Financial Impact of Implementing a Paint Product Stewardship Initiative in Connecticut

1. Background

Since the mid 1980s, the majority of Connecticut towns have offered ongoing household hazardous waste (HHW) collections to their residents as a means of safely disposing of potentially hazardous chemicals. These collections are financed by the municipalities. The largest item by volume brought to HHW is oil-based paint, accounting for 30%-50% of the total waste. Oil-based paint also accounts for an estimated 30-50% of the disposal costs associated with running a HHW collection. Implementing a program where the paint manufacturers finance the collection and proper management of paint will greatly reduce the municipal costs of operating HHW collections. In addition, it may lower the costs of conducting a HHW collection enough to allow towns currently not offering collections to host one, and allow other programs to schedule additional collections. This report will provide an indication of how much money municipalities could save if paint manufacturers assumed the costs associated with managing their product.

2. Current Paint Management Infrastructure

There are three types of collection programs for Connecticut residents wanting to dispose of unwanted paint;

- Permanent HHW programs There are four permanent HHW programs with fixed facilities located in New Haven, Manchester, Essex, and Willington. On days they are open they will accept oil-based paints and other household hazardous wastes from eligible residents. The paint is either bulked into 55 gallon drums or the whole cans are placed into one cubic yard flexbins. These programs do not typically accept latex paint.
- 2. **One-day HHW programs** There are seven regional HHW programs using a series of one-day collections. The majority of Connecticut residents participate in this type of program. On the day of a collection eligible residents drop off their oil-based paints. The paint is either bulked into 55 gallon drums or the whole cans are placed into one cubic yard flexbins. These collections do not typically accept latex paint.
- 3. Municipal Transfer Stations that Accept Paint There are four municipal transfer stations that are permitted to accept unwanted oil-based and latex paint. They only accept paint from their own residents. These transfer stations are in Avon, Essex, Sharon/Salisbury and RRDD#1 (Winchester, New Hartford and Barkhamstead). Residents bring in unwanted paint which in some cases is bulked and in others is placed in flexbins. These programs do accept latex paint.

There are a few towns, primarily in northeast Connecticut, that do not offer HHW collections on a regular basis and do not have municipal transfer stations that accept paint. Residents of these towns manage their paint primarily by throwing it in the garbage.

3. Paint Management Costs

Determining the exact paint management costs for a program is dependent on how the costs are allocated. For the municipal paint programs, the costs are fairly precise because the towns are paying for the removal of the paint directly although vendors may include ancillary charges such as fuel surcharges and pickup fees. For the household hazardous waste programs, costs are allocated in two ways: 1) The vendor charges a set fee for each user of the collection, or 2) the vendor charges a fee for each category of waste delivered to the collection. We estimated the costs to manage paint at HHW programs for those that could not provide accurate numbers by looking at the volume reported and asking the vendors what they would charge per unit of paint collected.

3.1 Municipal Transfer Stations That Accept Paint

Municipalities that accept paint from their residents finance that collection through the operating budget of the transfer stations. Some paint that is dropped off may be donated or reused. The remainder is taken off site by a licensed vendor. Table 1 shows a breakdown of the costs at these facilities. At the RRDD#1 paint facility, the vendor charges different rates for paint that is "spec" and "off-spec". We used the total cost and the total gallons to come up with the average cost per gallon. The data is for calendar year 2008.

Table 1

Paint and Stain Facility ¹	Total Paint Volume (gallons)	Total Costs	Cost Per Gallon	
Avon*	495	\$1,583	\$	3.20
Essex paint and stain*	110	\$1,064	\$	9.67
RRDD 1**	1100	\$6,960	\$	6.33
Sharon/Salisbury	1155	\$5,508	\$	4.77
Totals for Disposal	2860	\$15,115	\$	5.28

^{*}Avon and Essex accept latex paint only. Residents are directed to bring their oil-based paint to the HHW collection.

3.2 Permanent HHW Programs

Table 2 shows the paint management costs for the four permanent HHW programs in Connecticut. The Willington facility finances the program based on the costs of managing each specific waste stream. They were able to provide precise numbers for paint management costs.

^{**}Includes a pickup fee

Haz Waste Central (New Haven) was able to calculate the costs for managing waste paint although they pay for the program based on a per user fee. The Manchester and Estuary programs could not calculate the amount of their waste expenses attributable to paint. In order to calculate their expenses for paint we looked at the amount of paint reported and multiplied that times the standard fees charged by their vendor to dispose of one 55-gallond drum or one flexbin of paint. The totals are for calendar year 2008.

Table 2

Permanent HHW Programs	Total Paint Volume (gallons)	Total Costs	Cost Per Gallon		
Estuary	1250	\$5,600	\$	4.48	
Manchester	4750	\$19,000	\$	4.00	
Willington	1430	\$4,056	\$	2.84	
Haz Waste Central	27055	\$108,000	\$	3.99	
Totals for Disposal	34485	\$136,656	\$	3.96	

3.3 One-day HHW Programs

Under the conditions of their permit to conduct HHW collections, vendors are required to report the amount of paint they manage at these collections. We then asked what they would charge for a 55 gallon drum or a flexbin of paint. We used these totals to develop a total cost and a cost per gallon. Table 3 shows that there were only two vendors for one-day HHW collections in 2007, the latest year for complete data.

Table 3

One Day Programs	Total Paint Volume (gallons)	Total Costs	Cost Per Gallon	
Care Environmental Corp.	9300	\$53,250	\$	5.73
Clean Harbors	89010	\$413,790	\$	4.65
Totals for Disposal	98310	\$467,040	\$	4.75

Connecticut municipalities spent \$618,000 on paint management through these programs in 2008. This table does not reflect the collection and management of latex paint because most programs do not accept latex.

The actual costs would be signifiantly higher because some people are putting paint, both oil-based and latex, into the municipal garbage. In some cases, the town is paying the tipping fee for paint disposed of in the garbage.

4. Implementing a Paint Product Stewardship Initiative

The National Paint and Coatings Association (NPCA) has proposed a program where they would finance the recovery of unwanted oil-based and latex paint. The program is to be implemented in

Oregon in 2009 and would eventually be rolled out to each state. Connecticut is scheduled to be one of the early rollout states.

The NPCA will finance the recovery of all latex and oil-based paint by charging a fee for each can sold to wholesalers. This money would be used for processing the paint collected. While NPCA is still working on some of the specifics, the most likely scenario would use the existing collection infrastructure in Connecticut. Residents would continue to bring their unwanted paint to a HHW collection or a town drop site. The HHW vendor would be paid for paint management costs by the manufacturers.

Since most HHW programs don't currently accept latex paint, they would have to make a decision about whether to add it or not. In addition, the program could be extended to painting contractors, businesses and municipalities.

5. Benefits of a Paint Product Stewardship Initiative

Connecticut municipalities that offered paint collection or participated in an HHW collection spent approximately \$620,000 in 2008 for managing household generated paint, virtually all of it oil-based. A paint product stewardship initiative will transfer that cost from the municipality to the manufacturers.

Towns that do not offer HHW collections or any other type of paint collection will not recognize a direct savings. The primary reason these towns give for not holding regular HHW collections is that they don't have the money. If the town didn't have to pay for paint, the costs of an HHW collection would be significantly lower, perhaps by as much as 50%. This might afford the towns the opportunity to offer HHW collection. Another option would be for towns to establish municipal paint collection programs at their transfer stations. There might be an initial expense to construct an adequate storage building but the disposal costs would be paid for by the manufacturer.

Municipalities that pay the tipping fee out of their tax base would also see a savings associated with less paint going into the solid waste stream. Since the program would not be limited to households, towns would financially benefit by being able to properly dispose of their own paint at no cost.

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