

Evaluation of Connecticut's Paint Stewardship Program

Connecticut Department of Energy and Environmental Protection



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Executive Summary

The paint stewardship program began in 2013 as a result of Public Act 11-24.¹ This law requires paint manufacturers to provide for the convenient collection of unwanted residential paint for Connecticut residents. To fulfill this commitment, the paint manufacturers established PaintCare, a producer responsibility organization (PRO), to assist in the implementation of the law. The paint stewardship program is an example of Extended Producer Responsibility (EPR) where a manufacturer of a product is required to provide for the responsible management of that product at the end of life.

In 2012, PaintCare submitted a plan to the Department of Energy and Environmental Protection (DEEP) to establish a network of paint collection locations and events which included retailers, municipal transfer stations and household hazardous waste (HHW) collections. The plan was approved by DEEP in May of 2013. Currently, there are 158 permanent drop off sites in Connecticut. Implementation of the plan, including the collection, transportation and processing of discarded paint is financed by a fee charged on paint at the point of sale.

Since the program began, the PaintCare stewardship program has collected an estimated 4,000,000 gallons of unwanted paint. As the number of drop sites has increased and the awareness of the program has grown, the amount of paint collected has leveled off at approximately 400,000 gallons per year. The amount collected may in fact decrease over time depending on the effectiveness of PaintCare's campaign to educate customers on purchasing the proper amount of paint and storing remaining paint to lessen spoilage.

DEEP recommends one significant improvement to the program: the addition of aerosol paint. Aerosol paint has not been included in the past because of the need to manage aerosols in a different manner than other paints. The statutory definition of paint should be amended to include aerosol paints unless Paintcare voluntarily includes aerosols in Connecticut's program. The department otherwise has minor recommendations for improving the program, including listing collection points in Rhode Island and New York in the locator tool and measuring the impacts of the paint waste reduction campaign.

¹ https://cga.ct.gov/current/pub/chap_446z.htm#sec_22a-904



Statutory Charge

Section 22a-904(a) of the Connecticut General Statutes requires DEEP to submit an evaluation of the paint stewardship program biennially “that describes the results of the paint stewardship program and recommends modifications to improve the functioning and efficiency of such program, as necessary”.



Program History

BACKGROUND

Prior to 2013, Connecticut residents were advised to dispose of latex paint by allowing it to dry and placing it in the trash. Hazardous materials such as lead, and mercury had been banned previously so latex paint was no longer a hazardous waste. Residents were advised to bring oil-based paints to an HHW collection. Since these collections were infrequent, much of this paint also ended up in the garbage. Municipalities were burdened with the cost of managing oil-based paint at HHW collections. Oil-based paint disposal typically represented about 50% of the costs of an HHW collection. Many Connecticut residents stored unwanted paint, unsure of the proper way to dispose of it. A DEEP survey in 2012 estimated that Connecticut residents had between four and six million gallons of paint stored in their sheds and garages.

Beginning in 2003, Connecticut joined with other states and local governments in a dialogue with paint industry representatives. The paint manufacturers eventually agreed to establish an Extended Producer Responsibility (EPR) program for paint, the first industry in the USA to cooperate with EPR legislation. A model EPR bill was drafted and introduced in several states. In 2011, Connecticut became the third state after Oregon and California, to pass the model paint EPR bill. Currently, 12 states and the District of Columbia have enacted a paint stewardship law.

The implementation of the program became the responsibility of PaintCare, a non-profit organization whose Board of Directors is comprised of and represents paint manufacturers. PaintCare submitted their final plan for implementation of the program on April 23, 2013, and the DEEP approved the plan on May 1, 2013. The program began accepting paint on July 1, 2013. PaintCare submitted their initial report to the Department in October of 2014 with subsequent reports submitted annually. Much of the DEEP's information regarding the program and recommendations for this evaluation comes from these PaintCare annual reports.

PROGRAM DESCRIPTION

This program is an example of Extended Producer Responsibility (EPR), where producers of a product, in this case paint, assume financial responsibility for the end-of-life management of their product. PaintCare, on behalf of paint manufacturers, established a network of collection locations where residents can dispose of latex and oil-based paints and similar products at participating retail locations, municipal transfer stations and household hazardous waste days. The collected paint is then transported by a licensed contractor and sent to be separated into oil-based and water based (latex) products. The latex paint is recycled if in the proper condition, and the oil-based paint is primarily sent off for fuel blending and incinerated for energy recovery. Latex paint that can't be recycled is landfilled or incinerated. The program does not include specialty paints such as marine paints, aerosol paints and craft paints. Painting contractors that service residents can also participate in the program.

There is no charge to residents to drop off the paint. The program is funded through a fee assessed on the sale of paint. The money collected through the fee is managed by a paint stewardship organization as required by law. PaintCare's large volume pickup service (LVP) provides a convenient option for painting contractors and other eligible program participants, including contractors, builders, property managers, academic institutions, and homeowners who have accumulated large volumes of paint. The minimum amount to receive a free direct pickup is 100 gallons. Large volume pickup of paint is managed in the same way as residential paint.

Paint Fee Schedule

PAINTCARE FEE SCHEDULE		
SIZE	CONTAINER SIZE	FEE
Very Small	Half pint or smaller	\$0.00
Small	Larger than half pint up to smaller than 1 gallon	\$0.35
Medium	1 – 2 gallons	\$0.75
Large	Larger than 2 gallons up to 5 gallons	\$1.60

Program Evaluation

CONVENIENCE

The law requires PaintCare to “provide for convenient and available state-wide collection of postconsumer paint that, at a minimum, provides for collection rates and convenience equal to, or greater than, the collection programs available to consumers prior to such paint stewardship program”.² Paintcare, in their approved plan, proposed to meet this requirement by setting a goal of having a collection point within 15 miles for 95% of Connecticut residents. Prior to implementation of the stewardship program in 2013, there were limited options for the proper disposal of paint. Oil based paint was accepted at HHW collections. Latex paint was not typically accepted at these collections and residents were advised to donate it, use it up or dry it out and place it in the garbage. PaintCare has exceeded their goal for convenience by establishing 158 drop off locations,³ with 100% of Connecticut residents within 15 miles of a drop site. In addition to the retail and transfer station locations, PaintCare accepts paint at any household hazardous waste collection. The level of convenience far exceeds the level prior to implementation of the program.

COLLECTION AMOUNTS

AMOUNT OF PAINT COLLECTED ⁴				
YEAR	GALLONS COLLECTED (oil)	GALLONS COLLECTED (latex)	TOTAL GALLONS COLLECTED	NUMBER OF COLLECTION SITES
2022	58,147	335,565	393,712	157
2021	70,770	361,727	432,497	149
2020 (Calendar year)	73,073	314,419	387,492	151
2020 (Fiscal year)	77,313	278,324	355,637	154
2019	80,617	311,043	391,660	149
2018	68,470	273,880	342,350	146
2017	67,740	254,828	322,568	143
2016	73,695	246,719	320,414	140
2015	57,947	217,993	275,940	138
2014	72,239	168,559	240,798	127

²Section 22a-904a of the Connecticut General Statutes

³Paintcare website

⁴Paintcare annual reports

Prior to the start of this program, oil-based paint was the most common material brought to an HHW collection and typically represented approximately 50% of program disposal costs. There were no collection or recycling programs available for latex paint. Residents were frustrated with the lack of a convenient way to dispose of paint. The Department's policy was to inform residents they should dry out latex paint and throw it in the trash and bring oil-based paint to an HHW collection.

To date, over 4 million gallons of paint have been managed through this program. Eighty two percent of the latex paint is recycled back into new paint.⁵ PaintCare has undertaken an extensive public education program to teach the public how to purchase the right amount of paint and properly store the leftover paint to reduce paint waste.

PERFORMANCE OF PAINTCARE

The Department surveyed several municipalities and participating paint stores concerning the PaintCare program. The paint and hardware stores were unanimously pleased with the performance of PaintCare in ensuring timely pickups of stored paint and being responsive to their questions. They reported increased foot traffic and customers pleased that there was a convenient location to drop off paint and that this paint was being recycled. There were a few inquiries about the fee charged at the point of sale but no objection to paying it knowing how the money was used to support collection. Overall, the retailers contacted were pleased with the program and would continue to participate.

Municipalities were similarly pleased with the program. Some towns participate as drop sites and report that PaintCare was quick in responding to questions and requests for pick up. Municipal workers directed phone calls about the disposal of paint to the PaintCare website or to locations in their town. Towns reported that residents were pleased that there was a convenient location to drop off unwanted paint. Some residents would like to see the 5-gallon limit per visit increased.

PaintCare has consistently promoted the program through billboards, TV ads, social media and radio. Retailers report that most customers have learned about the paint program through word of mouth or stopping by a participating retailer for other purchases. Based on the level of convenience, feedback from collection locations, and the amount of paint collected, PaintCare's performance has exceeded expectations.

MUNICIPAL CONVENIENCE AND ACCESSIBILITY

There are currently 157 permanent collection locations for the PaintCare program. Using the locator tool on the PaintCare website, Connecticut residents can find a convenient collection anywhere within the state. However, the town of Greenwich does not have any retailers that participate, and the transfer station does not offer collection. Residents of Greenwich are directed to a single drop site in Stamford and stores in Norwalk and can use the HHW collections, only one of which is in Greenwich. Since New York recently started the PaintCare program, there are several collection points just across the border. PaintCare should update the location tool to include nearby collections in New York and Rhode Island. Including New York locations would increase convenience for Greenwich residents.

⁵Ibid

PER CAPITA COLLECTION (GALLONS/PERSON) AND COST PER GALLON

STATE	2022	2021	2020
Connecticut	.11 (\$9.43 cost/gal)	.12 (\$8.29 cost/gal)	.11 (\$7.71 cost/gal)
Rhode Island	.08 (\$12.06 cost/gal)	.08 (\$11.93 cost/gal)	.07 (\$9.20 cost/gal)
Vermont	.19 (\$7.05 cost/gal)	.17 (\$7.09 cost/gal)	.15 (\$7.53 cost/gal)
California	.10 (\$10.06 cost/gal)	.10 (\$8.63 cost/gal)	.09 (\$8.59 cost/gal)
Oregon	.16 (\$7.00 cost/gal)	.17 (\$7.20 cost/gal)	.16 (\$6.85 cost/gal)

RECOVERY RATE

The amount of paint collected in Connecticut per capita has been consistent and comparable to the amount collected in other states. However, the cost per gallon to operate the program has gone up steadily over the same three years. PaintCare attributed this cost increase to increases in the cost of transporting and processing paint.⁶ PaintCare believes they are carrying sufficient reserves so there is no immediate concern about having to raise the fee at point of sale that finances the program.⁷

Marketing of Collected Paint

The majority of latex paint collected is processed into recycled content paint. 85% of the paint collected was latex and 82% of that paint was recycled back into paint. The remaining 15% was oil based and virtually all of that was burned for energy recovery. In 2014, 70% of the paint collected was latex and 30% oil based. Latex paint is growing in market share and this trend will continue.

Eco fee and Reserves

The law requires PaintCare to conduct an independent financial audit every two years. The purpose for the audit is to ensure that PaintCare has sufficient revenue to finance the program including sufficient reserves. This audit also provides the basis for setting the fee at retail which supports the program.

PAINTCARE FINANCES

YEAR	REVENUE	EXPENSES	NET
2022	\$3,333,185	\$3,466,111	(\$132,976)
2021	\$3,712,972	\$3,345,656	\$367,316
2020	\$3,860,401	\$2,856,892	\$1,003,509
2019	\$3,423,301	\$3,380,453	\$42,848

⁶Email from Fred Gabriel, Paintcare, Jan 2, 2024

⁷ibid

As of the end of calendar year 2022, the Connecticut PaintCare had \$3,496,378 in reserves which is approximately 12 months of operations. There was a bump in revenue in 2020, likely in response to the pandemic when people were undertaking more home projects. Expenses were down that year, also likely due to the pandemic with few or no household hazardous waste collections occurring.

The current level of reserves should allow for the program to maintain the current eco fees for a few more years at a minimum. The program ran a small deficit in 2022 for the first time so we will continue to monitor the annual audit to see if this trend continues.

Establishing Program Goals

For Collection of Paint

When the program started in 2013, DEEP estimated there were between four and six million cans of legacy paint across the state. After 10 years, DEEP believes most of that legacy paint has either been used up, discarded or recycled through the PaintCare program. Looking at the collection data from recent years should give us a more accurate representation of what to expect to collect on an annual basis.

The last three years of data show the program accepted 387,000 gallons in 2020, 431,000 gallons in 2021 and 393,000 in 2022. The spike in 2021 may be attributed to the COVID pandemic with homebound residents undertaking more home projects during this time. It is reasonable to assume that collection will level off at around 400,000 gallons per year. This number could go down as it is a goal of the PaintCare program to educate people to purchase the right amount of paint so less unwanted paint is generated. Unless PaintCare can provide evidence that people are generating less unwanted paint, the collection goal should remain around 400,000 gallons per year.

RECOMMENDED MODIFICATIONS TO IMPROVE THE FUNCTIONING AND EFFICIENCY

1. Include aerosols

Aerosol paint has never been included in the program. Aerosols are predominantly oil based and can be blended with non-aerosol paint. Residents bring them to HHW collections where cans are punctured and the liquid is drained into a drum containing compatible liquids, or they are placed directly into the drum without puncturing. While adding aerosols to the program would increase costs, it would also bring in revenue when the fee is assessed. California recently added aerosols to their program through legislation. In lieu of Paintcare voluntarily adding aerosols in Connecticut, we should consider a statutory change to list aerosols as a covered paint.

2. Include New York and Rhode Island locations in the drop off locator function.

PaintCare maintains a tool on their website for finding a convenient drop off location. The resident types in a zip code or their town and a list of convenient drop sites pops up. However, the tool only lists Connecticut locations. Both New York and Rhode Island participate in the program. Greenwich does not have any collection sites in town and even though there are retailers just across the border in New York, residents are directed to go to Stamford. There may be drop sites in Rhode Island as well that are more convenient for residents of eastern Connecticut.

3. Establish a metric for the effectiveness of PaintCares

PaintCare has established a program called Paint Smarter which provides information to consumers about how to purchase the proper amount of paint for a particular project and how to store it in a way that reduces waste. The program has been ongoing for a number of years but there is no data to indicate whether or not it has been effective. Metrics could include awareness of steps to reduce paint waste and implementation of those steps.

Conclusions

The PaintCare stewardship program has been very successful in collecting and recycling unwanted paint. Before this program existed, Connecticut did not recycle any latex paint. Residents were directed to dry out unwanted paint and throw it in the solid waste. Oil based paint was collected at HHW programs which were financed by municipalities. Latex paint is now collected and recycled into new paint and oil-based paint is collected and burned for energy recovery.

Connecticut residents now have a network of convenient locations to properly dispose of their unwanted paint. Municipalities have saved money by not having to pay for the disposal of oil-based paint at HHW collections. The program collects about 400,000 gallons of paint per year.

After ten years of convenient collection and steady growth, the amount collected has leveled off. Going forward we can expect to see limited, if any, growth. The addition of aerosol paint to the program would increase volume and save municipalities money. Programs designed to educate consumers to buy the correct amount of paint and store leftover paint properly may lower the amount of paint collected. Unlike other EPR programs, paint is designed to be used up, ideally with nothing left to dispose of.



**Connecticut Department of Energy
and Environmental Protection**

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