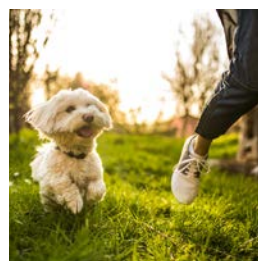
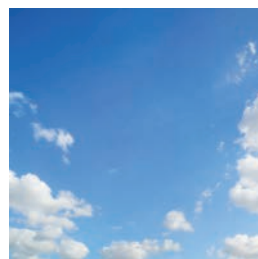
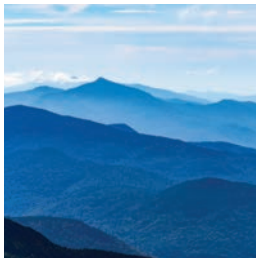


NEWMOA

2018 ANNUAL REPORT

partnerships for change





about NEWMOA

The Northeast Waste Management Officials' Association (NEWMOA) is a non-profit, non-partisan, interstate association whose membership is composed of the state environment agency programs that address pollution prevention, toxics use reduction, sustainability, materials management, hazardous waste, solid waste, emergency response, waste site cleanup, underground storage tanks, and related environmental challenges in Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Rhode Island, and Vermont.

letter from NEWMOA's 2018 chair

The year of 2018 was both an exciting year and one full of considerable challenges. Most of us faced challenges to our recycling programs caused by changes in China's contamination standard for recyclable material. We also were discovering and responding to the growing problem of per- and poly-fluoroalkyl substances (PFAS) contamination in drinking water, groundwater, landfill leachate, and other industrial sources. NEWMOA has taken an active role in assisting states with these challenges, but we know we cannot solve these problems alone.

It is a key strategy for NEWMOA to form and support partnerships with agencies and organizations to help achieve its goals. We believe that effective partnerships raise the level of performance of all of those involved beyond what could be achieved as individual agencies or groups. These relationships enrich and inform our work. This Report documents key partnerships that NEWMOA created and nourished throughout Fiscal Year 2018. We greatly appreciate the willingness of various agencies and groups to work with us, and we look forward to strengthening these collaborations in the future.

A key partnership in FY 2018 was with our sister organization, the Northeast Recycling Council (NERC). In FY 2017, NEWMOA's and NERC's Boards agreed to a [Joint Strategic Action Plan](#), which covers initiatives in:

- Food scrap reduction, recovery, and management
- Recyclables collection and impacts on manufacturing and end-users
- Product stewardship
- Climate and impacts on the recycling and solid waste infrastructure
- Construction and demolition materials

NEWMOA and NERC worked closely throughout FY 2018 implementing the Joint Strategic Action Plan, which resulted in many successful events and programs as described on pages 6-10 in this Report.

NEWMOA partnered with EPA Regions 1 and 2 on several important hazardous waste program

events. This included a series of activities in New England focused on improving compliance at commercial treatment, storage, and disposal facilities (TSDF). NEWMOA and EPA Region 1 collaboratively planned two meetings and several follow-up calls, which led to the issuance of a joint letter from states and EPA Region 1 to the TSDFs in the region outlining compliance concerns.

NEWMOA collaborated with EPA Region 2 to hold a successful workshop in New York City for New Jersey Department of Environmental Protection, New York State Department of Environmental Conservation, and EPA Region 2 hazardous waste inspectors and program staff. This was the first ever workshop that brought the RCRA staff from all of these agencies in the region together. The participants expressed strong support for continuing this kind of training and information-sharing in the future.

NEWMOA's IC2 collaborated with a number of groups on a planning committee to help form



Chuck Schwer

VERMONT
DEPARTMENT OF
ENVIRONMENTAL
CONSERVATION,
2018 NEWMOA CHAIR

“I am proud of the ways in which NEWMOA has worked hard to develop and strengthen these partnerships in the face of significant resource constraints. I look forward to seeing the fruits of these initiatives.”

an emerging national association to advance alternatives assessment. The other partners involved in this initiative include the Lowell Center for Sustainable Production (based at the University of Massachusetts, Lowell), consulting firms, companies, researchers, academic centers, and non-profit organizations. The Association for the Advancement of Alternatives Assessment (A4) was formally launched in the fall of 2018, and the IC2 will continue to support this emerging group in FY 2019 and beyond.

In FY 2018, NEWMOA undertook a new kind of partnership to promote recycling in schools. We partnered with the K-12 schools in Wakefield, MA on a proposal to enhance recycling. Wakefield is a small suburban community located north of Boston. The project will get underway in FY 2019. NEWMOA anticipates that this will provide a model from which other school districts in the region, which struggle to develop and implement recycling, can learn.

I am proud of the ways in which NEWMOA has worked hard to develop and strengthen these partnerships in the face of significant resource constraints. I look forward to seeing the fruits of these initiatives.

I'm also happy about the way that NEWMOA has helped the states confront the challenges of community drinking water supplies that are contaminated with perfluorooctanoic acid (PFOA) and perfluorooctane sulfonic acid (PFOS). States and EPA have set or are proposing to set stringent limits for these chemicals in drinking water because of their potential immunotoxic and other health effects. State environmental agencies in the region continue to extensively sample drinking water wells, install treatment systems or alternative water supplies for residents in areas where they have found contamination exceeding the

state's action levels, and sample a wide range of other environmental media. NEWMOA's workshops, information-sharing, and other support efforts on this emerging contaminant are described on pages 22-23 in this Report.

I invite you to learn about other examples of our work in FY 2018 by reviewing the rest of this Report. For a quick overview of our accomplishments, check out “NEWMOA-by-the-Numbers” and the “Highlights”.

Finally, I would like to extend my gratitude to Robert Kaliszewski, Connecticut Department of Energy and Environmental Protection (CT DEEP), who served on NEWMOA's Board for 12 years and transitioned off the Board early in FY 2018. Bob worked for CT DEEP for about 30 years and led various programs. Starting in 2016, he served as the Agency's Deputy Commissioner, and managed policy and program development on a wide range of emerging and cross program issues. He served as NEWMOA Chair in 2010, Vice Chair in 2015, and Chair in 2016. He has the distinction of being one of a handful of people who have chaired NEWMOA's Board twice. Bob was a strong supporter of NEWMOA's pollution prevention (P2) program and various toxics reduction initiatives over the years. He was a key voice on the Board and consistently asked important questions that significantly enhanced its deliberations. NEWMOA's Board will miss Bob's numerous contributions to environmental protection and our programs. Nicole Lugli, Director of CT DEEP's Office of Enforcement Policy and Coordination, joined the Board in FY 2018 as Bob's replacement. We are excited to have her filling those important shoes and look forward to her enhanced involvement.

As the Chair in 2018, I was able to see firsthand how valuable NEWMOA is to our region. NEWMOA's staff is dedicated to its mission and to helping its members effectively respond to new challenges. As highlighted by this Report, it is critical that we work together as a region, and NEWMOA has been a leader in building important partnerships. This leadership and dedication will allow NEWMOA to continue to be at the forefront of helping to address key waste management and pollution prevention issues.

FY 2018 NEWMOA highlights

Joint Strategic Action Plan with NERC

NEWMOA and the Northeast Recycling Council (NERC) collaborated throughout FY 2018 on many sustainable materials management (SMM) activities. These included holding a series of webinars on reducing contamination of recyclables, supporting a Food Waste Workgroup, holding conversations with advocates of product stewardship, and working on climate change and materials management.

Dairy Sustainability Summit

In February 2018, NEWMOA, in partnership with the Vermont Department of Environmental Conservation (VT DEC), hosted a well-attended Summit for processors of secondary dairy products (e.g., cheese, yogurt, butter, ice cream) in the Northeast. Presentations focused on a variety of topics, including the business case for sustainability, regulatory compliance, self-assessment tools, case studies, energy and water use efficiency, waste reduction, and much more.

High Priority Chemicals Data System

NEWMOA's Interstate Chemicals Clearinghouse (IC2) began to develop a High Priority Chemicals Data System (HPCDS) in 2018, which will be a single online portal for manufacturers to report the presence of high priority chemicals in children's products. The HPCDS will help Oregon, Washington, and Vermont to fulfill the requirements under their children's product disclosure laws. IC2 selected an information

technology contractor to design and build it after issuing a request for proposals and reviewing and evaluating the proposals that were submitted. After a contract was signed, IC2 began working closely with the contractor to define and document requirements for the System, which will be developed, tested, and deployed in FY 2019.

Reducing Food Waste

NEWMOA conducted an education project in rural areas of Maine, New Hampshire, and Vermont that was designed to help residents reduce the generation of food waste and start or expand backyard composting, and to help businesses increase recovery and donation of their excess food. The project developed fact sheets and a guide to home composting. NEWMOA staff also conducted outreach to residents at several local events during the summer and held stakeholder workshops in the fall to promote increased recovery and donation of edible food.

PFAS in the Northeast

PFOA and PFOS are perfluorooctanoic acid and perfluorooctane sulfonic acid, respectively, and belong to the broader class of poly- and perfluoroalkyl substances (PFAS). These chemicals have been widely used in carpet and fabric protection and food packaging and were key components of aqueous film-forming foams (AFFF) used for firefighting. Communities throughout the Northeast have sites where drinking water is impacted by this class of chemicals. NEWMOA held monthly conference calls of state and federal environmental and health officials to

help them share information as well as periodic training webinars throughout the year.

Recyclables Collection & Impacts on Manufacturing & End-users

Contamination of the recycling stream with materials that impair the quality of the recyclables that the Materials Recovery Facilities (MRF) produce has become a major challenge, in part because of restrictions imposed by China on imports of materials. China calls these restrictions the National Sword. NERC and NEWMOA partnered throughout the year to support information-sharing and networking on how state programs can address this problem. NEWMOA and NERC jointly organized a series of webinars in 2018 focused on reducing recycling contamination. The organizations also reinvigorated efforts to expand the markets for key materials.

Remedial Action Approaches

More than one remedial approach is often necessary to achieve clean-up objectives and reach site closure. Different tools may be suitable to address the various contaminant phases and concentrations in different areas of the same site. Adaptive, flexible, iterative, and attentive approaches are essential to achieving results, whether using one tool or combining several. To educate state and federal officials and consultants on these challenges, NEWMOA held day-long "Combining Technologies to Improve Remedial Outcomes" workshops in Connecticut, Massachusetts, and New Hampshire in 2018.

FY 2018 NEWMOA by the numbers



19 NEWMOA-SPONSORED TRAINING WEBINARS
involving more than **1,945 participants**

233

NEWMOA WORKGROUP AND PROJECT CONFERENCE CALLS
involving more than **1,935 participants**



More than **179,500 USER SESSIONS** on four of the NEWMOA-supported websites and more than **385,000 page views** by those visitors

14

NEWMOA-SPONSORED IN-PERSON WORKSHOPS OR SUMMITS
involving more than **740 participants**



30 CONFERENCE CALLS
organized by partnering groups in which NEWMOA staff participated



2 PROFESSIONAL SOCIAL NETWORKS developed and supported by NEWMOA, including SustainableLodging.org with **717 members**; and ZeroWasteConnection.org with **252 members**



11 NEWMOA MEETINGS
involving approximately **120 people**

11

FACE-TO-FACE MEETINGS, CONFERENCES, AND WEBINARS
sponsored by other groups in which NEWMOA staff participated

7

WEBSITES including newmoa.org, theic2.org, erpstates.org, p2rx.org, and greenlodgingcalculator.org



**4 ISSUES OF
NEWS@NEWMOA**

distributed to approximately
2,550 readers each



More than
300 COMPANIES

reporting on their
mercury-added products
through the Interstate
Mercury Education and
Reduction Clearinghouse
(IMERC)

13

IMERC MEMBER STATES

**3 IMERC Supporting
Members**

14

**OTHER NEWMOA
PUBLICATIONS OR
DOCUMENTS**

developed and distributed

14

IC2 MEMBERS

including state and
local governments;
**13 IC2 Supporting
Members**



**38 WORKGROUPS OR
COMMITTEES**

involving approximately
695 participants and
5 networking groups
involving approximately
100 participants

4

MEETINGS

of the NEWMOA
Board of Directors;
3 Board webinars



9 ONLINE DATABASES

and other downloadable
tools and resources
developed and/or
maintained

6

NEWMOA STAFF

8

**NEWMOA
MEMBER STATES**

**For more information,
visit www.newmoa.org.**

Working in partnership to address solid waste issues & sustainable materials management (SMM) programs



Peter Pettit

NEW YORK STATE
DEPARTMENT OF
ENVIRONMENTAL
CONSERVATION

2018 NEWMOA
SOLID WASTE & SMM
PROGRAM CHAIR

The most visible solid waste and materials management issue under discussion regionally and nationally in 2018 focused on the impacts of new Chinese restrictions on contamination of paper and plastic recyclables shipped there for recycling. Our member states engaged in many discussions as our recycling and materials management programs struggled to continue state and local recycling programs under these new restrictions. NEWMOA worked with our sister organization, the Northeast Recycling Council (NERC) to begin to address this challenge and develop policies and actions to help the region continue its strong commitment to recycling.

In addition, NEWMOA and NERC implemented our [Joint Strategic Action Plan](#), which was approved by both Boards in the summer of 2017. NEWMOA also focused on opportunities to reduce the generation of wasted food and opportunities to expand food donations.

NEWMOA conducted a survey of state participants in NEWMOA's FY 2018 solid waste and sustainable materials management groups to obtain feedback. Over three quarters of the respondents indicated that they use the information they learned from those activities. Respondents reported that they apply the knowledge that they gained from participation in NEWMOA, including one that stated that "conference calls are invaluable for learning what the nearby states are doing on germane issues and to making connections to solid waste and sustainable materials management staff from those states."

Implementing the Joint Strategic Action Plan

Overall, NEWMOA's and NERC's achievements under the first year of the Joint Strategic Action Plan included:

- Multiple webinars: three for the members of both organizations and four open to the public (these webinar presentations and recordings are posted on the websites of both groups). More than 1,275 individuals participated in at least one of these joint webinars, including people from all over North America.
- Conducting several joint Workgroup meetings to help with planning future activities
- Formation of a joint regional Recycling Markets Development Committee
- Numerous discussions with regional and national sustainable materials management leaders to share and gather information
- Collaboration with the West Coast Climate and Materials Management Forum to share information and resources
- Sharing of written reports between the two organizations' Boards and developing an Annual Report on the status of activities under the Joint Plan

These collaborative activities have helped the two organizations engage other organizations in the U.S. on messaging regarding promoting proper recycling, reducing contamination, and promoting common lists of recyclables. Many of these activities are described in more detail below.

Recyclables Collection & Impacts on Manufacturing & End-users

Contamination of the recycling stream with materials that impair the quality of the recyclables that the Materials Recovery Facilities

(MRF) produce is a major challenge. NERC and NEWMOA collaborated throughout the year to support information-sharing and networking on how state and local programs can address this problem. As part of this effort, NEWMOA and NERC jointly organized a series of webinars focused on reducing recycling contamination.

Recordings & PowerPoint Presentations

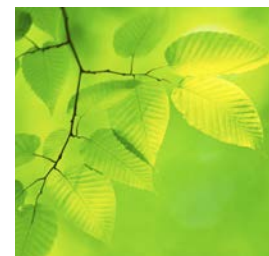
- [How to Beat Residential Recycling Contamination](#)
- [Implementing the Recycling IQ Toolkit to Reduce Contamination of Residential Recycling, Lessons Learned](#)
- [Effective Education Strategies for Proper Recycling](#)

In addition, the organizations reinvigorated efforts to track and expand the markets for key materials by forming a regional Recycling Markets Development Committee that started to meet in 2018.

Food Waste

EPA estimates that about 20 percent of the municipal solid waste stream is food waste. EPA and USDA have established a national goal to reduce this waste by 50 percent by 2030. NEWMOA supports actions to help achieve this objective in the Northeast. Under EPA's "Food Recovery Hierarchy," priority should first be on reducing the generation of wasted food at the source. The next best option for unwanted food should be feeding people, then feeding animals, and directing what's left to composting and anaerobic digestion (AD) facilities.

There are significant opportunities to promote reduction of wasted food and increase diversion of unwanted food from disposal in the Northeast, and many innovative initiatives are underway. Some of NEWMOA's members have achieved a dramatic increase in edible food rescued for donation because of new and enhanced environmental policies and actions. Furthermore, there is significant interest in expanding composting capacity, and the technologies are rapidly improving and capacity expanding for converting food waste to energy through AD. Many of our member states have already authorized new AD and commercial and municipal composting



2018 SOLID WASTE & SMM PROGRAM at-a-glance

7 joint webinars with NERC for approximately 1,275 participants

4 new publications posted on reducing waste food

300 participants in local events in VT and NH on reducing wasted food

New presentation posted on 2013 construction and demolition materials generation and management

New report posted on 2014 MSW waste disposal

New joint working groups with NERC on markets for recyclables, climate and materials management, and product stewardship

New Workgroup on Landfill Post-Closure Care

“[NEWMOA] listens to the states and alters its focus accordingly. That is much appreciated.”

Respondent to a survey about NEWMOA's 2018 Solid Waste and SMM activities

operations. State environmental agencies are also working with local governments and waste haulers to address challenges they have with food waste collection and storage.

Workgroup

NEWMOA's Food Waste Workgroup is a forum for interstate collaboration and information sharing on methods for diverting wasted food from disposal, siting and permitting of composting and AD facilities, and sharing other regulatory and policy issues and challenges. As a result of NEWMOA's partnership with NERC, the Workgroup invited NERC to join, and it became a joint workgroup in 2017. Throughout 2018, this expanded Workgroup, including staff from EPA Regions 1 and 2, met regularly to share updates and information.

The NEWMOA-NERC Food Waste Workgroup hosted two webinars this past year. The first one, in March, was titled “[Addressing the Confusing Landscape of Compostable Products](#)” and covered their potential impacts on compost operations. Presenters discussed legislation adopted in Seattle, California, and Maryland that mandate certifications for compostable bags, foodservice ware, and other products.

The second webinar, in May, was titled “[Trash, Recycling, and Organics Diversion Symbols](#)” and covered the challenges facing the public in understanding the various symbols and images used by local and state programs for organics collection.

As an outgrowth of this webinar, NEWMOA and NERC began to focus on harmonizing organics and recycling collection images, messages, and symbols and eventually joined a national initiative with other organizations, including Keep America Beautiful, the Institute for Scrap Recycling Industries, Solid Waste Association of North America, National Waste and Recycling Association, EPA Headquarters, and the Recycling Partnership. The intent of this national initiative is to develop uniform

messaging regarding which materials to recycle in residential programs and which to direct elsewhere. The results of this effort should be available in 2019.

Training on Reducing Wasted Food

NEWMOA collaborated with partner agencies in rural areas of Maine, New Hampshire, and Vermont to provide support and training on reducing, rescuing for donation, and composting wasted food. The goals of this project were to reduce the generation of wasted food; increase recovery and donation of excess food; and expand home composting of food scraps that cannot be reduced. Composting at home keeps the material out of the local waste management system, producing numerous benefits, including financial savings for households and their communities.

NEWMOA developed and distributed a [series of handouts](#) targeted to generators of food waste, including residents and local businesses; a guide for residents interested in getting started with home composting; and writable template versions of these documents so that other communities can customize them.

NEWMOA staff also conducted [education efforts at local events](#) to help residents in Vermont and New Hampshire learn about how to reduce the quantity of food that they waste and to start to compost at home. These efforts were well received and engaged almost 300 individuals. NEWMOA worked with stakeholders in each location to plan FY 2019 workshops to bring food generators, farmers, distributors, retailers, schools, food pantries, meal sites, and other stakeholders together to focus on increasing the recovery of edible food for donation to those who need it.

Transfer Station Operator Training

In many areas in the Northeast, towns operate transfer stations to provide waste management services for their residents. Transfer station operators and attendants report seeing all kinds of potentially dangerous and unwanted activities, including the disposal of hazardous materials and common recyclable materials.

In 2018, NEWMOA wrapped-up a [training project for waste management authorities and transfer station operators](#) in rural areas of New Hampshire and Vermont to improve worker safety

and promote waste reduction. NEWMOA and its partners provided technical assistance and training by publishing outreach handouts and posters.

Disaster Debris Management

Safe, proper, and timely management of debris generated during a disaster is an essential but often overlooked component of emergency response. Disaster debris must be properly managed to protect human health, comply with regulations, conserve disposal capacity, reduce injuries, and minimize or prevent environmental impacts. It involves advanced planning and coordination among individuals at various levels of government and the private sector with expertise in waste management. Communities often need to develop additional areas to store, separate, or process the debris before sending it for recycling, composting, combustion, or disposal. A local disaster debris management plan can aid municipalities in providing this advanced planning and coordination and can help to determine the appropriate management options in anticipation of a disaster to avoid rushed decisions. Many state agencies in the Northeast are assisting communities with development of these management plans. NEWMOA's Disaster Debris Management Workgroup, which includes representatives of state and federal environmental and state emergency management agencies, shared information, leveraged resources, and promoted strategies that work for local communities in 2018.

Product Stewardship

Product stewardship shifts end-of-life financial and management responsibility, with government involvement, upstream to the producer and away from the public sector thereby providing incentives to producers to incorporate environmental considerations in the design of their products and packaging. A form of product stewardship called Extended Producer Responsibility (EPR) requires manufacturers to be financially responsible for the end of life management of the products and packaging that they produce. During the past decade, Northeast states have enacted more than 25 EPR laws covering electronics, paint, mattresses, mercury thermostats, mercury auto switches, fluorescent lamps, pharmaceuticals, and batteries. Additional EPR proposals for other

products and product categories (for example, household hazardous waste, solar panels, tires, carpet, and various types of packaging and paper products) are also under consideration.

NEWMOA, in partnership with NERC, promoted coordination among the various state agencies and organizations in the region that are focused on implementing and expanding product stewardship programs. After discussions with major advocates for product stewardship, NERC and NEWMOA formed a new sub-group to collaborate regionally and identify and pursue future product stewardship priorities. This working group held several conference calls in 2018, and we expect this collaboration to continue.

Climate Change & Materials Management

In 2017, the Coalition of Northeast Governors (CONEG) released a Climate Action Plan that included a menu of possible actions that states could take. They identified initiatives related to materials and waste in their list of available strategies. NEWMOA and NERC formed a regional working group to discuss Climate and Materials Management strategies that states could employ to help advance state programs and to inform CONEG's efforts. NEWMOA took the lead in organizing several calls in 2018 that will continue into 2019. The group is developing ideas for programs and strategies that states could develop on materials and climate as well as outreach materials. The working group is also interested in developing methods to track and report greenhouse gas (GHG) benefits of waste reduction, reuse, composting, anaerobic digestion, and recycling.

To help inform the Workgroup's efforts, NEWMOA held a webinar with the Oregon Department of Environmental Quality (OR DEQ) on consumption-based emissions inventories. OR DEQ inventories greenhouse gas emissions in two different ways: a sector-based approach, formally called the in-boundary inventory, and a consumption-based emissions inventory (CBEI). The inventories utilize different accounting methods, and each encompasses a unique scope of emissions. NEWMOA's 2018 [webinar explored Oregon's CBEI methodology](#), data sources, the lessons learned from their



Food waste reduction and recovery handouts.

modeling, and the actions OR DEQ is taking based on the results.

This past year NERC and NEWMOA worked to strengthen their ties with the [West Coast Climate and Materials Management Forum](#), which includes representatives of environmental agencies in California, Oregon, and Washington. NERC and NEWMOA held several calls with the Forum to discuss coordination opportunities. All three groups have committed to sharing information and tools and to promoting each other's events. They will continue to hold joint calls to stay up-to-date on each other's strategies and activities in 2019.

Construction & Demolition (C&D) Materials

Construction and demolition (C&D) materials are a large and diverse waste stream, and capacity for recycling and proper management of these materials remains a significant challenge in the region. Historically, most C&D wastes were disposed in landfills. However, disposal capacity is becoming increasingly limited in most NEWMOA states, and public opposition has severely limited the siting of new landfills. Therefore, there is an increased emphasis on recycling and reusing C&D materials. NEWMOA provides an ongoing forum for states to discuss better management options for C&D, such as use of C&D wood for fuel, reuse of asphalt shingles, and recycling of gypsum wallboard.

To inform planning for C&D materials capacity, NEWMOA has prepared three reports that quantify the amount of C&D materials that are generated, processed, recycled, and disposed in each NEWMOA state and the interstate flow of the materials since 2005. In December 2017, NEWMOA released its latest [data presentation](#), which covered 2013 generation and management of C&D materials. NEWMOA found that the management of C&D material in the Northeast is regional, with facilities in each state importing and/or exporting these materials to each other for processing and/or disposal. All Northeast states export a portion of C&D materials for disposal, with some states relying more heavily on export for disposal than others.

To support state programs interested in expanding C&D materials recycling markets,

NEWMOA and NERC organized [a national webinar](#) in January 2018 to share the results of NEWMOA's C&D materials data analysis and a NERC project for Mass DEP on C&D materials recycling opportunities.

Municipal Solid Waste Interstate Flow

NEWMOA undertakes a periodic analysis of the interstate flow of municipal solid waste (MSW) among the Northeast states. The purpose of this effort is to improve the quality of the data and ensure that state agencies have as much information as possible to monitor trends in waste diversion, disposal, and interstate flow in the region. NEWMOA's Solid Waste Metrics Workgroup conducts this analysis. In 2018, they published a presentation, "[Municipal Solid Waste \(MSW\) Interstate Flow in the Northeast in 2014.](#)"

Since NEWMOA began publishing these presentations in 2000, the Workgroup has found that all of the Northeast states export MSW to facilities in other NEWMOA states for disposal and, with the exception of Rhode Island and Vermont, disposal facilities in all of the NEWMOA states import MSW from other Northeast states. Historically, Connecticut, Massachusetts, New Jersey, New York, Rhode Island, and Vermont have exported more MSW than they imported (and by a wide margin for some of these states). In the past, Maine and New Hampshire have imported significantly more MSW than they exported. However, in 2014, the quantity of MSW imports to Maine decreased significantly compared to prior years due to the closure of a waste-to-energy facility, and, therefore, the quantity imported to Maine was almost equal to the quantity exported from Maine.

Other key observations about 2014 MSW flow in the Northeast include:

- Approximately 29.7 million tons of MSW were generated in the region and disposed of in 2014, about the same amount as in 2012, and a reduction of 19 percent from the high of 36.6 million tons in 2002.
- Region-wide, 0.7 tons per person of MSW were generated and disposed of in 2014; with the rate ranging from 0.53 tons per person per year for New Hampshire to 1 ton per person per year for Rhode Island.

- There has been a general decline in the quantity of MSW exported for disposal from each of the Northeast states to states and provinces outside of the region since 2004. An overall region-wide decline has occurred from a high of approximately 10.6 million tons in 2002 to approximately 7.3 million tons in 2014 – a 31 percent reduction.

NEWMOA staff made several presentations on the results of this analysis, including at a MassRecycle/Solid Waste Association of North America (SWANA) conference, the National Materials Matter Summit, and a webinar of the Metropolitan Washington Council of Governments.

To complement its efforts to assess MSW shipped for disposal, NEWMOA formed a new Workgroup in 2018 to coordinate state efforts to develop and gather metrics related to sustainable materials management (SMM). The group started with an information gathering effort to help members understand the current state of SMM programs and how they measure their impact and to identify the differences among state programs in their approach to this topic. This will provide a foundation for ascertaining whether the programs in the region can agree upon some best practices and common approaches. The Workgroup will continue its discussions in 2019.

Landfill Post-Closure Care

There are thousands of inactive municipal solid waste landfills (MSWLFs) in the Northeast. Many of these were municipally-owned and unlined and stopped receiving waste after states imposed modern construction and operation requirements over 30 years ago. States have developed long-term requirements for the owners of closed landfills, including maintaining the integrity of the landfill cap; repairing the cap when necessary; monitoring water quality, settlement, and methane generation; maintaining the gas control, leachate collection, and storm water systems; providing financial assurance for the cost of post-closure care; and filing post-closure reports that summarize the condition of the cap and all other elements of the landfill closure. NEWMOA formed a Landfill Post-Closure Care Workgroup in 2017 after a meeting of state solid waste management officials

identified several important challenges that face agencies tasked with overseeing closed MSWLF sites. These challenges include:

- Overseeing a large universe of facilities with very limited resources
- The expiration of the “standard” 30-year post-closure care period for many facilities and the need for ongoing monitoring and maintenance
- Working with municipalities that owned or operated MSWLFs on their ability to implement their post-closure requirements
- Enforcing financial assurance plans

The Workgroup convened state officials several times in 2018 to discuss their programs and share information and strategies.

Coordination in New York & New Jersey

NEWMOA facilitated information-sharing conference calls and an [annual in-person meeting](#) for EPA Region 2, New Jersey, and New York solid waste and SMM staff and managers. These meetings provided an opportunity for updates and coordination on such topics as food waste, solid waste data, disaster debris planning, and product stewardship.

NEWMOA’s solid waste and sustainable materials management activities, described above, have continued to develop and expand policies in the region to better protect the health of our citizens and our environment. Without the collaboration of state members, guided by NEWMOA, many of these problems would remain unresolved. Much more still needs to be done, but, through these efforts, NEWMOA and member states are tackling these difficult and important issues.



Hazardous waste management programs



Michael Wimsatt

NEW HAMPSHIRE
DEPARTMENT OF
ENVIRONMENTAL
SERVICES

2018 NEWMOA
HAZARDOUS WASTE
PROGRAM CHAIR

Discussions among hazardous waste program officials throughout 2018 focused on compliance at Treatment, Storage, and Disposal Facilities (TSDFs); implementing EPA's Generator Improvement Rule and other recent rulemakings; and the launch of EPA's e-Manifest system.

NEWMOA conducted a survey of state participants in NEWMOA's FY 2018 hazardous waste activities, and 92 percent of the respondents indicated that they use the information they learned from those activities. Respondents stated that:

- [They are] ...new to the...hazardous waste program so every call...has given...new information to work with.
- The topics often provide valuable guidance on specific topics. For instance, discussions on pharmaceuticals over the years have led to a better understanding of compliance issues at health care facilities. Calls on emerging industries, like vape shops, have given...a new universe of facilities to consider for compliance assistance and enforcement.

Training

NEWMOA's Hazardous Waste Training Workgroup provides ideas and oversight on training activities, and this group was busy in 2018 planning workshops and calls. NEWMOA held workshops for 120 hazardous waste inspectors in EPA Regions 1 and 2 in June. The workshops focused on the implementation of the e-Manifest system, documenting inspections, Land Disposal Restrictions, and other topics.

The June hazardous waste (HW) inspectors' workshop for NJ and NY, in collaboration with EPA Region 2 received a 95 percent rating of excellent or good on evaluation forms;

"[NEWMOA helps me]... (1) learn about emerging issues in other states; (2) learn from other states' experience with various issues; (3) learn about other states' approaches on common problems; (4) get different viewpoints on problems we encounter in our state; (5) facilitate coordination on interstate policy, enforcement, or permitting issues; (6) network and form relationships with hazardous waste staff in other states; (7) raise questions and discuss them with other states"

Respondent to a survey about NEWMOA's 2018 Hazardous Waste Program activities

participants reported that they plan to use the information they learned in the following ways:

- Use some photos and note taking pointers from others to be more effective and save time
- As I am new to RCRA, the information was a great foundation for me to build upon

The June HW workshop in New England received a 100 percent rating of excellent or good on evaluation forms; participants reported that they plan to use the information they learned in the following ways:

- To be more efficient at my inspections
- Apply to permit writing
- Relay information to the generators, TSDFs, and transporters

Throughout FY 2018, NEWMOA also provided training for hazardous waste program staff through monthly information-sharing

conference calls or webinars. These sessions focused on:

- Household hazardous waste
- Implementing Land Disposal Restrictions
- Implementing EPA's Generator Improvement Rule
- Management of remediation waste (2 calls)
- Interjurisdictional issues between mandatory solid waste recycling and hazardous waste requirements for businesses and municipalities
- Results of inspections of retail facilities
- State RCRA training for Large Quantity Generators and Small Quantity Generators
- Fuel cell waste (webinar)
- State implementation of e-Manifest
- Update on a Treatment, Storage, and Disposal Facilities compliance initiative

On average, about 45 participants from the Northeast states and EPA Regional Offices and Headquarters joined each of these calls.

Compliance at Commercial Treatment, Storage, & Disposal Facilities (TSDFs)

In partnership with EPA Region 1, NEWMOA helped organize a New England workshop for 37 state and federal hazardous waste program staff on compliance at commercial TSDFs. The December session received a 100 percent rating of excellent or good on evaluation forms; and participants reported that they plan to use the information they learned to:

- Facilitate improvements in RCRA permitting program
- Increase coordination among staff

NEWMOA assisted EPA Region 1 with planning a follow-up meeting in April to continue the discussions.

As a result of the TSDF workshop and meeting, the directors of the state and EPA Region 1 hazardous waste programs in New England sent a joint letter to commercial TSDFs informing them of key compliance issues that state and federal inspectors have observed and the collaboration underway between EPA and the states.

NEWMOA's calls and workshops are for state and federal hazardous waste inspectors



2018 HAZARDOUS WASTE PROGRAM at-a-glance

2 workshops for 120 hazardous waste (HW) inspectors and program staff

11 information-sharing conference calls on key HW topics, involving an average of 45 participants

Workshop and meeting on compliance issues at commercial treatment, storage, and disposal facilities

New Permit Writers Workgroup

Comments to EPA on the proposed rule covering hazardous waste aerosol cans

Lean Practitioners

Lean and Six Sigma methods help organizations identify and eliminate unnecessary and non-value-added process steps and activities that have built up over time. These process improvement approaches were developed originally for use in the private sector for manufacturing processes, but there has been steady progress towards adapting them for use in the public sector for service and administrative processes.

All of the state and federal environmental agencies in the Northeast are using Lean to reduce the time needed in their permitting, enforcement, data gathering and management, administrative review, and other activities. These agencies have found that Lean methods enable them to understand how their processes are working on the ground and to make adjustments that optimize desired outcomes. By making routine activities quicker and more efficient, staff time can be freed to focus on higher-value functions.

In FY 2018, NEWMOA supported a Lean Practitioners Workgroup to help its members learn from each other and exchange technical resources. NEWMOA held several Workgroup conference calls to share information about recent Lean events, new tools and resources, and lessons learned.

Innovative Compliance Programs

NEWMOA has a long history of supporting state efforts to develop and implement innovative approaches to advancing environmental enforcement, conducting compliance assurance activities, and measuring performance. Since 2013, NEWMOA has supported a Workgroup that includes state and EPA Regional enforcement, compliance assistance, and pollution prevention staffs. The group supports state and EPA efforts to develop innovative strategies to advance compliance and measure performance. The group met via conference call regularly in FY 2018 and conducted a [webinar briefing](#) on state initiatives for EPA Headquarters' Office of Enforcement and Compliance Assurance (OECA) management and staff.



July 2018
news@NEWMOA

and other compliance, enforcement, and regulatory development staff. The evaluations from participants emphasized how important these opportunities are for state program staff. The calls and workshops are the primary training that they receive, and they help to facilitate ongoing information sharing and networking.

Permit Writers Workgroup

Another result of the TSDf workshop and meeting was the formation of a NEWMOA Permit Writers Workgroup in 2018. Among the strategies that the workshop and meeting participants discussed were the benefits for permit writers of an ongoing regional forum to share information and discuss ways to address challenges. The participants in the 2018 events stated that a regional forum for them to learn from each other would be very helpful, particularly as states face retirements of senior program staff. The workgroup members are particularly eager to share permit language, their processes for developing permits, and strategies for communicating with facilities.

Comments on EPA Rulemaking

NEWMOA prepared [comments](#) on EPA's "Increasing Recycling: Adding Aerosol Cans to the Universal Waste Regulations," which was published in the *Federal Register* in March. The letter outlined NEWMOA's general support for adding aerosol cans to the Universal Waste Rule. A majority of the states joined together in offering a number of points of clarification and recommendations in NEWMOA's letter.

NEWMOA's hazardous waste activities in 2018 provided critical training and information-sharing opportunities for our program staff. These services helped our staff stay informed about new federal rules, ways of improving their inspection and field work, various challenges facing hazardous waste programs, and much more.

Interstate Chemicals Clearinghouse (IC2)

In FY 2018, the IC2 started developing a major data system while continuing to support its Workgroups, Board, and Council; maintain and update its existing databases; and hold webinars.

NEWMOA conducted a survey of state IC2 participants in 2018 activities, and 100 percent of the respondents agree that the information that was shared was directly applicable to their work. Respondents also stated that the IC2:

- Helped me become more familiar with alternatives assessment activities and resources
- Project on PFAS alternatives for AFFF will help our PFAS reduction efforts
- Trainings and webinars all have been helpful
- Helped connect me to others in the field, particularly those interested in procurement

High Priority Chemicals Data System

Throughout 2018, IC2 staff worked with Oregon, Washington, Vermont, and other members of the IC2 Database Workgroup on development of the High Priority Chemicals Data System (HPCDS). These three states are collaborating through the IC2 to develop a single online portal for manufacturers to report the presence of high priority chemicals in children's products. The HPCDS will facilitate greater efficiency and cost effectiveness for states with reporting programs for children's products and will help Oregon, Washington, and Vermont to fulfill the requirements under their children's product disclosure laws. It will also reduce reporting burdens and provide better service for manufacturers; increase opportunities for interstate involvement in data analysis and presentation; improve access to robust data for federal, state, and non-governmental stakeholders; and enhance the sharing of reported information with the public.

The HPCDS will set the standard for reporting chemicals-in-products data and create the framework for additional states to implement similar reporting programs at greatly reduced cost. Product manufacturers and distributors will benefit from a reduced burden through "one-stop" reporting that satisfies multiple state requirements. Compared with independent systems in multiple states, a single system is likely to result in fewer reporting errors and inconsistencies and thus a higher-quality dataset.

Ultimately, the HPCDS will provide public access to this data through a flexible Web-based search interface, allowing perspectives on the presence of chemicals of concern in products nationally. Analyses of these data could lead to



Karl Palmer

CALIFORNIA
DEPARTMENT OF
TOXICS SUBSTANCES
CONTROL
2018 IC2 CHAIR

2018 INTERSTATE CHEMICALS CLEARINGHOUSE (IC2)

at-a-glance

Development of the High Priority Chemicals Data System (HPCDS)

7 webinars for more than 290 people

Two IC2 e-Bulletins

Four active Workgroups focused on training, alternatives assessment, procurement, and databases

IC2 Board and Council conference calls

Presentations at two national conferences

“The IC2 has provided learning opportunities for us, policy data, deeper collegial relationships with people in the field, and better connections and understanding...”

Respondent to a survey about NEWMOA's 2018 IC2 activities

reductions in exposures to chemicals of concern, with resultant benefits to human and ecological health, including reduced potential risk, health care costs, and preservation of valuable ecosystem services. Finally, a national dataset of this type will help reveal insights regarding the movement of chemicals through manufacturing supply chains.

After a lengthy procurement process, the IC2 selected Eastern Research Group (ERG) to provide information technology (IT) development support for the HPCDS Project, and the System will be launched in FY 2019.



April 2018 IC2 e-Bulletin

Webinars

Hearing from New Members

In October, the leaders of two of the IC2's newest member organizations – Lauren Heine, Executive Director of Northwest Green Chemistry, and Dianne Barton, Chair of the National Tribal Toxics Council – described their organizations and work to reduce human and environmental exposures to toxic chemicals on an IC2 Council webinar.

Specialty Paper-Making

In October, for at least 50 participants, Zack Leimkuehler of Expera Specialty Solutions described the paper-making process generally and some of the sustainability issues and trade-offs paper makers face as they develop new products, including per- and polyfluoroalkyl substance (PFAS)-free, unbleached, Forest Stewardship Council (FSC)-certified, and post-consumer recycled fiber. Zack also discussed the differences between molded fiber products and paper products, as well as the links in the supply chain from material sourcing to finished consumer product.

P2OASys

In October, for at least 22 participants, Jason Marshall, Director of the Toxics Use Reduction Institute (TURI) Cleaning Laboratory, provided an overview of the benefits of using the [Pollution Prevention Options Assessment System \(P2OASys\)](#) and what it covers and described how it compares with other chemical hazard assessment tools, such as GreenScreen. TURI created the original P2OASys in the mid-1990s to analyze chemical and equipment alternatives. P2OASys is one of the first hazard-analysis tools to help small and mid-size businesses compare several chemicals and hazards. TURI recently updated and released a new, Web-based version of this tool.

Dry Cleaning Solvents

In April, for at least 48 participants, the IC2 held a webinar on the potential [hazards of dry-cleaning solvents](#) and initiatives to identify and spur the adoption of safer alternatives. Joy Onasch, from the Massachusetts TURI, discussed their work with dry cleaners over the past decade, including the results of a perchloroethylene (perc) alternatives assessment. The Institute has awarded grants, run demonstration events, and compiled case studies related to dry cleaner conversions from perc to dedicated wet cleaning. Ashley Pedersen and Steve Whittaker, from the King County Local Hazardous Waste Management Program (LHWMP), described efforts in King County to switch perc dry cleaners to safer alternatives and discussed new information about the most common alternatives to perc: high-flashpoint hydrocarbons.

Chemical Hazard Data Commons

Also, in April, for at least 76 participants, the IC2 and Clean Production Action (CPA) co-sponsored a webinar on the [Chemical Hazard Data Commons](#). This resource, developed by the Healthy Building Network (HBN), makes it easy to find, compare, and monitor chemical hazards from dozens of sources around the globe and provides a forum to work on the ongoing challenges. In this webinar, HBN's Michel Dedeo and Tom Lent and CPA's Shari Franjevic provided a tour of this free resource, demonstrated how it can help solve common problems, and discussed how it supports the GreenScreen for Safer Chemicals.

AFFF Alternatives

In June, for at least 54 participants, Jimmy Seow, Ph.D. discussed [fluorine-free alternatives for Class B aqueous film-forming foams](#) (AFFF) used to suppress liquid and vapor fuel fires, implementation of fluorine-free foams outside of the U.S., and environmental impacts of firefighting foam.

Analyzer to Detect Metals

In July 2018, for at least 18 participants, Jared Sachs and Thomas Tongue, from XOS, discussed the capabilities of [XOS's HD Mobile High Definition X-Ray Fluorescence](#) (HDXRF) analyzer, which is able to analyze lead in paint and substrate materials and also precisely measures cadmium, arsenic, mercury, antimony, and other elements that may be of concern in consumer products.

In total, approximately 290 people attended at least one of these webinars, and the feedback was positive. In addition to webinars, the IC2 held “roundtable” calls to provide an opportunity for members to learn about each other’s priorities and activities. For more information on IC2 training, visit <http://theic2.org/events>.

Supporting Procurement of Less-Toxic Products

The IC2 Procurement Workgroup brings together a lively, engaged, and committed group of its members interested in finding ways to improve state and local government procurement policies and grow markets for manufacturers committed to using safer chemistries, including green chemistry, and in reducing products’ chemical and carbon footprints. The group held two conference calls during the year to share information, strategies, and lessons learned.

Alternatives Assessment

The IC2 Alternatives Assessment Workgroup met regularly in FY 2018 to share successes and challenges related to chemical hazard assessment and alternatives assessment. This Workgroup oversees the IC2 Chemical Hazard Assessment Database, to which IC2 staff add new GreenScreen and QCAT assessments as they become available. The IC2 contributed to the

creation of the Association for the Advancement of Alternatives Assessment (A4), a new professional association solely dedicated to advancing the science, practice, and policy of alternatives assessment and informed substitution.

Chemicals Policy Database

The IC2 Chemicals [Policy Database](#) is a searchable database of enacted state-level chemical legislation and policies. Users can search the Database by state, policy category, chemical, product type (e.g., children’s products, cleaning products), and year. In 2018, the IC2 added new policies suggested by the membership and gleaned from other sources.

Outreach

The Clearinghouse published two [IC2 e-Bulletins](#) in FY 2018. IC2 *e-Bulletins* are distributed free to hundreds of IC2 Members and Supporting Members, colleagues at EPA, other interested groups, and anyone who expresses an interest in the work of the Clearinghouse.

IC2 staff also presented on chemical use disclosure at the North American Hazardous Materials Management Association (NAHMMA) National Conference in August. Staff made a similar presentation at the Safer Chemicals in Products Conference in September.

Overall, 2018 was a busy and productive year for the Clearinghouse, and we have even more planned for 2019. In addition to completing the HPCDS, the IC2 will develop an online reporting system to support NYSDEC’s Cleansing Product Information Disclosure (CPID) program.



Interstate Mercury Education & Reduction Clearinghouse



Tom Metzner

CONNECTICUT
DEPARTMENT
OF ENERGY AND
ENVIRONMENTAL
PROTECTION (CT DEEP)

2018 IMERC CHAIR

NEWMOA conducted a survey of state participants in IMERC's groups in FY 2018, and 100 percent of the respondents agreed that IMERC's activities provided substantial benefit to their work. They also reported that IMERC has enabled them to collaborate more with state and local agencies, non-governmental organizations (NGOs), businesses, and EPA.

All of the survey respondents reported that their participation in IMERC has helped them learn from the experience of other state programs and organizations. This is important, as one of the many challenges noted by IMERC's members is the limited staff resources to implement the states' laws. The IMERC model of many states collaborating on a task or issue benefits its members because the newer state staff can learn from those with experience, especially when it comes to making unique or complicated decisions, such as when reviewing company requests for product phase-out exemptions. Members also share responsibilities in implementing their laws, such as when reviewing notification forms.

In FY 2018, IMERC focused on its priorities of facilitation and coordination of states' mercury-added product legislation, working through its workgroups, as well as helping manufacturers and other companies that sell mercury-added products. IMERC also collaborated with state and federal agencies, non-governmental organizations (NGOs), and other groups to advance mercury education and reduction efforts. The ability to partner with these diverse stakeholders effectively and efficiently was a strength of IMERC in 2018.

Coordinating on EPA's Rulemaking

In December 2017, IMERC submitted [comments to the U.S. EPA](#) in response to their proposed reporting requirements for mercury under the Toxic Substances Control Act (TSCA) Mercury Inventory. While IMERC supported the overall intent of EPA's proposed rule, members expressed concerns about the federal reporting schedule and EPA's exemption for mercury-added components. IMERC also provided comments on the proposed zero threshold for mercury, compliance guides, reporting categories, and electronic reporting. EPA published its Final Rule in June 2018.

During the summer and fall of 2018, IMERC helped to educate its members about a Natural Resources Defense Council (NRDC) petition challenging EPA's final Mercury Reporting Rule. This effort was led by the states' Attorneys General (AG). IMERC provided background information on state requirements and the importance of establishing an accurate and complete national mercury inventory.

Throughout these efforts, IMERC has maintained a collaborative relationship with EPA as both prepare for a new mercury reporting cycle in FY 2019.

Partnering to Enhance Mercury-added Products Reporting

In FY 2018, IMERC partnered with the Connecticut Department of Energy and Environmental Protection (CT DEEP) to successfully apply for a grant from EPA's National Environmental Information Exchange Network (NEIEN) to upgrade the online mercury-added products e-filing system and public database.

This funding will enable IMERC to update its online reporting cycle to conform with EPA's

timeline, which was announced in the final Mercury Reporting Rule. The most significant change for companies and states will be accelerating the next round of triennial notifications by reporting for calendar year 2018, rather than calendar year 2019. This alignment with the national reporting requirements means that IMERC will have a more complete, national mercury inventory, which will support the data requirements of TSCA and the international Minamata Convention on Mercury.

Upgrades to the online Mercury-Added Products Database will improve accessibility and data quality because users will have more options for search queries and data presentation and will be able to download raw data for their analyses more easily. EPA awarded the grant at the end of FY 2018; IMERC will start its work in FY 2019.

Leading Workgroup Efforts on Compliance

IMERC's [Labeling Workgroup](#) reviewed alternative labeling applications and approved 41 alternative labels for more than 20 companies in FY 2018. The companies that are approved to use an alternative label have adequately demonstrated to IMERC that their product(s) cannot comply with the "standard" labeling criteria required by the states and are instead implementing an appropriate alternative. The Labeling Workgroup is diligent in their reviews of these requests and works closely with the manufacturers and distributors of these products to ensure that they comply with the laws.

IMERC's [Notification Workgroup](#) wound down its review of the 2016 mercury-added product triennial notification forms in FY 2018. At the end of the fiscal year, more than 270 companies had reported on their 2016 mercury-added product sales in the U.S. – a compliance rate of more than 91 percent of known companies (i.e., companies that previously reported to IMERC). IMERC members used the e-filing system to review and approve company submissions and track company compliance.

IMERC's Phase-out Workgroup coordinated on decisions related to phase-out exemption requests. In particular, the [Workgroup](#) focused



2018 INTERSTATE MERCURY EDUCATION & REDUCTION CLEARINGHOUSE (IMERC)

at-a-glance

Comments to EPA on its proposed Mercury Reporting Rule

41 alternative labels approved for more than 20 companies

91 percent compliance rate with states' notification requirements

IMERC Alert

Presentation at a national conference

“IMERC provides knowledge, work hours, and coordination to help us complete a number of tasks to ensure compliance with our mercury product laws. For example, IMERC staff assisted with the review of notifications and facilitated interstate efforts in this area; facilitated input on EPA’s mercury rule and an interstate response to EPA’s final rule; [and] assisted with labeling approvals...”

Respondent to a survey about NEWMOA’s 2018 IMERC activities

on a submittal from a mercury-added switch manufacturer in 2018. As mercury-added switches and relays are banned in all notification states (CT, LA, ME, MA, NH, NY, RI, VT), this inspired IMERC to reach out to all previous manufacturers of these products to remind them of the laws and ensure that they are not selling the products illegally.

The Education and Outreach Workgroup compiled and analyzed the 2016 mercury-added product data collected through the triennial reporting cycle. With this information, IMERC drafted updates to the [six fact sheets](#) covering different categories of mercury-added products. These were published in early FY 2019. For more information, visit: www.newmoa.org/prevention/mercury/imerc/FactSheets/index.cfm

NAHMMA National Conference

In August, several IMERC members attended the North American Hazardous Materials Management Association’s (NAHMMA) National Conference in Portland, Maine. IMERC presented on the trends in the use of mercury in thermostats and other products, the

benefits of interstate coordination, and mercury-added thermostat collection programs. The [presentation](#) emphasized that by sharing information and working together states have been able to achieve better results.

IMERC Alert

IMERC published an [IMERC Alert](#) in 2018. This electronic newsletter is distributed to more than 525 people, including users of the mercury-added product e-filing system, IMERC Members and Supporting Members, colleagues at EPA, other interested groups, and anyone who expresses an interest in the work of the Clearinghouse.

IMERC made great progress on product labeling and education on trends in mercury use in products in 2018. In 2019, we look forward to updating and modernizing the e-filing system. I look forward to working with the IMERC members on our successful programs next year.



May 2018 IMERC Alert

Waste site cleanup challenges

NEWMOA's Waste Site Cleanup Program helps members and others learn about emerging issues and develop responses more efficiently than they would if they operated separately. Organizing training through NEWMOA is more cost-effective than having each state develop this capacity. Bringing all the state programs together also enhances the training experience by involving people with different perspectives.

NEWMOA conducted a survey of state participants in NEWMOA's 2018 Waste Site Cleanup groups, and all of the respondents reported that they use the information they learned from their participation in NEWMOA conference calls, meetings, workshops, or webinars. They noted that NEWMOA:

- Provides ideas for policies and programs used in other states
- [Helps] inform management on how other states are solving problems or dealing with issues

One respondent noted that “the most valuable calls have been the ones for PFAS... each state has contributed significantly to the overall understanding of this issue.”

Workshops

In FY 2018, NEWMOA organized three sets of one-day workshops for state and federal staff, the consulting community, students, and others focused on:

- Combining Technologies to Improve Remedial Outcomes (November 2017)
- Back-to-Basics Part 1: Developing the Conceptual Site Model and Site Characterization Plan (March 2018)
- Back-to-Basics Part 2: Data Collection and Interpretation, State of Practice and Lessons Learned (September 2018)

Each workshop was held in CT, MA, and NH to maximize accessibility for regional participants.

Combining Technologies to Improve Remedial Outcomes

More than one remedial approach is often necessary to achieve remedial action objectives and reach site closure. Adaptive, flexible, iterative, and attentive approaches are essential to achieving results, whether using one tool or combining several. NEWMOA's workshop provided information on planning and implementing various remedial technologies in combination, including:

- High-resolution site characterization
- Evolving the conceptual site model
- Reagent delivery
- Thermal remediation
- In-situ carbon injection



Trish Coppolino

VERMONT DEPARTMENT
OF ENVIRONMENTAL
CONSERVATION

2018 WASTE SITE
CLEANUP PROGRAM
CHAIR

2018 WASTE SITE CLEANUP PROGRAM at-a-glance

3 one-day workshops in 3 locations each
for more than 500 participants

10 states/EPA conference calls on PFAS,
including three webinars

Annual brownfields program meeting

Soil Reuse Workgroup

Presenters included:

- Jim Cummings, EPA
- John Haselow, Redox-Tech
- Gorm Heron, Cascade
- Mike Marley, XDD
- Matt Burns, WSP
- Dan Socci, EthicalChem
- Maureen Dooley, Regenesys
- Paul Dombrowski, ISOTEC

The [workshops](#) were attended by approximately 190 participants, and they reported on evaluation forms that they plan to use the information they learned in many ways, including:

- Providing remedial ideas to customers/contractors
- Support my decision-making
- Re-evaluate our remedial approaches

Back-to-Basics Part 1: Developing the Conceptual Site Model & Site Characterization Plan

Senior program personnel with significant practical site experience are retiring, and states are hiring new staff that need training. This has created a need to transfer the lessons learned from one generation to the next. To address this, NEWMOA started to implement a three-part “back-to-basics” training program in 2018. The first workshop focused on how to understand site conditions and covered:

- Common contaminants and the types of businesses that used them
- Understanding subsurface fate and transport
- Developing the conceptual site model (CSM)
- Developing a site characterization plan

Presenters included:

- William Ottaway, New York State Department of Environmental Conservation
- Michael Smith, Vermont Department of Environmental Conservation
- Ryan Wymore, CDM Smith

The [workshops](#) were attended by approximately 145 participants who reported on evaluations that they plan to use the information they learned in several ways, including:

- Draft better site characterization plans and develop more accurate and complete CSMs

- Critically evaluate CSMs presented in site reports
- Put more focus on site geology prior to developing a site characterization plan

Back-to-Basics Part 2: Data Collection & Interpretation: State of Practice & Lessons Learned

The workshop targeted site managers and their staff to help ensure that data collection best practices for soil, groundwater, and vapor intrusion are used and that laboratory data is understood. The workshop provided an opportunity to learn about:

- Accessing the subsurface
- Collection methods and techniques for soil sampling, groundwater sampling, and vapor intrusion sampling
- Understanding and using laboratory data

Presenters included:

- Ryan Wymore, CDM Smith
- Seth Pitkin, TetraTech
- Daniel Voisin, Stone Environmental
- Jean Firth, Wood
- David Shea, Sanborn Head
- Jim Occhialini, Alpha Analytical

The [workshops](#) were attended by approximately 175 participants who reported on evaluations that they plan to use the information they learned in numerous ways, including:

- Consider alternatives when deciding what equipment, methods, and technologies to use in sampling/drilling
- Reduce groundwater monitoring and increase site characterization
- Improve communication as to why additional work is needed to develop and defend the CSM

Emerging Contaminant: Poly- and Perfluoroalkyl Substances (PFAS)

NEWMOA's Waste Site Cleanup Program helped states share information on PFAS issues in FY 2018. PFAS are a large class of chemicals that have been used in numerous consumer products and industrial processes due to their oil and water-resistant properties and their exceptional stability. The products include carpet and fabric protection,



food packaging, and aqueous film-forming foams (AFFF) used for firefighting. The same properties that make PFAS so useful in consumer products and for firefighting make them challenging to remove from soil and water, including drinking water supplies. Many communities in the Northeast have drinking water systems that are impacted by PFAS. Understanding fate and transport and remediation and treatment options to meet state and federal drinking water guidelines is challenging.

To support state efforts to understand and address this emerging issue, NEWMOA organized a PFAS Networking Group in 2016 that includes approximately 60 members from state agencies and EPA Regional offices. The Group holds monthly information-sharing conference calls. In FY 2018, three of the monthly sessions were webinars and included presentations by EPA, the Minnesota Pollution Control Agency (MPCA), and Massachusetts Department of Environmental Protection (Mass DEP). Each webinar was attended by 35 or more participants.

In addition, NEWMOA staff facilitated two sessions on PFAS topics at the Annual International Conference on Soil, Water, Energy, and Air held at the University of Massachusetts Amherst in October 2017. These sessions were each attended by at least 100 people. NEWMOA staff organized three sessions on PFAS topics for the 2018 conference.

NEWMOA Board members and staff also participated in EPA's National PFAS Leadership Summit in May and an EPA Region 1 Public Listening Session in New Hampshire in June.

Brownfields

Each year NEWMOA sponsors a meeting between EPA Region 1 and the state brownfield program managers and staff to share information and promote cooperation and coordination. The June 2018 meeting's 38 participants focused on:

- Vermont's Net Metering Rule and preferred sites
- Connecticut's brownfields inventory mapping
- The common application for brownfields funding in Rhode Island
- Liability protections in New Hampshire
- Historic preservation and brownfields

Soil Reuse

Construction, utility, brownfields, and waste site cleanup projects can generate significant quantities of excess soil that cannot be reused at the project site and can contain contaminants at levels that are below the standards for hazardous waste but are detectable and may still pose a groundwater or human contact risk. The management of these mildly contaminated soils can significantly increase the cost of a construction or remediation project and therefore hinder economic development. In 2011, NEWMOA's Waste Site Cleanup Program initiated a partnership with NEWMOA's Solid Waste Program to focus on improving the management and reuse of excess soil in the region. In FY 2018, the Soil Reuse Workgroup held two conference calls and updated NEWMOA's "[Soil Reuse: State Information Resource.](#)"

- PCBs and brownfields
- Area-wide planning
- Leveraging petroleum funding

Meeting participants also decided that NEWMOA should assist them with organizing a two-day regional brownfields summit to occur in 2019 or 2020. The purpose of the conference would be to advance understanding of state and federal brownfield programs and opportunities among stakeholders, including:

- State, and federal government brownfields and waste site cleanup programs
- Local, regional, and state economic development agencies
- Real estate developers, financial institutions, and legal firms
- Local governments
- Consultants

NEWMOA started to actively organize this event by holding monthly conference calls of the Brownfields Workgroup starting in the middle of the fiscal year.



April 2018
news@NEWMOA

Pollution prevention & sustainability



Rich Bizzozero

MASSACHUSETTS
OFFICE OF TECHNICAL
ASSISTANCE

2018 POLLUTION
PREVENTION &
SUSTAINABILITY
PROGRAM CHAIR

In FY 2018, NEWMOA ended its two-decade-long role as a regional center in the Pollution Prevention Resource Exchange, also known as P2Rx. P2Rx, a national network of regional P2 information centers, advanced pollution prevention as a cornerstone of sustainability by helping state and local programs through training, networking, and measurement support. Federal funding for P2Rx was eliminated, and the network and the resources developed under P2Rx were sunset at the end of the year. NEWMOA thanks EPA for their support of NEWMOA's P2Rx efforts over the past 20 years.

Continuous Improvement

NEWMOA conducted a survey of state participants in NEWMOA's FY 2018 Pollution Prevention and Sustainability groups, and respondents reported that NEWMOA's P2 tools, resources, and information sharing forums have improved states' ability to execute P2 and sustainability projects. They stated that NEWMOA:

- Provides valuable connections to EPA Region 1's pollution prevention efforts that would not necessarily occur otherwise
- ...has always played a vital role in helping states communicate, share ideas and issues

Another respondent shared that "the face to face meeting in Chelmsford was the best for me. You just cannot get the same information and experience on a call."

Dairy Summit

In February 2018, NEWMOA in partnership with the Vermont Department of Environmental Conservation (VT DEC) hosted a [Summit](#) for 70

participants, including processors of secondary dairy products (e.g., cheese, yogurt, butter, ice cream) in the Northeast. Presentations focused on a variety of sustainability topics, including the business case for sustainability, regulatory compliance, self-assessment tools, case studies, energy and water use efficiency, waste reduction, and much more. 92 percent of those who submitted evaluations rated the summit agenda as excellent or good. Participants reported that they plan to use the information they learned in their work in several ways, including:

- Begin detailed recording and tracking of utilities and waste to identify areas to improve and track/measure progress
- Evaluate... renewable options and how to reduce the environmental impact of... [our] supply chain
- Investigate proper amounts of cleaners or sanitizers
- Energy and water assessments to look for opportunities for reduction and savings

Green Business Program Support

The Northeast states have a rich history of supporting small businesses in their efforts to prevent pollution and become more sustainable. Through their green business, environmental leadership, and recognition programs, states serve many small business sectors by providing educational resources, training, onsite assistance, and recognition to encourage more sustainable practices. In FY 2018, NEWMOA formed a working group that held conference calls focused on supporting efforts to grow business engagement in the programs and on piloting software to support programs in measuring and tracking successes of participating businesses.

Northeast P2 & Sustainability Roundtable

NEWMOA's Northeast Pollution Prevention and Sustainability Roundtable helps state and local government environmental officials implement effective multimedia source reduction and assistance programs to promote sustainability and improvement in public health and the environment. NEWMOA convened two P2 Roundtable meetings in 2018. In September, 25 P2 program managers and staff from the New England states and EPA Region 1 met to discuss future strategic directions, including the role of P2 Programs in addressing emerging contaminants, the Toxic Substances Control Act (TSCA) reforms, and technical assistance to breweries.

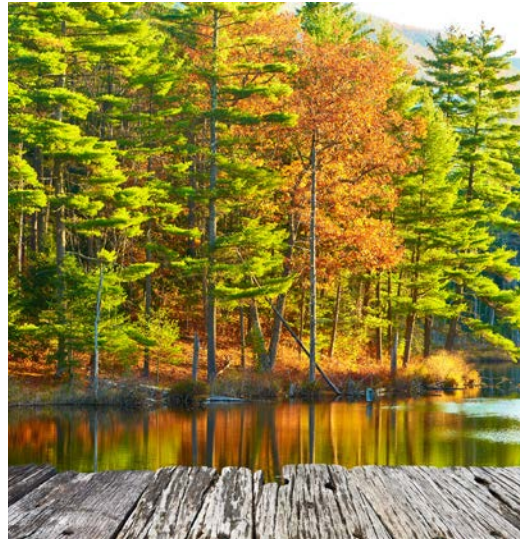
NEWMOA convened another meeting in September for 16 officials from P2 programs in New York, New Jersey, and EPA Region 2. This event focused on setting goals for the coming year and identifying challenges or obstacles to progress and emerging issues.

NEWMOA also convened the state program representatives from all of the Northeast states periodically by conference call to share information and discuss program issues.

Overall, 2018 was a year of transition for NEWMOA's Pollution Prevention and Sustainability Program. In the coming year, states will refocus their regional P2 efforts through NEWMOA. The Association will provide direct support to state P2 programs in the areas of janitorial services and breweries and will explore opportunities to diversify its P2 funding sources.

“[NEWMOA] has been very helpful and patient in bringing new state staff up to speed with the regional conversations and in synthesizing seemingly disparate viewpoints to develop constructive and doable next steps.”

Respondent to a survey about NEWMOA's 2018 P2 and Sustainability activities



2018 POLLUTION PREVENTION & SUSTAINABILITY PROGRAM

at-a-glance

Summit for 70 processors of secondary dairy products in the Northeast

Green Business Workgroup

2 Roundtable meetings of state and EPA P2 program staff

NEWMOA funding

NEWMOA relied on dues, grants, contracts, and special contributions for funding in FY 2018. A foundational source of funding was state dues. The New England states requested that EPA Region 1 make a portion of their RCRA hazardous waste program assistance funds available as dues and general support in the form of a grant to NEWMOA. The NEWMOA Board of Directors determined the specific amount in consultation with EPA Region 1. New York and New Jersey paid their annual dues directly to NEWMOA. IMERC and IC2 members also paid annual dues directly to NEWMOA to fund those activities.

EPA and U.S. Department of Agriculture competitive grants supported pollution prevention and sustainable materials management projects. Grants for these activities were awarded by a combination of EPA Region 1 and Headquarters and occasionally by other agencies and institutions. The USDA provided grant support for solid waste education projects in rural communities.

Contributions from member states in the form of contracts make up another important source of funding. Several states contribute directly to fund projects of particular interest, as well as to support NEWMOA's IMERC, IC2, and Brownfields programs.

NEWMOA's Financial Activity

October 1, 2017 to September 30, 2018

Revenues

State Dues, Contracts, Fees, Contributions, & In-Kind Services/Match	\$ 4 1 8 , 8 8 5
Federal Grants	4 0 4 , 7 5 4
Miscellaneous	3 0 1
Total Revenue	\$ 8 2 3 , 9 4 0

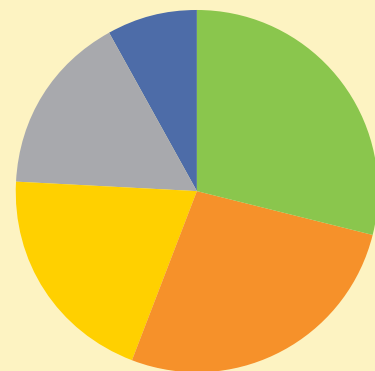
Expenditures

Staff Salaries & Benefits	\$ 5 6 8 , 2 3 0
Travel & Meetings	6 0 , 7 4 7
Other Direct Program Expenses	8 , 4 8 9
General & Administrative	1 5 6 , 1 7 9
Contracts	2 0 , 1 1 2
Total Expenditures	\$ 8 1 3 , 7 5 7

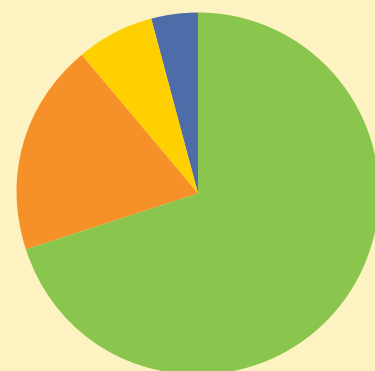
Net Assets

Net Change in Assets	\$ 1 0 , 1 8 3
Net Assets at Beginning of Year	\$ 2 0 7 , 6 8 1
Net Assets at End of Year	\$ 2 1 7 , 8 6 4

2018 NEWMOA Revenues



2018 NEWMOA Expenses



thank you

NEWMOA greatly appreciates the financial support provided by the following agencies in FY 2018:

California Department of Toxic Substances Control (CA DTSC)
Connecticut Department of Energy and Environmental Protection (CT DEEP)
King County Local Hazardous Waste Management Program
Louisiana Department of Environmental Quality (LA DEQ)
Maine Department of Environmental Protection (ME DEP)
Massachusetts Department of Environmental Protection (MassDEP)
Metro (Portland, Oregon)
Michigan Department of Environmental Quality (MI DEQ)
Minnesota Department of Health (MN DoH)
Minnesota Pollution Control Agency (MPCA)
New Hampshire Department of Environmental Services (NH DES)
New Jersey Department of Environmental Protection (NJ DEP)
New York State Department of Environmental Conservation (NYS DEC)
New York State Pollution Prevention Institute (P2I) at the Rochester Institute of Technology
North Carolina Department of Environmental Quality (NC DEQ)
Oregon Department of Environmental Quality (OR DEQ)
Oregon Health Authority (OHA)
Rhode Island Department of Environmental Management (RI DEM)
San Francisco Department of the Environment (SF DoE)
U.S. Department of Agriculture (USDA)
U.S. Environmental Protection Agency Region 1
U.S. Environmental Protection Agency Headquarters
Vermont Department of Environmental Conservation (VT DEC)
Vermont Department of Health (VT DoH)
Washington Department of Ecology (WA Ecology)

IC2 Supporting Members:

Citizens' Environmental Coalition
Clean and Healthy New York
Clean Production Action
Clean Water Action Minnesota
Clean Water Fund
Costco
Environmental Health Strategy Center
Lowell Center for Sustainable Production
at UMass Lowell
Maureen Gorsen (Alston & Bird)
National Tribal Toxics Council (NTTC)
Northwest Green Chemistry
Oregon Environmental Council
Walmart

IMERC Supporting Members:

Clean Water Fund – Massachusetts Chapter
Consumers for Dental Choice
Mercury Policy Project

Sponsors of waste site cleanup workshops:

Alpha Analytical
Cascade Drilling and Technical Services
Con-Test Analytical Laboratory
EthicalChem
Regenesis

NEWMOA Board Meeting, September 2018

Front row: (left to right) Tiffany Skogstrom, Mass OTA; Kim Greenwood, VT DEC; Nicole Lugli, CT DEEP; Dania Rodriguez, ASTSWMO; Jennifer Griffith, NEWMOA; Mike Ryan, NYS DEC; Beth Meer, NYS DEC; John Vana, NYC DEC

Back row: (left to right) Terri Goldberg, NEWMOA; Yvonne Bolton, CT DEEP; Ron Gagnon, RI DEM; Chuck Schwer, VT DEC; Peter Pettit, NYS DEC; Christopher Buck, NEWMOA; Leo Hellested, RI DEM; Mike Hastry, NJ DEP; Andy Bray, NEWMOA



NEWMOA 2018 Staff

Terri Goldberg
Executive Director

Andy Bray
Project Manager

Topher Buck
Project Manager

Jennifer Griffith
Project Manager

Lois Makina
Office Manager

Rachel Smith
Project Manager

NEWMOA 2018 Board of Directors & Officers

Yvonne Bolton
Bureau Chief, Bureau of Materials Management & Compliance Assurance, CT DEEP

Nicole Lugli
Director/Ombudsman, Office of Enforcement Policy & Coordination, CT DEEP

Dave Burns
*(2018 Board Treasurer)
Director, Bureau of Remediation & Waste Management, ME DEP*

Paul Locke
Assistant Commissioner, Bureau of Waste Site Cleanup, MassDEP

Greg Cooper
Director, Business Compliance Division, Bureau of Air & Waste, MassDEP

Richard Bizzozero
Director, Office of Technical Assistance, MA OTA

Michael Wimsatt
Director, Waste Management Division, NH DES

MaryJo Aiello
Director, Division of Solid & Hazardous Waste, NJ DEP

Mike Hastry
Director, Division of Waste Enforcement, Pesticides, & Release Prevention, NJ DEP

Peter Pettit
Director, Bureau of Waste Reduction & Recycling, NYS DEC

Ronald Gagnon
*(2018 Board Vice Chair)
Director, Office of Technical & Customer Assistance, RI DEM*

Leo Hellested
Chief, Waste Management Division, RI DEM

Chuck Schwer
*(2018 Board Chair)
Director, Waste Management Division, VT DEC*

Kim Greenwood
Director, Environmental Compliance Division, VT DEC

NEWMOA's mission

NEWMOA provides a strategic forum for effectively solving environmental problems through collaborative regional initiatives that advance pollution prevention and sustainability, promote safer alternatives to toxic materials in products, identify and assess emerging contaminants, facilitate adaptation to climate change, mitigate greenhouse gas sources, promote reuse and recycling of wastes and diversion of organics; support proper management of hazardous and solid wastes, and facilitate clean-up of contaminant releases to the environment.

Goals

NEWMOA's long-term goals are to:

- Support and strengthen state efforts to implement policies, regulations, and programs
- Promote interstate coordination and develop innovative strategies to solve critical and emerging environmental problems
- Develop and enhance the capabilities and knowledge of state officials so that they are well trained, able to adjust to rapid changes in technology, and respond effectively to emerging environmental challenges
- Articulate state program views on federal policy developments, programs, and rulemakings
- Cultivate and enhance relationships among member states, federal agencies, colleges and universities, and stakeholders
- Engage with and educate the regulated community and the public

Challenges

NEWMOA's 2018-2022 priorities are:

- Identifying and assessing emerging contaminants
- Anticipating and mitigating the impacts of climate change
- Building the technical capacity of and ensuring adequate resources for programs

Core Programs

- Pollution Prevention and Sustainability
- Hazardous Waste
- Solid Waste and Sustainable Materials Management
- Waste Site Cleanup
- Interstate Mercury Education and Reduction Clearinghouse (IMERC)
- Interstate Chemicals Clearinghouse (IC2)
- Cross Program Initiatives





Northeast Waste Management Officials' Association

89 South Street, Suite 600
Boston, Massachusetts 02111-2747
Tel: 617-367-8558
Fax: 617-367-0449
TDD/TTY: 857-265-3934
www.newmoa.org

