

# VERMONT MATERIALS MANAGEMENT PLAN: Moving from Solid Waste towards Sustainable Management

Effective date June 18, 2014

“Materials management is an approach to serving human needs by using and reusing resources most productively and sustainably throughout their life cycles, minimizing the amount of materials involved and all the associated environmental impacts.”

– *Sustainable Materials Management: The Road Ahead (USEPA 2009)*



Photographs clockwise from top left: baled plastics, food scraps fed to chickens, and compost windrows being turned.

## HOUSEHOLD HAZARDOUS WASTE, CONDITIONALLY EXEMPT GENERATOR WASTE, ELECTRONIC WASTE, AND UNIVERSAL WASTE

The USEPA describes HHW as “Leftover household products that contain corrosive, toxic, ignitable, or reactive ingredients that pose a threat to the environment and public health. These chemicals are costly to collect and manage separately from municipal solid waste.” Such products include automotive fluids, batteries, household chemicals, and electronic products with hazardous components disposed by households.

Vermont Solid Waste Rules define HHW as “waste that would be subject to regulation as hazardous waste if it were not from households” (6-201 Definitions). Although HHW is exempt from state and federal regulation as hazardous waste, Vermont statute requires the Solid Waste Program to address the volume and toxicity of the waste stream. Vermont has worked carefully to integrate programs designed to segregate hazardous waste from solid waste and to achieve the reduction of toxic materials both at the source of production and at the point of waste generation.

Conditionally Exempt Generator (CEG) waste is hazardous waste from a business, municipality or other entity other than that generates less than 220 pounds of hazardous wastes per month. Waste collected from CEGs must be managed under Vermont Hazardous Waste Management Regulations (VHWMR) and therefore should be segregated from HHW.<sup>24</sup> If CEG waste is co-mingled with HHW, then all waste is managed as hazardous waste and the exemption for household hazardous waste management may not be utilized. This Plan will refer to both HHW and CEG wastes Universal Waste refers to any of the following hazardous wastes that are handled under streamlined provisions in order to facilitate proper management: batteries, pesticides, thermostats, PCB-containing fluorescent light ballasts, fluorescent lamps, mercury-containing devices and cathode ray tubes (CRTs).

Electronic Waste includes computers, computer monitors, computer peripherals, printers, televisions and devices containing a cathode ray tube. Electronic devices contain toxic materials (including lead, mercury, and chromium), as well as precious metals (such as gold) that should be managed responsibly, recovered, and recycled when possible.

Solid waste management entities (SWMEs) work with ANR to manage HHW. Since 1992, SWMEs and municipalities in Vermont have been required to include provisions in their Solid Waste Implementation Plans (SWIPs) for the management of this waste as “unregulated hazardous waste.” The 2001 State Solid Waste Management Plan established the requirement for SWMEs to hold a minimum of two household hazardous waste collection events per year. Since this initial requirement was created over 12 years ago, some SWMEs have gone above and beyond the minimum, increasing the number of events offered per year to as many as 25. Others have built fixed and fully permitted facilities that are open seasonally or year round. Those SWMEs that do not offer similar services have been restricted by their own budgetary constraints to offer only two events per year. To help offset costs of HHW collections for all SWMEs, ANR has provided annual SWIP grants based on per capita population of the region served. Those with permitted fixed facilities are able to consolidate materials, which lowers recycling and disposal costs. Fixed facilities, depending on hours of operation, can be more convenient for residents and CEGs than seasonal events. However, those with fixed facilities have increased staffing costs and as well as the upfront cost to purchase, site, and build a facility.

Since the writing of the state’s last Solid Waste Management Plan, both SWMEs and ANR have evaluated the best way to manage HHW. Factors considered include safety to the environment and residents, training for SWME staff handling materials, overall costs for services, and convenience of disposal for residents. Gauging the need for hazardous waste collection and discerning real participation rates is challenging. Comparing the number of participants accessing HHW events/facilities with US Census Bureau population data shows a participation rate of 10% of Vermont’s households.

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<sup>24</sup> Vermont Agency of Natural Resources, *Hazardous Waste Management Program: Regulations & Statutes*, (2013), <http://www.anr.state.vt.us/dec/wastediv/rcra/regs.htm>, and Subchapter 9: Universal Waste Management Standards, [http://www.anr.state.vt.us/dec/wastediv/rcra/hazregs/VHWMR\\_Sub9.pdf](http://www.anr.state.vt.us/dec/wastediv/rcra/hazregs/VHWMR_Sub9.pdf).

This may appear to be a low rate but is consistent when compared nationally with other states that have HHW collection programs. The challenge is to discern what the actual participation rate is. In the performance standards section, this Plan outlines recommendations in order to evaluate how much waste is being generated/purchased, how educated residents and businesses are about proper disposal, and how convenient access to disposal is.

ANR will focus future state initiatives on reducing HHW generation through public education and outreach and EPR and product stewardship of HHW.

Vermont has multiple successful product stewardship programs in place for products including electronics waste mercury containing bulbs, mercury thermostats and mercury containing automotive switches. A paint stewardship program is poised to be implemented in 2014. The Extended Producer Responsibility & Product Stewardship section of this chapter discusses these programs in further detail.

### **Public Education and Outreach**

Public education and outreach is important to promote the proper disposal of HHW/CEG waste and to increase participation both at fixed facilities and collection events. Well planned education and outreach activities can generate awareness of the environmental and health risks associated with HHW/CEG waste. It can also promote changes in behavior when making product choices and identifying proper disposal of hazardous waste products. ANR will explore opportunities to educate and inform both the general public and small businesses about the opportunities for HHW/CEG waste management.

1. ANR will collaborate with other groups and agencies to develop a waste reduction program for schools throughout the state that will cover recycling, organics source reduction and diversion, and toxics reduction.
  - a. Tools and resources will be developed for teachers to impart the fundamentals of waste reduction and management at home and school..
  - b. The SWMEs will provide assistance as needed in the establishment and maintenance of a school-wide waste reduction program. ANR recommends that such a program include:
    - i. A designated School Waste Reduction Advisory Committee. The group may be comprised of students, teachers, administrative staff, facilities/cafeteria staff, and parents that make decisions and recommendations for the school toxics reduction program and will ensure the sustainability of the school waste reduction program.
    - ii. A written policy stating the commitment to a school-wide toxics reduction program. This could include an initial materials evaluation completed by the SWME and establishing a connection with Vermont Environmental Assistance Office (EAO). EAO can offer assistance with school lab chemical clean outs. Evaluations will offer school-specific performance measures for reducing the presence of toxics on campus, and the proper end-of-life management of unavoidable toxics. Costs to the school could be tracked in order to show cost savings as a result of waste reduction.
    - iii. Procurement policies outlining School District wide purchasing of non-toxic environmentally preferred products to be used in schools. This may be accomplished independently or with assistance from ANR.
    - iv. A method of tracking hazardous waste purchases to identify where purchasing adjustments can be made.

2. Continue to look for opportunities to educate and inform the commercial sector and the general public about the benefits of proper disposal and toxic use reduction.. Efforts will be performed by the SWMEs and state agencies..
  - a. Promote participation in Vermont’s Stewardship Programs for mercury thermostats, fluorescent bulbs, electronic waste, and paint.
  - b. Develop a comprehensive list that provides detailed information about HHW collection events and permanent collection facilities that is easily accessible by the general public via website and mailings to town offices.
  - c. ANR will require all SWMEs to offer outreach to businesses as to what services are available such as Vermont EAO to help them reduce the amount of hazardous waste they generate and how to safely handle and dispose of it. EAO can assist with a waste audit and resources to ensure the business is following regulations and promoting waste reduction practices.. Audits educate the commercial sector about proper recycling and disposal and are also effective in helping businesses reduce the amount of waste they generate.

### **Extended Producer Responsibility & Product Stewardship**

Hazardous waste generated in the household such as cleaners, batteries, mercury containing devices, paints, pesticides, and automotive products have been at the forefront of environmental concern for many years. The practice of managing these products and the associated costs have prompted regulators to more closely examine the manufacturer’s role in the funding of the proper disposal or recycling of their waste products. Extended producer responsibility and product stewardship programs have addressed many barriers of cost and convenience to the general population. Many states, including Vermont, have successful program for proper recycling of such products as fluorescent bulbs, mercury thermostats, paint, and electronic wastes through regulated programs. These extended producer responsibility programs have been adopted at an increasing rate and have allowed for convenient options for disposal.

In the first year following implementation of the mercury lamp EPR program, 37% of mercury lamps were recycled, which is significantly higher than the national average of less than 5%. In 2012, 25 pounds of mercury were recovered by the thermostat EPR program. As a result of thermostat program, Vermont has the highest per capita rate of recycling in the nation for thermostats. Following implementation of the electronic waste EPR program enacted in 2010, 4.8 million pounds of covered electronic devices were collected during the first year of the program. This exceeds the legislative goal of 3.4 million pounds per year, and it represents a higher per capita rate of collection than any other state. No statistics are available yet for Vermont’s paint recycling law, which was passed in 2013 and will be implemented in 2014.

EPR and product stewardship programs not only offer collection services in more convenient locations, but they also shift the burden of disposal costs from taxpayers and municipalities to manufacturers and the consumer.

To encourage cost-effective and convenient management of HHW, ANR will:

1. Evaluate the use of extended producer responsibility and product stewardship programs, for the sound management of HHW/CEG waste.
2. Evaluate the need for additional extended producer responsibility and product stewardship programs in Vermont through a stakeholder process.

### **Government Leadership**

Government leadership is important in promoting sound management of hazardous and universal wastes.

ANR supports the following efforts:

1. Keep abreast of and support procurement policies for Vermont state government that adheres to Environmentally Preferable Purchasing (EPP) for all state agencies and coordinate with Building and General Services on the existing policies. This is intended to encourage the elimination of priority toxic substances such as arsenic, lead, and mercury in products purchased by the state, public, and private sectors. Show leadership in purchasing and using non-toxic, environmentally sound products in state buildings.
2. Promote the use of Electronic Product Environmental Assessment Tool (EPEAT) standards for state procurement policies for computers and computer related products, adhere to recommended operation and maintenance standards, and abide by strict end-of-life management practices.
3. Ensure continued education and preferred practices are conducted by State owned and operated auto repair shops. Previous efforts made by ANR's Environmental Assistance Office (EAO) have shown great success with adoption. The EAO will continue to be available as a resource to businesses in Vermont looking for assistance with management of their waste.
4. Promote addressing the issue of high hazard wastes (such as explosives and chemically unstable/reactive waste) at the state emergency response level. Some high hazard events have risen to a level that required State involvement. While some progress has been made on this effort, high hazard wastes remain a topic of discussion both in the public and private sectors.
5. Utilize existing training courses for use by municipal officials and staff that focus on proper HHW/CEG collection and management, and evaluate overall understanding and comprehension standards for necessary updates and improvements to education efforts. EAO currently offers periodic HHW/CEG training workshops around the state at no charge.

### **Infrastructure Improvements**

Historic Solid Waste Management Plans and legislative reports have considered establishing an increased number of fixed HHW/CEG facilities in an effort to enhance accessibility and convenience. To date, there are five permanent facilities, which operate in Addison County, Chittenden County, Northeast Kingdom (seasonal), Northwestern Vermont, and Rutland County. These 5 permanent facilities combined with seasonal events show an overall 10% participation rate statewide by Vermont residents. The 2013 Waste Composition Study found 0% HHW in the samples of residential MSW, but by weight it is estimated that 423 tons are still being disposed of in MSW. This shows that while strong efforts have been made to keep HHW out of the waste stream, there is still room for improvement. Since HHW poses such serious risks to human health and the environment, it is imperative that no HHW is disposed of in the landfill.

Without better data, it is hard to define the actual need and demand for HHW disposal. Are residents sitting on piles of household hazardous waste because they do not have convenient disposal options? Are they pouring it down their drain because they have not received enough outreach? Or do they have little if any hazardous waste that they need to dispose of on a regular basis? In order to answer these questions, accurate data needs to be collected. This data will assist in defining what Vermont's goal should be for managing hazardous waste. Part of the phased-in performance measures of this Plan requires all SWMEs to survey residents of their region. Many areas of the state have very limited access to hazardous waste disposal and the requirements outlined in this Plan focus on ensuring access and convenience for every region of the state.

From the available data, reporting indicates that permanent facilities have higher participation rates. The following three SWMEs have provided data showing an increase in participation in instances where the management of HHW/CEG has progressed from periodic events to fixed facilities. The Northeast Kingdom Solid Waste Management District switched

collections from periodic events to a permanent facility between 2000 and 2001. In that one year, they exhibited a 12% increase in participation and a 20% drop in disposal costs. The Addison County Solid Waste Management District (ACSWMD) also has data that documents a strong increase in participation rates subsequent to their fixed facility coming online in 2005. ACSWMD shows that from 2005 to 2011, participation rates for HHW increased 43% and 44% for CEG waste. However, their staffing and facility costs have also increased. Chittenden Solid Waste District's increase in participation rates when their fixed facility (The Environmental Depot) experiences three times the participation rate compared to their "Rover" events in 2011, but their budget also shows increased costs for HHW operations.

The growth in participation rates may also be attributed to a designated operating schedule, predictable availability, and a strong education and outreach program for the previously mentioned permanent facilities. This MMP establishes a phased in implementation schedule (see Performance Standards) during which all SWMEs are required to improve accessibility by increasing: education and outreach efforts, the frequency of collection opportunities via events or facilities, available operating hours, and access to convenient disposal options.

### **Mandates and Disposal Bans**

Hazardous waste released into the environment can contaminate our air and water. Regulations that place mandates and landfill bans on hazardous materials do so to prevent landfilling of these materials. In Vermont, landfill bans are in place on rechargeable batteries, lead acid batteries, button batteries, certain electronic devices, fluorescent bulbs, motor oil, paints, regulated medical waste, propane and other gas cylinders, dangerous wastes including explosives, and mercury-added products. Banned electronic devices include computers, peripherals, monitors, cathode ray tubes, televisions, printers, personal electronics such as personal digital assistants and personal music players, electronic game consoles, fax machines, wireless telephones, telephones, answering machines, VCRs, DVD players, digital converter boxes, stereo equipment, and power supply cords. There are also landfill bans on non-hazardous materials, such as tires<sup>25</sup> and household appliances. Other potential bans for both non-hazardous and hazardous containing products will be evaluated during the Plan term in order establish more cost effective and convenient options for collection.

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<sup>25</sup> VT Agency of Natural Resources. Report to the Vermont Legislature on Problem Scrap Tire Piles. January 8, 2013.



Performance Standards- HHW, CEG, E-Waste, Universal Waste	
Agency-level Standards	Documentation & Deadlines
Statewide Goal	
<p>The goal is to reduce toxicity in the waste stream and to expand and provide convenient, cost-effective HHW/CEG management systems statewide. Such an expansion will include convenient access to year round HHW/CEG collection programs either through collection facilities or events, and/or EPR and product stewardship programs in close proximity to all residents.</p>	<p><b>Documentation:</b> Description and assessment of the HHW/CEG collection programs throughout the state will be documented.</p> <p><b>Deadline:</b> Biannual report to the Vermont legislature.</p>
<p>Within the first year, ANR will implement a statewide public outreach campaign to inform the residents and businesses of the preferred practices for hazardous wastes, including information about the disposal bans of these materials and ways to reduce generation. ANR will also include information on preferred disposal of pharmaceuticals at DEA or other law enforcement and pharmacy sponsored collections and prevention of disposal of pharmaceuticals into waste water systems.</p>	<p><b>Documentation:</b> Description and assessment of the outreach programs will be documented.</p> <p><b>Deadline:</b> Biannual report to the Vermont legislature.</p>
<p><b>Education and Outreach</b></p> <p>Within the first two years, ANR will work with SWMEs to identify survey criteria to evaluate the need and convenience for year round HHW disposal statewide. Each solid waste management entity (SWME) will be responsible for adhering to these criteria in order to identify what the need is for their region. Those who have completed a similar survey within the past 2 years may apply to ANR for an exemption. All SWMEs will be required to repeat the survey every 5 years.</p>	<p><b>Documentation:</b> Provide criteria for surveys and consolidate SWME responses to show statewide need.</p> <p><b>Deadline:</b> Criteria will be provided in Year 1 to be used in Years 2-5.</p>
<p>During the third year, ANR will work with SWMEs, EAO and other state agencies to identify preferred practices for managing hazardous wastes in schools, and develop training tools and educational resources for a statewide education plan.</p>	<p><b>Documentation:</b> Compendium of resources to be provided to all SWMEs including sample curriculum to then be distributed to the schools with which they work.</p> <p><b>Deadline:</b> Within the second year of MMP adoption.</p>

Performance Standards- HHW, CEG, E-Waste, Universal Waste		Documentation to ANR & Deadlines
<i>Solid Waste Management Entity-level Standards</i>		
	<p>The goal of this standard is to increase the number of schools that are compliant with state and federal laws pertaining to proper end-of-life management of hazardous waste (including waste reduction and recycling) and to increase the number of schools that are utilizing environmentally preferable purchasing. Work with schools and ANR’s Environmental Assistance Office to provide information and technical assistance on HHW/CEG handling, disposal, waste reduction, recycling and assistance accessing cost effective disposal options. Prioritize working with those schools that have not received these services before and that need assistance. Solid waste management entities (SWMEs) will work with 10% or 2 schools (whichever is greater) within their jurisdiction each year, ensuring that at least 50% of schools in their jurisdiction are reached by the end of the SWIP term. SWMEs will conduct the same percentage of direct contact, at least every two years, with schools to ensure the effectiveness of existing and established waste reduction programs.</p>	<p><b>Documentation:</b> List of schools contacted or visited; annual list of schools actively involved in program; and informational materials provided. <b>Deadline:</b> Annually, by July 1<sup>st</sup>.</p>
<p>Education and Outreach</p>	<p>SWMEs will work with school officials to reduce or eliminate as much of their hazardous waste streams as possible, and ensure proper end-of-life management of materials.</p> <p>The goal of this standard is to raise awareness about proper end-of-life management of hazardous waste and pharmaceuticals (including waste reduction and recycling) and the options for businesses, institutions, and residents to utilize environmentally preferable purchasing. Implement an ongoing multi-media public outreach campaign to inform the residents, businesses, and institutions of the preferred practices for hazardous materials including pharmaceuticals. Prioritize outreach to, and working with those businesses and institutions that do not have such programs already in place. This will include connecting businesses and institutions with the ANR Environmental Assistance Office for HHW/CEG management assistance and other regulatory assistance. This will also include recommendations for disposal of pharmaceuticals at DEA or other law enforcement and pharmacy sponsored collections and prevention of disposal of pharmaceuticals into waste water systems. Include information about the disposal bans. SWMEs must work with 2% or 20 (whichever is greater) the businesses and institutions in their region per year on proper disposal and waste reduction information. SWMEs will at minimum have reached at least 10% of the businesses and institutions within their region by the end of the SWIP term.</p>	<p><b>Documentation:</b> Provide copy of outreach materials, link to website, and any mailing lists to ANR, though direct mailings are not required. <b>Deadline:</b> Annually, by July 1<sup>st</sup>.</p>



Performance Standards- HHW, CEG, E-Waste, Universal Waste	
<b><i>Solid Waste Management Entity-level Standards</i></b>	<b>Documentation to ANR &amp; Deadlines</b>
<p>Year 1 –By July 1, 2014: Each SWME shall provide a minimum of 2 HHW/CEG events per year or access to a permanent facility.</p> <p><b>Convenience</b></p> <p><b>Minimum requirements for events:</b> There must be at least one event scheduled in the spring and one in the fall and must operate for a minimum of 4 hours. In the event that an SWME provides additional events above the minimum requirement, waivers to the minimum duration for each event may be considered and approved by ANR.</p> <p><b>Minimum requirements for facilities:</b> Facilities must operate for a minimum of 4 hours per day open and on at least one week day and one weekend day per week.</p>	<p><b>Documentation:</b> Provide date of events, list of collection points, track participation rates and submit required annual reporting. Annual reporting must include collection totals for CEG hazardous waste collected via events and/or facilities per HW program. Define all services offered. Report shall include an updated list of all collection points.</p> <p><b>Deadline:</b> Annually, by July 1<sup>st</sup>.</p>

Performance Standards- HHW, CEG, E-Waste, Universal Waste	
<b><i>Solid Waste Management Entity-level Standards</i></b>	<b>Documentation to ANR &amp; Deadlines</b>
<p><b>Year 2- By July 1, 2015:</b></p> <p>Each SWME shall demonstrate to ANR through their SWIP that year round collection options exist in their region for the following materials: Batteries, fluorescent lamps, mercury thermostats, 1 and 20 pound propane tanks, electronics, paint, and used oil. Collection locations need not be operated by the SWME. Collection locations can be privately owned, such as auto parts stores collecting used oil or hardware stores collecting paint and fluorescent lamps. However, if the only collection location closes or decides to cease collection of a required material during the SWIP term, resulting in a lack of a collection option for that material in the region, then the SWME is responsible for providing collection and will provide a collection option for its residents. All collection locations must have operating hours on at least 1 week day and 1 weekend day per week.</p> <p><b>Convenience</b> Additionally, each SWME must provide a minimum of 2 HHW/CEG events per year or access to a permanent facility. Events and Facilities must collect all other HHW products that aren't listed in the year round collection section above.</p> <p><b>Minimum requirements for events:</b> There must be at least one event scheduled in the spring and one in the fall and must operate for a minimum of 4 hours. In the event that an SWME provides additional events above the minimum requirement, waivers to the minimum duration for each event may be considered and approved by ANR.</p> <p><b>Minimum requirements for facilities:</b> Facilities must operate for a minimum of 4 hours per day open and on at least one week day and one weekend day per week.</p>	<p><b>Documentation:</b> Provide date of events, list of collection points, track participation rates, and submit required annual reporting. Annual reporting must include collection totals for CEG hazardous waste collected via events and/or facilities per HW program. Define all services offered. Report shall include an updated list of all collection points</p> <p><b>Deadline:</b> Annually, by July 1<sup>st</sup>.</p>

Performance Standards- HHW, CEG, E-Waste, Universal Waste	
<b><i>Solid Waste Management Entity-level Standards</i></b>	<b>Documentation to ANR &amp; Deadlines</b>
<p><b>Year 3- By July 1, 2016:</b></p> <p>Each SWME shall demonstrate to ANR through their SWIP that year round collection options exist in their region for the following materials: Batteries, fluorescent lamps, mercury thermostats, 1 and 20 lb. propane tanks, electronics, paint, and used oil.. Collection locations do not need to be operated by the SWME. Collection locations can be privately owned, such as an auto parts store collecting used oil or a hardware store collecting paint. However, if the only collection location closes or decides to cease collection of a required material during the SWIP term, resulting in a lack of a collection option for that material in the region, then the SWME is responsible for providing collection and will provide a collection option for its residents.</p> <p><b>Convenience</b></p> <p>Additionally, each SWME must provide a minimum of 3 HHW/CEG events per year or access to a permanent facility. Events and Facilities must collect all other HHW products that aren't listed in the year round collection section above.</p> <p><b>Minimum requirements for events:</b> There must be at least one event scheduled in the Spring and one in the Fall and must operate for a minimum of 4 hours. In the event that an SWME provides additional events above the minimum requirement, waivers to the minimum duration for each event may be considered and approved by ANR.</p> <p><b>Minimum requirements for facilities:</b> Facilities must operate for a minimum of 4 hours per day open and on at least one week day and one weekend day per week.</p>	<p><b>Documentation:</b> Provide date of events, list of collection points, track participation rates, and submit required annual reporting. Annual reporting must include collection totals for CEG hazardous waste collected via events and/or facilities per HW program. Define all services offered. Report shall include an updated list of all collection points.</p> <p><b>Deadline:</b> Annually, by July 1<sup>st</sup>.</p>

Performance Standards- HHW, CEG, E-Waste, Universal Waste	
<b><i>Solid Waste Management Entity-level Standards</i></b>	<b>Documentation to ANR &amp; Deadlines</b>
<b>Convenience</b>	<p><b>Year 4- By July 1, 2017:</b></p> <p>Each SWME shall demonstrate to ANR through their SWIP that year round collection options exist in their region for the following materials: Batteries, fluorescent lamps, mercury thermostats, 1 and 20 lb. propane tanks, electronics, paint, and used oil.. Collection locations do not need to be operated by the SWME. Collection locations can be privately owned, such as an auto parts store collecting used oil or a hardware store collecting paint. However, if the only collection location closes or decides to cease collection of a required material during the SWIP term, resulting in a lack of a collection option for that material in the region, then the SWME is responsible for providing collection and will provide a collection option for its residents.</p> <p>Additionally, each SWME must provide a minimum of 3 HHW/CEG events per year or access to a permanent facility. Events and Facilities must collect all other HHW products that aren't listed in the year round collection section above.</p> <p>Further, each SWME must ensure that each household has access to a HHW/CEG event or permanent facility within a 15 mile radius and if a town or area of the SWME's region does not have access within 15 miles, the SWME will offer an additional HHW/CEG event in this town or area.</p> <p><b>Minimum requirements for events:</b> There must be at least one event scheduled in the Spring and one in the Fall and each must operate for a minimum of 4 hours. In the event that an SWME provides additional events above the minimum requirement, waivers to the minimum duration for each event may be considered and approved by ANR.</p> <p><b>Minimum requirements for facilities:</b> Facilities must operate for a minimum of 4 hours per day open and on at least one week day and one weekend day per week.</p>

**Documentation:** Provide date of events, list of collection points, track participation rates, and submit required annual reporting. Annual reporting must include collection totals for CEG hazardous waste collected via events and/or facilities per HW program. Define all services offered. Report shall include an updated list of all collection points.

**Deadline:** Annually, by July 1<sup>st</sup>.

Performance Standards- HHW, CEG, E-Waste, Universal Waste		Documentation to ANR & Deadlines
<b>Solid Waste Management Entity-level Standards</b>		
<b>Convenience</b>	<p><b>Year 5- By July 1, 2018:</b></p>	
	<p>Each SWME shall demonstrate to ANR through their SWIP that year round collection options exist in their region for the following materials: batteries, fluorescent lamps, mercury thermostats, 1 and 20 lb. propane tanks, electronics, paint, used oil. Collection locations do not need to be operated by the SWME. Collection locations can be privately owned, such as an auto parts store collecting used oil or a hardware store collecting paint. However, if the only collection location closes or decides to cease collection of a required material during the SWIP term, resulting in a lack of a collection option for that material in the region, then the SWME is responsible for providing collection and will provide a collection option for its residents.</p> <p>Additionally, each SWME must provide a minimum of 4 HHW/CEG events per year or access to a permanent facility. Events and Facilities must collect all other HHW products that aren't listed in the year round collection section above.</p> <p>Further, each SWME must ensure that each household has access to a HHW/CEG event or permanent facility within a 15 mile radius and if a town or area of the SWME's region does not have access within 15 miles, the SWME will offer an additional HHW/CEG event in this town or area.</p> <p><b>Minimum requirements for events:</b> There must be at least one event scheduled in the Spring and one in the Fall and must operate for a minimum of 4 hours. In the event that an SWME provides additional events above the minimum requirement, waivers to the minimum duration for each event may be considered and approved by ANR.</p> <p><b>Minimum requirements for facilities:</b> Facilities must operate for a minimum of 4 hours per day open and on at least one week day and one weekend day per week.</p>	<p><b>Documentation:</b> Provide date of events, list of collection points, track participation rates, and submit required annual reporting. Annual reporting must include collection totals for CEG hazardous waste collected via events and/or facilities per HW program. Define all services offered. Report shall include an updated list of all collection points.</p> <p><b>Deadline:</b> Annually, by July 1<sup>st</sup>.</p>
	<p>Through careful and comprehensive data collection with criteria provided by ANR, each SWME will establish a baseline participation rate. Such a baseline will serve to document relative success in future surveys. Expectations are tangible annual growth in participation rate or proof of a decrease in generation of hazardous waste by the residents and CEGs in that region.</p>	<p><b>Documentation:</b> Provide improved data based upon survey criteria provided by ANR.</p> <p><b>Deadline:</b> Annually, by July 1<sup>st</sup> beginning within the second year of SWIP approval.</p>

APPENDIX A: Timeline of Act 148 Implementation Dates



# Universal Recycling TIMELINE

**JULY 1  
2014**

- » Transfer stations/Drop-off Facilities must accept residential recyclables at no extra charge
- » Food scrap generators of 104 tons/year (2 tons/week) must divert material to any certified facility within 20 miles

**JULY 1  
2015**

- » Statewide unit based pricing takes effect, requiring residential trash charges be based on volume or weight
- » Recyclables are banned from the landfill
- » Transfer stations/Drop-off Facilities must accept leaf and yard debris
- » Haulers must offer residential recycling collection at no extra charge
- » Public buildings must provide recycling containers alongside all trash containers in public spaces (exception for restrooms)
- » Food scrap generators of 52 tons/year (1 ton/week) must divert material to any certified facility within 20 miles

**JULY 1  
2016**

- » Leaf, yard, and clean wood debris are banned from the landfill
- » Haulers must offer leaf and yard debris collection
- » Food scrap generators of 26 tons/year (1/2 ton/week) must divert material to any certified facility within 20 miles

**JULY 1  
2017**

- » Transfer stations/Drop-off Facilities must accept food scraps
- » Haulers must offer food scrap collection
- » Food scrap generators of 18 tons/year (1/3 ton/week) must divert material to any certified facility within 20 miles

**JULY 1  
2020**

- » Food scraps are banned from the landfill