

Household Hazardous Waste Subcommittee Meeting Minutes  
Waterbury State Office Complex  
November 30, 2007

Next Meeting: December 13, 2007, Mad Tom Room, Osgood Bldg., Waterbury State Office Complex

Present: Thomas Benoit (DEC), Linda Boccuzzo (VT Dept. of Health), Charity Carbine (VPIRG), Pam Clapp (Solid Waste Alliance Communities), Gary Gulka (DEC), Jen Holiday (Chittenden Solid Waste District), John Hurd (Greater Upper Valley Solid Waste Mgmt. District), Andy Johnson (Clean Harbors), Annie MacMillan (Agency of Agriculture) Donald Maglienti (Addison County Solid Waste Management District), Michele Monpetit (ENPRO Environmental Services), Mary T. O'Brien (Southern Windsor/Windham Solid Waste Mgmt. District), Corey Raymond (Northeast Kingdom Solid Waste District), Janet Shatney (Casella Waste Management), Tracy Tsugawa (VOCAL), Deane Wilson (Rutland County Solid Waste District).

### Agenda Item 1

#### *Introductions and Background to the Meeting*

Gary Gulka explained that VT DEC is developing a Waste Prevention Strategic Plan. The process began last April and led to the creation of a Waste Prevention Steering Committee.

The Steering Committee represents a broad group of stakeholders, including municipal and state government, environmental organizations, businesses, and the waste management industry. The Steering Committee developed several focal areas of the Waste Prevention planning effort, including the following:

- Organics
- Recyclable products
- Construction and demolition debris
- Electronic waste
- Household hazardous waste

Subcommittees have been formed around each of these topic areas, and these subcommittees are in the process of developing and prioritizing recommended state strategies for waste prevention and reduction.

Electronic waste and household hazardous waste (HHW) were originally addressed together by one subcommittee and held a first meeting on September 14. After this meeting, it was decided to split into two separate subcommittees, owing to the divergent nature of the topics and the different

stakeholders for each topic. Some valuable information was obtained in the first meeting, however, the discussions on HHW were very preliminary.

From the September 14 meeting and further discussions between Jen Holiday, Tom Benoit, and Gary Gulka, five priority categories of HHW are being proposed for the focus of this planning effort as follows, based on volume, toxicity, and cost of waste handling:

- Paints
- Flammables
- Oils
- Mercury products
- Pesticides

Also based on the September 14 meeting, it is proposed that the subcommittee focus on four types of strategies and approaches:

- Promotion of product stewardship
- Infrastructure improvement for HHW collection
- Public education/awareness
- Funding mechanisms for all of the above

## Agenda Item 2

### *Overview of HHW*

Tom Benoit provided an overview of HHW programs and requirements in Vermont.

Requirements: At a minimum, collections need to be available to households and conditionally exempt generators twice a year.

Different Programs: Districts  
Alliances  
Municipalities

Availability: Permanent year round Facilities- 4 (ACSWD, CSWD, RCSWD, WCSWD)  
Permanent Seasonal Facilities- 2 (NEKWMD 6/1-9/29, GUVSWD)  
More than two events/year- 5 (NWSWD, LRSWD, CVSWD, SWAC, SWWCWD)  
Two events a year - Most single and groups of towns not in an alliance or district

\*\*\* NWSWD currently developing collection center in Georgia

Permanent- Approx 42% of VT Households  
Seasonal- Approx 12% of VT Households  
At least Two-day collection events- Last reported Approx. 45%  
(In theory the remaining percentage of 46%). Some towns are not doing collections at all (white towns).

Solid Waste Plan Map: Coverage of state

2006 HHW/CEG Survey: Amounts, variety of waste streams-not as broken out.

Participation: Ranges from 13% to 1%. Statewide average 6%. Roughly equivalent to National Averages.

Waste Volumes: 2005- 526tons, 2006-428 tons  
# of collection days/events: 2005-1183, 2006-1225  
Program costs: 2005-\$1,156,000 , 2006-\$1,267,000

Participants: 2005-17800, 2006-19300

Jen Holiday gave an overview of the Chittenden Solid Waste District HHW Program

- Participation has leveled off lately to 9,000 - 10,000 participants per year
- The amount of HHW collected is increasing; lbs per person is on the rise
- HHW pie chart with waste streams collected by percentage of total shows that paint is well over 50% of the total; next largest is flammables (15%)
- Fluorescent lamps are a large volume and large expense
- Public education has not led to a reduction in waste and the product manufacturers and advertisers have great influence on purchasing habits

- The incentive for reduction has to be driven upstream to manufacturers
- Product Stewardship - Paint Dialogue. Initiated over 4 years ago. It grew to include paint industry, EPA, 11 other state government entities, 3 local government entities, retailers and NGOs. A second MOU has been developed this fall, after \$1 million spent on projects.
- Paint MOU - Industry involved with funding. There will be a demonstration project in Minnesota starting this fall. A third party organization will be formed to determine how to fund a waste paint collection program nationally. The MOU contains a timeline for 11 states to come on line with a paint collection program - VT is slated for 2009. The collection program costs will be embedded in the price of the paint sold. The MN pilot will involve waste reduction, consumer education, and collection, including an evaluation of what to do with the collected paint. Local government will provide the collection infrastructure and the paint industry would be paying the management costs. There would now be a system for manufacturers to source reduce waste paint since they would pay for the system. A priority for the paint industry is waste reduction in this project.
- Jen indicated that she hopes to work through the Product Stewardship Institute in a similar with fluorescent bulbs.
- Pie chart of costs by waste stream: paints the highest cost, followed by flammables, fluorescent bulbs, and pesticides.
- Jen explained what Product Stewardship Institute does. It is a non-profit organization that focuses on problematic waste streams. They look at the issue and bring together stakeholders to find solutions.
- Jen feels that Vermont needs to get up to speed on product stewardship and that Vermont needs a HHW point person

### Agenda Item 3

#### *Measures of Success Used in Other Programs in U.S.*

Jen Holiday provided an overview of how other state programs are looking at measuring program success and planning for HHW management. She got responses from programs via an email inquiry.

Florida

The 1983 Legislature passed the Water Quality Assurance Act which established the Local Household Hazardous Waste (HHW) Collection Center Program. This program has remained very active over the years and has positioned Florida to have one of the best statewide HHW collection infrastructures in the nation. With 47 counties having permanent collection centers and 20 additional counties holding regularly scheduled collection events, over 99% of Florida's households have access to household hazardous waste collection services. Most of these services include centers that are open six days a week to the public. Florida's small businesses in 53 counties also have the opportunity to use these collection programs to manage the small amounts of hazardous waste they may generate.

## Washington State Department of Ecology

### Five-year Milestones:

The following are milestones for the first five years of the Small-Volume Hazardous Materials Initiative:

- A consensus-based process is in place and used to rank priority substances that are high-risk, and the next set of substances to pursue have been identified.
- Sales of mercury-containing consumer retail products have significantly decreased in the state.
- A statewide strategy has been agreed to and is undergoing implementation to reduce threats posed by polybrominated diphenyl ethers (PBDE) used as flame-retardants.
- Industry has established a nationally based, effective product stewardship program for electronic products.
- An industry led management system for leftover paint has been created, and there are at least as many collection locations to accept leftover paint across the state as there are used oil collection sites, with sites in each county.
- The growth trend in retail sales of high-risk non-agricultural pesticides has leveled off.
- All of state government and 80 percent of other entities that are members of the Washington State Purchasing Cooperative are using environmentally preferable purchasing for products and services in the following areas:

1. Automotive products and vehicles (re-refined oil, alternative fuels and/or hybrid-fuel vehicles, and non-mercury switches).
2. Products containing flame-retardants.

3. Grounds maintenance (least-risk methods)/Integrated Pest Management (less toxic pesticides).
4. Electronic products.
5. Building materials (including recycled-content paint, carpet, fixtures, and furnishings).
  
6. Safer, least-risk cleaning products.
  - Local hazardous waste plans are up to date and are being fully implemented.
  - All MRW facilities are in compliance with Chapter 173-350 WAC, and all treatment storage and disposal facilities handling MRW are also in compliance with Chapter 173-303 WAC."

This full document can be downloaded at:

<http://www.ecy.wa.gov/pubs/0407022.pdf> and covers organics recycling, green building and various other solid waste, industrial, and hazardous waste topics.

One of the key tools that we are leveraging is the fact that every planning jurisdiction in the state is required to have and implement a local hazardous waste plan. CA and MN have planning requirements as well. This can be a powerful tool to get momentum going at the local level.

### Connecticut

We aren't following a particular plan but we are looking specifically at lawn chemicals/fertilizers. After paint it is the highest volume material. We are finding a number of reasons why people waste so much and are trying to focus on getting people to be more educated on taking care of their lawns. Sometimes that means organic, other times it may mean learning how to purchase the right amount and what you truly need.

I think it is helpful to look at a particular waste stream and ask why people are bringing it in, especially on a continuous basis. Then ask yourself how you can decrease that amount.

### Missouri

Missouri has no statewide organized plan that I'm aware of - but we measure our success against how much material is removed from the community in the five counties / 40 cities we serve.

Key factors are -

- Injuries
- Cost / Lb
- Clients Served
- Material and Type collected
- Pounds / Man Hour - Pounds / Man year (should not exceed 150,000 in our humble opinion)

### Moving Upstream: Chemicals Policy in the Northwest

Jen provided some information from a presentation on HHW at the recent NAHMMA conference giving a perspective from the Pacific Northwest States.

#### ► Are we succeeding in the Northwest?

Upside:

- Accessibility improvements
- Efficiency improvements
- Improvements in solid waste/sewer diversion

Downside:

- Participation rates between 1 and 10%
- Long term business compliance rates unknown
- Behavior change unknown

#### ► In what areas do we need to do a better job?

- Move upstream
- Identify and apply effective communication
- Link program outcomes to values
- Create strategic partnerships
- Get political

#### ► Traditional measures of success

- Raise participation rates
- Improve access/convenience
- Improve efficiency
- Promote behavior change

► Redefining success: Looking upstream

- Promote solutions that shift responsibility to the producer
- Eliminate production and/or reduce availability of most problematic chemicals
- Reduce human & environmental exposure, focus on most vulnerable populations
- Improve services to traditionally underserved populations

Jen noted that the Pacific Northwest has a regional Product Stewardship Council and it is her hope that the Northeast will start a similar Council. A New England NAHMMA chapter has formed but membership is very low. There is also a Product Policy Institute that works on extended producer responsibility and it is looking at how it can grow in this region.

#### Agenda Item 4

##### *Defining Measures of Success for Vermont*

Traditional measures of success:

- Cost of collection (efficiency)
- Number of customers participating
- Pounds of waste collected
- Staff time lost to injuries
- Load checks

Question: What are our current measures of success and what is missing?

- Participation rates (**continue**)
- Customer feedback
- Number of outreach events
- Repeat customers
- Accessibility of services (**continue**)
- Change in buying patterns
- Participation over a geographical area
- Pounds or gallons of waste
- Access to website for information
- Pounds per person of waste (**continue**)
- Money spent - cost effectiveness (**continue**)
- Increase in banned substances collected

- Transition from more toxic to less toxic products collected - change in behaviors (continue)
- Compliance with the requirements of the solid waste plan
- Regional comparisons of measures
- Issue: Different methods are used for measuring volume/amount among waste districts/towns
- Issue: Different methods are used for determined cost of services/programs
- Issue: How do we measure the effectiveness of educational efforts?

Question: What should our measures of success be?

- Less cost for government, more to producers for collection and disposal
- HHW products that are less toxic, have extended longevity
- Using existing waste to make something new
- Development of new technologies for collection and treatment of HHW
- Availability/convenience for disposal
- Increasing education and its relationship to a decrease in HHW products purchased and an increase in the purchase of alternative, non or less toxic products
- Tracking sales of toxic vs. alternative, non-toxic products
- Legislation enacted incentives
- State leadership in product stewardship
- Risk-based prioritization of HHW products
- Retailer/manufacturer participation in product stewardship efforts
- Tracking and disseminating emerging information about problems with and research about chemicals
- Looking at toxics more globally through strategic partnerships with air, water, and solid waste initiatives to see how much of the toxics are in the environment
- Ban HHW from landfills and enforcement of bans
- Adopting EPP policies - state leadership, creating a purchasing group with purchasing power (e.g. Washington State)
- Unified methods for determining cost/volume and standards for comparison

### Agenda Item 5

#### *Key obstacles/challenges*

Focusing on the five priority HHW previously identified (paints, oil, flammables, mercury, pesticides), the group brainstormed responses to the following questions:

- What are the key obstacles/challenges to preventing/reducing these types of HHW waste?

- What are the key obstacles/challenges to recycling and disposing these types of HHW waste?
- What are the key obstacles/challenges to collecting these types of HHW waste?

We then clarified and clustered the responses from the group and generated the following key obstacles/challenges for all five types of HHW (specific comments in parentheses):

- **Education/awareness** (consumer education; consumer education on disposal options/availability; public awareness of hazards in products; lack of public demand and awareness for less/non-toxic products; public awareness of proper management/bring it to a collection center; consumers unsure of efficacy of less toxic products; Vermonter packrat mentality; understanding why people need green, weedless toxic lawns; changing consumer buying behavior of more is better; changing the perceived need of toxic products; education that is appropriate across the demographic spectrum; participation in programs)
- **Funding** (funding for everything related to HHW; cost of collection; cost for districts and towns for collection; need for a funding mechanism to relieve the financial burden on municipalities; costs for education, public information, and marketing; labor costs for collection)
- **Accessibility of services** (inconvenient HHW collection; location of collection spots in rural areas; convenient public access to facilities; availability/access for recycling and disposal; notice about availability of collection; availability of collection dates with farmers in mind; convenience of recycling and disposal; state of the art infrastructure needed; lack of infrastructure/knowledge of business “swaps” of unused products)
- **Legislation/regulation** (enforcement of recycling and disposal with legislative mandates and education; inappropriate regulations that are difficult to apply to all settings within the state; current approach to chemical regulation; lack of standards for reuse/disposal)
- **Producer responsibility** (no control of what is being produced and marketed; lack of producer responsibility for product collection; lack of producer responsibility for less toxic products; smaller sizes vs. Costco sizes)
- **Alternative products** (no available substitutes; cost of less toxic products is often higher than toxic products) [Suggestion: Combine this with producer responsibility?]
- **After markets** (lack of contacts/markets for collected materials)
- **Exportation** (exporting our waste out of state for recycling and disposal)
- **State leadership** (lack of state leadership; additional trained, knowledgeable personnel needed at state and local levels; lack of contacts/management of highly hazardous materials)

The following key obstacles/challenges for PAINTS (specific comments in parentheses):

- **Cost** (latex paint recycling needs to be affordable; cost of paint disposal is too high; transportation; labor)
- **State not purchasing recycled paint**
- **Volume** (sheer volume is high for latex and oil-based paints)
- **Management of paint by consumers**

The following key obstacles/challenges for OIL (specific comments in parentheses):

- **Consumer education** (local drop-off places and whether those are legal; not HHW - expensive to deal with)

### Agenda Item 6

*Identify next steps, next meeting to gather additional information for recommendations*

- **NEXT MEETING: Thursday, December 13<sup>th</sup>, from 8:30 a.m. - noon, Mad Tom Room in the Osgood Building of the Waterbury State Complex**
- **Homework: Think about possible solutions to issues/challenges to bring to the next meeting utilizing the following question: If the state of Vermont is to successfully prevent, reduce, recycle, and dispose of these 5 types of HHW, what do we need to do (in the areas of product stewardship, developing a funding mechanism, public education, and developing an infrastructure) in order to address these priority obstacles/challenges? (everyone)**
- **Research what other states are doing about these issues (Jen, Gary, and Tom)**

Agenda for next meeting:

- **Finish clarification of issues/challenges (only a few comments need clarification)**
- **Generate ideas about possible solutions, clarify and prioritize solutions (solutions will become the basis of recommendations to the Waste Prevention Steering Committee)**
- **Generate ideas about specific next steps to take to carry out prioritized solutions**

