andy, who like me are ‘P2 old timers’.”
Agricultural Plastics Recycling 2010

Best Management Practices to Keep Plastic Clean Enough to Recycle

- AVOID MUD and MANURE as much as possible. Don’t run tractor over plastic. Locate silage bags and bales on a concrete pad, asphalt, or on high, dry ground.

- CUT FILM BEFORE REMOVING SILAGE. Cut into pieces of size and weight one person can handle.

- SHAKE or BRUSH OFF forage, soil, stones.

- ROLL or FOLD DRY FILM into bundles about the size of a large pillow (2’ x 3’). Stored film must be dry.

- SEPARATE DIFFERENT PRODUCTS and TYPES. Do not mix different products in one bale (e.g., separate bale wrap from silage bags and bunker covers; twine or bale net from bale wrap, etc.). Separate cleaner film from dirtier. No PVC accepted.

- CHEMICAL CONTAINERS: Triple rinse to clean. See Ag Container Recycling Council (ACRC) website: www.acrcycle.org.

- STORE UNDER COVER: Keep clean and dry as possible — e.g., store on pallets in a barn, trailer, hay wagon or outside under a tarp.

- BALING: Make 1000 - 1200 lb bale. Label with permanent marker: type of material, date, contact/phone/location.

Recycling Ag Plastics Project
Life Cycle Stewardship of Agricultural Plastics
http://environmental Dirt.com/AgPlastics
Mobile: 556-621-7492, Office: 556-215-4785

Recycling Ag Plastics Project
Life Cycle Stewardship of Agricultural Plastics
http://environmental Dirt.com/AgPlastics
Mobile: 556-621-7492, Office: 556-215-4785

Best Management Practices to Keep Plastic Clean Enough to Recycle

- CUT into pieces of size and weight one person can handle.

- BRUSH or SHAKE to remove clumps of soil, stones, plant matter.

- ROLL or FOLD DRY FILM into bundles about the size of a large pillow (2’ x 3’).

- HIGH TUNNELS, HOOPHOUSE COVERS: CUT INTO SECTIONS TO FEED “NIP ROLLER” Dimensions will depend on thickness and flexibility of film.

- RIGID PLASTIC POTS, CONTAINERS, DRIP TAPE, TRAYS

- STACK POTS and TRAYS: Knock out loose soil. Keep dry. Tie onto pallet or compress with baler.

- CHEMICAL CONTAINERS: Triple rinse to clean. See Ag Container Recycling Council (ACRC) website: www.acrcycle.org.

- STORE UNDER COVER: Keep clean and dry as possible — e.g., store on pallets in a barn, trailer, hay wagon or outside under a tarp.

- DO NOT MIX DIFFERENT PRODUCTS in a BALE Separate clean films from dirtier. No PVC accepted.

- BALING: Make 1000 - 1200 lb bale. Label with permanent marker: type of material, date, contact/phone/location.
Waste Site Cleanup Workshops

Sept. 2006

Sept. 2008

April 2010

Sept. 2011
“The opportunity that NEWMOA provides for comparing notes among state & federal directors has to be a top benefit of membership. Training for state program professionals is another critical core benefit; all the more now since NEWMOA has become the only available source of training for states on hazardous waste & site cleanup program issues.

The above exemplify the clear & compelling reasons that led the founders to establish the Association 25 years ago. NEWMOA is just as important today as it was then.”
“The mercury program is NEWMOA’s most impressive effort. We were involved from start to finish, effectively supporting & facilitating state efforts, which led to a coordinated consensus that has secured many tons of mercury from release to the environment. IMERC is a wonderful example of successful interstate cooperation & collaboration that provides a model approach. All who participated should be proud of this ongoing remarkable success.”
2010 Annual Report

Working Together to Protect Our Quality of Life
2011 Highlights

- “Ecological Risk Assessment” Workshop held
- Annual States-EPA Brownfields meeting held
- Advanced Hazardous Waste Inspector workshop held
- Sustainable lodging network launched
- Green chemistry workgroup launched
2011 Highlights

- Mercury-added Products Database e-filing developed
- In-Situ chemical oxidation workshop held
- Contaminated soils initiative launched
- IC2 publically launched
- Chemical Policy Database managed
2011 Highlights

- NEWMOA incorporated
- P2 data collection tool launched
- IC2 state priority chemicals lists database developed
- Wet cleaning technology tradeshow developed
- Survey of waste paper users initiated
- Region 2 P2 Meeting
Wet Cleaning Virtual Tradeshow
Green Chemistry & Engineering in the Northeast

Green chemistry is the design of chemical products and processes that reduce or eliminate the use or generation of hazardous substances across the entire life cycle of a product, including its design, manufacture, and use. Green engineering is the design, commercialization and use of processes and products that are feasible and economical while reducing the generation of pollution at the source and minimizing the risk to human health and the environment. These concepts and approaches are complementary and frequently practiced together and are an essential aspect of pollution prevention. See page 3 for a description of the 12 principles of green chemistry.

State pollution prevention (P2) programs have long promoted the adoption of green chemistry and engineering among their clients. This includes helping companies to utilize the products of green chemistry and implement green engineering processes, developing and implementing environmentally preferable purchasing, and creating curricula and educational opportunities at high schools and colleges. The following pages provide some examples of these efforts, a roundtable discussion with two green chemistry leaders in the region, and a description of a new multi-state regional initiative.

Maine Reduces Chlorine in Swimming Pools
In December of 2010, the Maine Department of Environmental Protection (ME DEP)’s Business Assistance Program worked with two public swimming pool owners to explore alternative technologies to reduce their use of chlorine. This was a voluntary project completed with funding from the U.S. Environmental Protection Agency (EPA). Chlorine

(continued on page 2)
NEWMOA Chairs: 2006 - 2011

2011 - Sarah Weinstein, MassDEP
2010 - Yvonne Bolton & Bob Kaliszewski, CT DEP
2009 - Gary Gulka, VT DEC
2008 - Ron Gagnon, RI DEM
2007 - Frank Coolick, NJ DEP
2006 - Dave O’Toole, NYS DEC
“I was involved as a NEWMOA director during the early years. We spent a lot of time in the 1980s building relationships with each other & EPA. Our yearly meetings in Waterville Valley were full of discussions on regional topics of concern. EPA Region I was good at reaching out to their counterparts in DC to let them hear of our needs, strengths, & our capacity to cooperate to solve problems.”
“When I left the organization, we had made great progress in P2 program support, training, & outreach. The group also began to write white papers on issues of regional concern, like trans-border solid waste disposal & hazardous waste disposal / generation capacity. In the 8 years I was active in NEWMOA, it changed from an organization trying to find itself, to one that was a leader in developing solutions to tough problems concerning waste issues.”
To develop & sustain an effective partnership of states that helps achieve a clean, healthy, & sustainable environment by exploring, developing, promoting, & implementing environmentally sound solutions for...
Current Mission

• Reducing materials use & preventing pollution & waste,
• Properly reusing & recycling discarded materials that have value,
• Safely managing solid & hazardous wastes, &
• Remediating contaminated sites.
Thanks to all of the NEWMOA Staff

Anne
Bill
Lisa
Andy
Rob
Sam
Jennifer G.
Andrea
Rachel
Lois
Terri
Jennifer S.
Karen
Maureen
Erin
Hannah
Nate
Adam
Norm
Carole
Susan
John
Meg
Tara
Mary
Sally
Current NEWMOA Staff

Terri Goldberg, Nate Bisbee, Andy Bray, Adam Wienert, Lois Makina, Rachel Smith, Jennifer Griffith
Challenges for the Future - 2036

- Maintaining State Hazardous & Solid Waste Program Capacity & Institutional Knowledge & Skills
- Advancing & Implementing Use of Alternative Compliance Strategies
- Promoting Economic Competitiveness, Clean Tech Economy, & Green Jobs
- Sustaining & Funding State Programs
Challenges for the Future - 2036

- Reducing Greenhouse Gas Emissions
- Adapting to Climate Change
- Advancing Sustainable Materials Management
- Cleaning-up the Backlog of Waste Sites Using Sustainable & Green Practices
- Innovating & Utilizing Multi-Media Approaches to Regulatory Compliance
Challenges for the Future - 2036

- Reducing Toxics in Products, Processes, & Waste
- Promoting Safer Alternatives & Green Chemistry & Engineering
- Mitigating Pollution from Emerging Technologies
- Green Labels & Certification Programs
Challenges for the Future - 2036

- Product Stewardship
- Environmentally Preferable Purchasing
- Expanding Reuse & Recycling of Solid Waste
Challenges for the Future

- Conserving Energy & Water
- Conducting Community Outreach & Improving Environmental Justice
- Measuring & Evaluating Results & Progress
- Adapting & Responding to New Waste Management Technologies
On to the Next 25 Years!

Thank you for your support!