

# NEWMOA Project Ideas

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## Waste Site Cleanup Projects

### Conducting Waste Site Cleanup Workshops

Methods and technologies to investigate and remediate contaminated properties are continuously changing to incorporate new science and lessons learned. Local, state, tribal, and federal regulators, potentially responsible parties (PRPs), and the consultants they hire need training to keep up with new developments. NEWMOA can conduct a workshop or series of workshops.

The Association has extensive experience organizing and running technical [workshops](#) on a variety of waste site cleanup topics, including perfluorooctanoic acid (PFOA) and perfluorooctane sulfonic acid (PFOS), vapor intrusion, and chlorinated solvents contamination.

NEWMOA is available to support:

- Topic selection
- Agenda development, including identifying presenters
- Logistics and registration
- Event promotion, including to NEWMOA’s list of over 1,000 local, state, tribal, and federal regulators, consultants and potentially responsible parties (PRPs), and others in the Northeast
- On-site event management

NEWMOA could apply for continuing education credits for Massachusetts Licensed Site Professionals (LSPs), Connecticut Licensed Environmental Professionals (LEPs), and New Jersey Licensed Site Remediation Professionals (LSRPs).

Proposal: Organize waste site cleanup workshops to enhance the technical capability of local, state, tribal, and federal regulators, consultants, potentially responsible parties, and others.

Estimated cost: \$15,000 per workshop. NEWMOA could also charge a registration fee for participants to help cover the costs for the workshop space and food. The Association might also seek sponsors to help offset some of the costs.

### Improving Soil Reuse

Construction, utility, brownfields, and waste site cleanup projects often generate quantities of excess soil that cannot be reused at the project site and can contain contaminants at levels that are detectable but below those that would qualify them as hazardous waste. The management of these mildly contaminated soils can significantly impact the cost of a construction or remediation project and thereby impact economic development. For example, most mildly contaminated soil must be disposed in a landfill at considerable expense. Such disposal also consumes limited and valuable space.

NEWMOA manages a cross-program workgroup of state waste site cleanup and solid waste program staff focused on soil reuse. The Workgroup has pulled together a [webpage](#) that provides access to state information on soil reuse regulations and other topics. NEWMOA is available to develop communications materials to help the construction industry, consultants, local governments, and others understand one or more states' regulatory approaches to mildly contaminated soils management and available options. Materials could include fact sheets or periodic updates on state efforts.

Proposal: Develop communications materials to help the construction industry, consultants, local governments, and others understand one or more states' regulatory approaches to soil reuse and available options. Materials could include fact sheets or periodic written updates. Estimated cost: \$5,000 - 25,000 depending on the scope.

## Innovative Compliance Results

### Implementing Innovative Compliance & Performance Strategies

State agencies are concerned about the cumulative impact of the large universe of such small facilities as auto body shops, auto repair, dry cleaners, sites with underground storage tanks (such as gas stations), small quantity generators of hazardous waste, and many others. These facilities are often unaware of their compliance obligations, may not have staff dedicated to environmental compliance, and may not manage their air emissions and hazardous waste properly. State agencies often do not have the resources to perform traditional compliance inspections at this large number of facilities. To address this challenge, state programs have developed and implemented innovative approaches, such as the [Environmental Results Program](#) (ERP) and others. These agencies have found that innovative compliance strategies can increase government efficiency and improve environmental and human health protection.

State agencies created a national forum, called the [ERP Consortium](#) to assist them with developing and testing these approaches, sharing their results, and helping each other build capacity. Through this group, state programs engaged the U.S. EPA in discussions about these approaches. NEWMOA supported and facilitated the ERP Consortium for a number of years, until funding expired in 2013.

NEWMOA is available to reinvigorate the ERP Consortium and expand its scope and change its name to reflect a broader set of compliance strategies that states are developing. The Association is also available to conduct workshops, manage pilot projects, hold conference calls and webinars, provide website support, develop outreach materials, and communicate with the U.S. EPA and other key parties. An expanded Consortium could evolve into a forum for exploring the innovative compliance and results initiatives that state agencies have undertaken in recent years.

Proposal: Support a reinvigorated and expanded consortium that focuses on innovative strategies for advancing compliance in the regulated community, including offering training, holding conference calls and webinars, providing website support, developing outreach materials, developing and managing pilot projects, and communicating with U.S. EPA and other key parties. Estimated cost: \$5,000 - 25,000 depending on the scope.

### Building Institutional Capacity to Implement ERP

Many states have actively employed a wide variety of traditional and innovative approaches to advancing environmental compliance, enforcement, and assistance because of the need to:

- Effectively and efficiently improve the environmental performance of large groups of facilities with limited agency resources
- Demonstrate that compliance assurance efforts are yielding measurable results

These initiatives have experimented with various combinations of regulatory and non-regulatory approaches, including an approach called the Environmental Results Program (ERP). ERP uses a unique combination of linked compliance assistance, compliance certification, inspections, and statistical performance measurement to achieve improved performance of selected regulated sectors or groups.

NEWMOA has participated in the implementation of two regional ERP-related projects and has experience using various [ERP support tools](#), including the software designed to support statistical analysis. NEWMOA is available to provide assistance to a state or local environmental agency developing an ERP for a targeted sector or group. NEWMOA could help with:

- Identifying the universe of facilities and a statistically valid sample size
- Developing an inspection checklist
- Training inspectors to ensure uniform understanding and use of the checklist
- Performing a baseline round of facility inspections
- Compiling and analyzing baseline inspection results
- Developing a self-certification form and supporting outreach materials
- Performing the “after” round of facility inspections
- Compiling and analyzing the “after” results
- Performing before and after comparisons
- Preparing a project report

Proposal: Assist a state or local environmental compliance agency in building capacity to implement an ERP. Estimated cost: \$20,000 - 150,000 depending on the scope.

## Mercury Reduction

### [Online Registration for Dental Offices to Verify Compliance with the Dental Amalgam Separator Rules](#)

Recently, the U.S.EPA issued a new federal law requiring the use and maintenance of dental amalgam separators at dental clinics. Some of the IMERC states have already implemented similar regulations and have found that compliance is uneven. They have found that the biggest problem is the lack of proper maintenance of the amalgam separator (i.e., changing out the cartridges). Another issue is that the universe of dental offices is large, and many state agencies lack the resources to inspect them all.

IMERC could create an online registry for dental offices in the member states, similar to the notification program (i.e., e-filing system), in which the dental offices could self-report on their installation and maintenance activities. The dental offices that do not submit their reports could then be targeted by the state programs for inspections.

Proposal: Develop an online reporting system for dental offices to self-report their dental amalgam separator installation and maintenance activities and conduct outreach and assistance to inform the regulated entities. IMERC would enlist the help of an IT contractor to build the online system with IMERC's oversight to ensure that the information is distributed to all dentists. Estimated cost: \$250,000 – 350,000 depending on the scope.

### [Outreach on Mercury Use in Skin Lightening Creams & Cosmetics](#)

Mercury and/or mercury salts may be used as an active ingredient in skin lightening products to “lighten” the complexion or remove blotchy spots. However, this use of mercury poses a significant risk to users as mercury can be absorbed through the skin and cause damage to the brain, kidneys, and nervous system.

Some states require reporting and labeling for many products that contain mercury as well as bans or restrictions on the sales of these products. For example, Connecticut bans formulated products that contain more than 50 parts per million (ppm) of mercury; and Louisiana and Rhode Island ban formulated products that contain more than 10 ppm of mercury and mercury use in skin lightening creams would exceed these limits. Minnesota bans the use of mercury in cosmetics. To date, IMERC has never received a Notification regarding these products, although there is evidence that they continue to be sold illegally on the black market in small shops and bodegas catering to some ethnic communities across the U.S. Because many of these products are manufactured overseas and imported into the U.S. illegally, IMERC could focus on educating the distributors and retailers about the state laws.

IMERC could also assist in developing an education and outreach campaign targeted to the communities that tend to use skin lightening creams and other cosmetics that may contain mercury. As part of this effort, IMERC could create a webpage focused on skin lightening creams and add it to its “[Mercury Legacy Product Webpage](#)”. This could include materials that present information about the products, their potential health impacts, and state laws. IMERC could work closely with the state and local health departments to develop these documents.

Proposal: Assist state and local agencies and non-governmental organizations with an education and outreach campaign to communicate the potential negative health effects of mercury use in personal care products. Estimated cost: \$25,000 - 50,000 depending on the scope.

### Testing Compliance with Mercury Product Sales Bans / Restrictions

There are many instances of companies that appear to manufacture or sell banned mercury-added products in the U.S. but either have not notified through IMERC or have indicated that they do not sell or distribute these products in the IMERC states. [Examples of mercury-added products that are banned in all IMERC states include mercury-added switches and relays and sphygmomanometers \(blood pressure cuffs\).](#)

IMERC could help to verify these manufacturers' self-reported compliance with the states' mercury-added product bans by attempting to purchase banned products for shipment into one or more of the affected states. IMERC could attempt to purchase these products via the internet or telephone and document the results, including the types of protocols (if any) that are used by the manufacturers to ensure compliance with the restrictions.

Proposal: Verify compliance with mercury-added product sales bans by attempting to purchase banned items. Use this information to provide outreach and compliance assistance to companies. Estimated cost: \$25,000 – 50,000 depending on the scope.

## Emerging Contaminants

### Toxic Chemicals in Consumer Products

A growing body of research raises significant concerns about potential harm associated with the presence of flame retardants, plasticizers, heavy metals, and other chemicals in consumer products. This is causing consumers, businesses, and policy makers to question the safety of certain chemicals or materials in these products. Timely and preventative actions on toxic chemicals are critical to effectively protecting the environment and public health and can help spur a transformation to a greener economy, new and safer jobs, and a renewed public confidence in consumer products.

The ability of state, local, and tribal agencies and others to assess the hazards and risks posed by the use of chemicals of concern in products and to develop policies to protect human and environmental health is obstructed by a lack of accessible and transparent information on the chemical content of consumer products. NEWMOA facilitates the [Interstate Chemicals Clearinghouse \(IC2\)](#) to fulfill this and other needs related to public policy on chemicals of concern. Collaboration among local, state, and tribal governments is a proven strategy to cost effectively reduce duplication of effort, enhance efficiency through information sharing and coordination, increase access to high-quality information, build capacity, and promote consistency in public policy. The IC2 facilitates increased access to chemical hazard assessments and outreach to non-governmental organizations (NGOs), industry, academics, government officials, and others in the user community on its resources. The IC2 is available to:

- Expand analysis of available state data on the prevalence and use of targeted toxic chemicals in products, publish results, and conduct outreach and education with a broad range of stakeholders on the results
- Coordinate the development of [hazard assessments of chemicals of potential concern](#) and [alternatives assessments](#) of chemicals of concern in specific uses
- Develop a database to share the results of product testing for the presence of priority toxics
- Educate non-governmental organizations (NGOs) and industry on alternatives assessment methods and examples to expand their ability to conduct and review these assessments

Through its leadership of [IMERC](#) and the [IC2](#), among other initiatives, NEWMOA has extensive experience working with government agencies at many levels—as well as other stakeholders—to address hazards associated with chemicals of concern by lowering barriers to more and better information and collaboration.

Proposal: Support development of new (or enhancement of existing) chemical hazard assessment and alternatives assessments, associated tools, and support materials and chemical-use reporting systems. Estimated costs: \$20,000 - 100,000, depending on the scope.

## Solid Waste & Sustainable Materials Management Projects

### Generating Renewable Energy from Food Waste

Food wastes come from food processing facilities, grocers, restaurants, hotels, convention centers, schools, universities and other institutions, and private residences. Most food waste is thrown away, making food waste the single largest component of MSW reaching landfills and incinerators. Management of food waste is a rapidly evolving field, and waste management firms are adapting technologies to maximize the recovery of value as a:

- Soil nutrient through composting – offsetting the need for chemical fertilizers
- Source of energy – anaerobic digestion (AD) facilities generate methane gas, which is a natural gas that can be used to generate electricity or for heating

AD of food waste enhances sustainability by reducing the quantity of useful materials that are thrown away, reducing the need for synthetic fertilizers (usually petroleum-based), and increasing local energy generation.

State environmental agencies are finding that existing organics management standards are often not well-suited for the myriad of issues related to post-consumer food residuals management, such as non-food contamination, odors, and possible pathogens. AD projects need to operate properly and address these problems proactively for facilities to be safe and accepted in communities. State environmental agencies, solid waste management industry officials, and developers of AD technologies need a forum to share information and learn from each other to develop a common understanding of key issues and available solutions.

NEWMOA supports a joint [Workgroup with the Northeast Recycling Council \(NERC\) focused on food waste](#) issues. Under the framework of this group, NEWMOA and NERC are available to examine available management standards for anaerobic digestion for post-consumer food waste



management and research key questions, particularly focused on residuals management. NEWMOA is available to develop information resources to help state officials and other stakeholders understand the best practices for post-consumer food waste anaerobic digestion and associated residuals management.

Proposal: Develop information resources and conduct outreach to help stakeholders and communities understand the best practices for post-consumer food waste anaerobic digestion and associated residuals management. Estimated cost: \$40,000 - 100,000 depending on the scope.

### Decreasing Trash Disposal & Increasing Recycling Through Pay-as-You-Throw

Many towns use property taxes and/or a flat fee to fund their waste management services. Pay-as-You-Throw (PAYT) programs are different; they charge residents for waste disposal based on the amount they throw away. PAYT programs are known by other names, including unit-based pricing (UBP) and save money and reduce trash (SMART). Under a PAYT system, residents that produce less trash are not subsidizing those that produce more. Communities that have implemented PAYT find it is an effective incentive-based program that reduces waste disposal and related costs and increases recycling. NEWMOA has worked with waste management districts in Vermont and New Hampshire to promote PAYT in rural communities and developed [numerous case studies and outreach brochures, and organized workshops](#). NEWMOA is available to work with one or more interested communities to help them understand their current waste management and recycling costs and related issues, develop a recommended PAYT approach, develop outreach materials, and engage the public.

Proposal: Assist interested communities with understanding their current waste management and recycling costs and related issues, develop a recommended pay-as-you-throw (PAYT) approach, prepare and disseminate outreach materials, engage the public, and support implementation. Estimated cost: \$10,000 - 25,000 depending on the number of communities and the scope.

### Increasing Reuse & Recycling of Bulky Wastes

Bulky waste includes furniture, carpet, mattresses, and such large rigid plastic items as kiddie swimming pools and play structures. These items are difficult to handle and transport and consume a significant amount of increasingly scarce landfill space. In addition, they contain materials that, through recycling, can replace virgin material in the manufacturing of new products reducing their carbon footprint and overall environmental impact. However, diverting bulky wastes from disposal presents a significant challenge for homeowners and local governments. During 2015 and 2016, NEWMOA collaborated with waste management authorities and a variety of [stakeholders in four rural areas in Maine, Massachusetts, and Vermont to develop effective strategies to reuse and recycle bulky waste](#). Through this project, NEWMOA developed a series of publications focused on best management practices and held workshops.

NEWMOA is available to assist interested communities with understanding their options for reducing bulky waste generation and increasing reuse and recycling, including associated costs. NEWMOA could also help the local programs with implementing selected options. NEWMOA could assist the community with public outreach, including developing educational material and meetings.

Proposal: Assist communities with understanding and implementing options to improve management and increase recycling of bulky wastes, develop outreach materials, and engage the public. Estimated cost: \$8,000 - 15,000 depending on the amount of assistance requested.

### Improving Safety at Rural Transfer Stations

In many rural areas, towns operate transfer stations to provide waste management and recycling services to their residents. In many cases, the physical set-up and/or operation of the transfer station presents safety concerns for workers and/or residents using the facility. [In 2016 and 2017, NEWMOA partnered with waste management authorities and transfer stations in rural areas of New Hampshire and Vermont to improve worker safety.](#) NEWMOA staff visited eight rural transfer stations to observe conditions and develop recommendations to improve safety. NEWMOA also developed training for transfer station attendants and municipal officials to raise awareness of the full spectrum of potential safety issues and offer solutions.

NEWMOA is available to provide training to transfer station workers. NEWMOA could also assist interested communities with understanding safety concerns at their specific facilities and their options for improvement. NEWMOA could also help the local programs with implementing selected options.

Proposal: Assist rural communities with understanding and implementing options to improve safety at transfer stations and drop-off recycling facilities. Estimated cost: \$5,000 - 15,000 depending on the number of communities and the amount of assistance requested.

### Reducing Waste Disposal

Some residents dispose of recyclable materials, such as milk jugs and aluminum beer/soda cans, or items that are in good shape and could be reused by others. In 2016 and 2017, NEWMOA partnered with waste management authorities and transfer stations in rural areas of New Hampshire and Vermont to promote waste reduction strategies to residents. [NEWMOA developed outreach materials and held training workshops.](#)

NEWMOA is available to assist interested communities with understanding their options for reducing waste disposal through reduce, reuse, and recycling strategies. NEWMOA could assist communities implement their outreach strategies, including developing educational material and organizing meetings.

Proposal: Assist communities with understanding options to decrease waste disposal by promoting reduce, reuse, and recycling strategies to residents, develop outreach materials, and engage the public. Estimated cost: \$5,000 - 15,000 depending on the number of communities and the amount of assistance requested.

### Increasing Reuse & Recycling of Industrial By-Products

Many industrial by-products are non-hazardous and could be used as substitutes for raw materials in the manufacture of consumer products, roads, bridges, buildings, and other construction projects. For example, the use of coal fly ash can enhance the strength and



durability of concrete. However, most industrial by-products are disposed, which wastes valuable resources and is expensive. Increasing industrial materials reuse and recycling would increase sustainability by:

- Preserving natural resources by decreasing the demand for virgin materials
- Conserving energy and reducing greenhouse gas emissions by decreasing the demand for products made from energy-intensive manufacturing processes
- Saving money by decreasing disposal costs for the generator and decreasing materials costs for end users

To promote greater reuse of these materials, many state environmental agencies have developed beneficial use determination (BUD) programs to review and approve safe uses of industrial by-products. [NEWMOA has worked with BUD program staff from states across the country](#) and developed an online database of beneficial uses of industrial non-hazardous by-products, called the Beneficial Use Determinations (BUDs) Database, for states and EPA use. The development of the BUDs Database was overseen by a national workgroup of state officials, and the database contains over 1,500 BUDs issued by 27 states. The BUD Database helps state programs share information and improve the efficiency of their BUD approval process.

The state BUDs programs are often not well-known by industry and/or have requirements that they need to understand. A public version of the Database would enable manufacturers to learn more about the states' BUD processes, what states require, and beneficial uses of materials they generate that state programs have approved. NEWMOA is available to improve the BUD Database by:

- Adding information on states' BUD criteria and approaches
- Updating and adding more BUD data
- Creating an easily searchable public version that covers some but not all of the available data

NEWMOA could also facilitate a BUD Workgroup of state officials as a forum for sharing information and learning so that participants can continue to develop and improve their programs.

Proposal: Create a public version of NEWMOA's Beneficial Use Determinations (BUDs) online database; expand and maintain the content. Estimated cost: \$40,000 – 75,000 depending on the scope.

#### [Improving Recycling of Construction & Demolition Wastes](#)

NEWMOA's report, "[Construction and Demolition \(C&D\) Materials Management in the Northeast in 2013](#)" assessed how construction and demolition (C&D) materials were managed in the region. An important conclusion of the Report is that most C&D debris is either disposed in landfills, or the fines and residuals generated by C&D waste processing are used as alternative daily cover (ADC) at landfills.

The Association supports a [Workgroup focused on C& D materials](#). Under the framework of this group, NEWMOA is available to collaborate with government officials, researchers, and C&D waste processors and their trade association to promote best management practices (BMPs)

and/or performance standards for C&D debris processing. NEWMOA could conduct workshops or meetings with stakeholders to increase awareness about processing and recycling opportunities and approaches and develop written materials.

Proposal: Increase C&D materials recycling through outreach and education. Estimated cost: \$30,000.

### Improving Disaster Debris Management Planning

Hurricanes Irene and Sandy devastated many areas of the northeast and provided many lessons learned for debris management. When disasters like those occur, roadways must be cleared quickly, and residents and business owners need an outlet for debris. Communities need temporary staging areas for timely and efficient management of the wastes. Municipalities and counties need to pre-identify appropriate locations for the storage of the various wastes that are generated. NEWMOA is available to work with state and local waste and/or emergency response agencies to:

- Estimate the types and quantities of debris that would be generated and the how quantities would be distributed throughout the state
- Inventory state-owned properties to develop a list of those that might be appropriate for temporary staging
- Assist state waste/emergency response programs in communications with other state agencies that control these potentially appropriate locations
- Identify gaps in available appropriate state-owned properties, the estimated quantities of materials, and the physical relationship to where the debris could be generated
- Identify other locations that might fill potential gaps, such as large areas that do not have dense vegetation or buildings, including parking lots
- Identify owners of identified properties and assist state waste/emergency response programs in communications with them

A second outstanding need is to pre-identify potential markets for the waste materials generated by a disaster, particularly construction and demolition (C&D) debris. To minimize disposal of debris, and maximize reuse and recycling, state and local agencies need to promote segregation of various wastes at the curb and at temporary staging areas, and to have a place for the material to go. In the immediate aftermath of a disaster, identifying outlets for reuse and recycling are not likely to be a high priority. NEWMOA is available to help state and local governments identify outlets and establish relationships prior to a disaster by:

- Researching how debris, particularly C&D debris was handled after Hurricanes Irene and Sandy and identifying lessons learned and suggestions for improvement
- Contacting key firms to identify their capacity to handle disaster debris and their ability to maximize recovery for reuse/recycling
- Identifying additional reuse and recycling firms in the region and engage them in discussions
- Developing a write-up summarizing potential regional outlets for each of the various material types that could be generated from a disaster

Proposal: Assist state and local officials with improving the management and maximizing the diversion of municipal solid waste and construction and demolition materials from disposal

following a natural disaster by pre-identifying locations for temporary storage and developing a go-to resource on outlets to recycle the types of materials generated. Estimated cost: \$20,000 - 50,000 depending on the scope.

### Supporting the Development of State Solid Waste Plans

States must update their solid waste master plans periodically. Since its founding, NEWMOA has [supported state solid waste programs](#) in the development of programs to address solid waste and has extensive experience understanding their challenges. For example, NEWMOA has:

- Collected and analyzed state data on [municipal solid waste \(MSW\)](#) and [C&D debris](#) management in the region and published reports
- Worked with rural communities on improving the management of paint waste, bulky waste, and food waste and on implementing [pay-as-you-throw](#) strategies
- Assisted states with preparing [solid waste reports](#) and planning documents and organizing stakeholder meetings for solid waste planning

NEWMOA is available to assist state programs with developing solid waste plans, including:

- Developing strategies and setting priorities
- Organizing and managing stakeholder meetings
- Scoping projects, developing tasks, and identifying resource needs
- Researching best practices in other states and countries
- Supporting waste characterization studies
- Collecting, managing, analyzing, and presenting data
- Managing contractors
- Preparing, reviewing, and editing reports or commenting on reports prepared by others

Proposal: Assist state officials with updating the state's solid waste master plan. Estimated cost: \$20,000 - 100,000 depending on the scope.

### Promoting Proper Recycling

Single-stream, or no-sort recycling was established to streamline source separation, increase recycling rates, and simplify collection. While these goals have been important, there have been unintended consequences. Consumers are not always aware of or are confused about what are acceptable materials for recycling. People often engage in wishful recycling that leads to downstream contamination and intractable problems with processing recycling at material recycling facilities (MRF). The cumulative effect of recycling contamination has led to a global disruption in the recycling market and China's imposition of restrictions often called "National Sword," whereby China has put strict limits on levels of contamination in the plastic and paper streams and has started to refuse imports of lower-purity commodities. To combat recycling contamination, programs must engage haulers and MRFs, educate consumers, and audit and provide feedback at the curbside and drop-off.

NEWMOA is available to work with one or more interested communities or states to help them educate residents on proper recycling practices, understand their current waste management and recycling costs and related issues, develop a recommended approach, develop outreach materials, and engage the public.

Proposal: Assist interested communities or states with improving recycling practices. Estimated cost: \$10,000 - 150,000 depending on the scope of NEWMOA's role and the size of the community.

## Pollution Prevention & Sustainability

### Promoting Safer Garment Cleaning

Use of solvents like perchloroethylene (PCE) by dry cleaners and others presents potential hazards in the workplace and neighborhoods. The use of PCE can be expensive, since PCE waste must be handled as a hazardous waste. If their wastes are not handled properly, PCE garment cleaners can be a source of soil and groundwater contamination. An estimated three out of four existing dry cleaners, or 27,000 sites, may be contaminated in the U.S. The remediation of these sites can be costly.

There are alternatives to PCE for garment cleaning, such as hydrocarbons and siloxanes, but many of these have environmental, health and safety concerns or have not been thoroughly studied. Professional wet cleaning is a safer, greener, and commercially available substitute for PCE dry cleaning. The process uses computer-controlled washers and dryers, specially formulated detergents, and specialized finishing equipment. NEWMOA supports a [garment cleaning working group](#) that developed a [wet cleaning technology virtual trade show](#). In 2017 NEWMOA organized a series of successful wet cleaning demonstration events at existing garment care facilities in the region.

The diffusion of professional wet cleaning has been slow. Barriers include a lack of customer awareness of professional wet cleaning; limited understanding by stakeholders of the environmental and economic benefits of professional wet cleaning; limited understanding by cleaners of the efficacy of professional wet cleaning; and a lack of knowledgeable vendors, qualified installers, qualified trainers, and real-world venues to observe the potential of the technology. To address these challenges, NEWMOA is available to:

- Develop a public service announcement video outlining the benefits of wet cleaning and the risks to public health and the environment associated with dry cleaning
- Develop fact sheets for the public, which could be distributed through boards of health, on the health and environmental impacts of PCE and other solvent alternatives, such as n-propyl bromide
- Disseminate information to the public and dry cleaners in the Northeast
- Organize wet cleaning demonstrations

Proposal: Develop outreach and education resources or tools on wet cleaning for garments and disseminate and organize wet cleaning demonstrations. Estimated cost: \$50,000 – 75,000 depending on the scope.

## Hazardous Waste

### Promoting Hazardous Waste Compliance Among Retailers

The retail sector can generate significant amounts of hazardous waste in the form of off-spec, returned, or damaged products. These retailers can include hardware stores, big box stores, pharmacies, and others. There are unique and challenging issues with respect to these wastes and how they are managed. NEWMOA staff has expertise in hazardous waste regulations and management, including the compliance challenges facing retailers. To address their issues, NEWMOA is available to develop tools and educate retailers on the opportunities to reduce hazardous waste and properly manage it, including:

- Identifying source reduction opportunities for retail hazardous waste
- Developing best management practices for hazardous materials and waste generated by retailers
- Creating e-learning modules to streamline training for staff
- Working with corporate headquarters to ensure proper management and feedback loops throughout the reverse distribution process

Proposal: Develop outreach and education materials and assist retailers with reducing the generation of hazardous waste and managing their wastes properly. Estimated cost: \$75,000 - 150,000 depending on the scope.