

# EPR Achievements: THE CASE OF PAINT IN THE U.S.

Product Stewardship Institute

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## The Leftover Paint Problem

Each year in the U.S., more than 78 million gallons of paint, or approximately 10% of what consumers purchase, goes unused. At a cost of about \$8 per liquid gallon, it would cost local governments and their taxpayers more than \$600 million annually if all leftover paint was collected and properly managed. Oil-based paint, which is considered a hazardous waste in the U.S., is particularly expensive to manage. In the absence of producer responsibility, local household hazardous waste (HHW) facilities spend up to 50% of their budgets on paint alone. Due to budget constraints, local governments often instruct residents to dry out latex (water-based) paint and place it in the trash, wasting a valuable resource and causing environmental impacts. (In California, latex paint must be handled as hazardous waste, unless it is destined for reuse or recycling).

## The Road to Extended Producer Responsibility (EPR) for Paint in the U.S.

In 2002, the Product Stewardship Institute (PSI) invited the paint industry (through its national association, today called the American Coatings Association) to work collaboratively along with state and local governments and other stakeholders to address the problem of leftover paint. PSI developed a Paint Product Stewardship Action Plan, which included important technical background and information on recycled paint markets and regulatory barriers. The Action Plan became the basis for the Paint Product Stewardship Initiative and a series of national dialogue meetings that took place in 2003 and 2004. PSI led stakeholders through discussions and negotiations to eventually reach two Memorandums of Understanding (MOUs). The first MOU was completed in 2005 and was signed by more than 60 entities. It is the only such agreement for product stewardship

in the U.S. signed by the U.S. Environmental Protection Agency (US EPA). Following eight pilot projects conducted to develop a greater understanding of the problem and solutions, PSI mediated a second MOU, which established a roadmap for creating a model extended producer responsibility program for the U.S.

## Launching EPR for Paint

The consensus-based process and development of a model that multiple stakeholders supported laid the groundwork for harmonization in program design across the U.S. In 2009, Oregon was the first state to pass an EPR bill for paint, based on the model. Since then nine additional states and the District of Columbia have passed bills based on the same model. Nine programs are operating, one (State of Washington) was recently signed into law, and one (New York State) passed both legislative chambers and is expected to be signed into law in 2019. The long road to legislation, as well as continued interest in and passage of bills, point to the need for long-term engagement on EPR issues in the U.S. Even with a supportive industry and a clear model, passing legislation requires considerable education, persistence, and prolonged stakeholder engagement in each state.

## Features of the Paint Stewardship Program

Laws establishing each state program, as well as recent and pending bills, include the following features:

- A requirement for producers to submit a plan to the state for review and approval, and for the plan to include a description of how producers will collect, transport, reuse and recycle paint according to the waste management hierarchy and environmentally sound management practices;
- The ability of producers to organize under a Producer Responsibility Organization (PRO) (in this case, PaintCare,

a non-profit organization), which submits a plan to the state and manages the program;

- An eco-fee charged to consumers on each can of paint they purchase (typically \$0.35-\$0.49 for cans larger than a half pint and smaller than 1 gallon; \$0.75-\$0.99 for 1 gallon; and \$1.60-\$1.99 for larger than 1 gallon up to 5 gallons);
- Convenience requirements based on distance and population (e.g., 95% of residents must be within 15 miles of a drop-off site, and one additional site must be added per 30,000 residents);
- Communication requirements to educate consumers about the program, the fee, how to determine the right amount of paint to purchase to reduce leftover paint, and how to store leftover paint correctly);
- Voluntary participation by paint retailers, who can choose to serve as a drop-off site;
- A ban on the sale of paint that is not registered with the state under an approved stewardship plan;
- A requirement for an annual report detailing paint collection and processing, consumer education and convenience, and financials;
- A third-party financial audit, in part to ensure that the fees collected cover the cost of the paint stewardship program only.

## Status of Paint Laws in the U.S.

As noted above, there are nine programs operating, one recently passed into law, and one pending (passed by the state legislature, awaiting the governor's signature). Two other states (New Jersey and Massachusetts) have introduced bills that are still under consideration this legislative session, and many others are interested in bringing the paint EPR model to their state. What makes the mediated agreement on paint stewardship so unique is that the paint industry sponsors state legislation and is the lead lobbyist seeking to pass bills. No other industry group in the U.S. has taken responsibility for reducing the post-consumer impacts of their products like the American Coatings Association. PSI, state

and local government agencies, recyclers, environmental groups, and others work with ACA to seek passage of the model bill.

## Program Performance

In addition to program design, reporting for the state paint programs is largely harmonized. In 2014, PSI led a process with PaintCare and state and local governments from six states to create a report template with an outline and key information to be included in each section. The consistent template harmonizes reporting and simplifies comparison among programs.

The table on the next page summarizes recent performance in each state. The states vary in terms of population size, population density, and land area, all of which can impact the ease with which the industry can meet convenience standards. Several factors can influence recycling rates as well, including: distance to recycled paint manufacturers' processing infrastructure (to recycle paint), the presence of a strong reuse network, local climate (which may impact the quality of leftover paint stored by residents), and local practices. Current EPR programs for paint cover approximately 19% of the U.S. population, or 62 million people (set to increase to 27% with Washington and

New York, or nearly 90 million people).

The programs vary considerably in size. California processes nearly 4 million gallons of paint annually for a population of about 40 million people. The next largest program is Minnesota, at nearly 1 million gallons of paint for a population of 5.6 million people. The smallest program is in the District of Columbia, which processes 39,000 gallons for a population of about 700,000 people.

Most year-round collections take place in retail stores, with more than 1,300 voluntary drop-offs located in paint and hardware stores. An additional 360 year-round drop-offs are located at HHW sites, landfills, and transfer stations. Paint recyclers (remanufacturers), recycling centers, and reuse stores also host year-round drop-offs. In each program, at least 93% of residents have access to a year-round drop-off site within 15 miles of their home, providing significant consumer convenience, which is a major factor in the amount of leftover paint recovered. The programs offer large-volume pickups (for people or organizations with 200 gallons or more), and events are offered in some states to increase access to people needing to bring back leftover paint.

About 20% of paint processed

State	Law Passed	Program Implemented
Oregon	June 2009	July 2010
California	September 2010	October 2012
Colorado	June 2011	July 2013
Rhode Island	June 2012	July 2014
Vermont	May 2013	May 2014
Minnesota	May 2013	November 2014
Maine	July 2013	October 2015
Colorado	June 2014	July 2015
Washington, D.C.	March 2015	November 2016
State of Washington	May 2019	November 2020 (planned)
New York	<i>Awaiting Governor's signature</i> June 2019	January 2021 (planned)

through the state programs is oil-based, while the large majority (80%) is latex. Currently, approximately 70% of collected latex paint is reused or recycled back into paint or non-paint recycled products. The remainder is solidified and landfilled, used as fuel, or mixed with a thickening material and applied as daily landfill cover. Most oil-based paint is used as fuel or incinerated; a small amount (less than 5%) is reused. Across the states, the average per gallon cost of processing paint is approximately \$8.

### Paint Recycling Infrastructure

A successful EPR program for paint requires a healthy paint recycling industry to accept, remanufacture, and market recycled paint. In 2017, PSI began organizing paint recyclers in North America, eventually bringing them together to identify common challenges and priorities. The International Paint Recycling Association (IPRA) officially launched in 2019 to promote the quality, availability, and value of recycled latex paint. IPRA is

the first organization in the world to represent the recycled paint industry. Founding members include a dozen recycled paint manufacturers operating in 20 states and multiple Canadian provinces. IPRA's first major initiative is to develop the IPRA Green Standard® paint certification program to guarantee that certified products meet stringent performance criteria.

### The Future of EPR for Paint and Paint Recycling

With two or more new programs likely being established in the next two years, paint stewardship and the recycled paint industry are positioned for considerable growth. The paint stewardship program does face some challenges, such as how to manage the dry or semi-dry portions of returned latex paint that cannot be recycled into new paint. PSI conducted a research study on emerging technologies to use this portion of paint, and PaintCare has administered a grant program

#### U.S. Paint Stewardship (PaintCare) Programs by State

	California	Colorado	Connecticut	District of Columbia
<b>State Characteristics</b>				
Population	39,557,045	5,695,564	3,572,665	702,455
Square Miles	163,696	104,093	5,543	68
Urbanization rate	95%	86%	88%	100%
<b>Year-Round Drop-Off Sites</b>				
Retail Store	580	153	105	8
Household Hazardous Waste and other Public Waste Facilities	174	12	42	1
Recycler, Recycling Center, or Reuse Store	14	9	2	-
Totals	768	174	149	9
<b>Convenience</b>				
Percent of Residents within 15 miles of a Drop-Off Site	98.5%	94.7%	100%	100%
<b>Paint Processing</b>				
Annual Amount Processed*	3,881,913	654,476	342,350	39,130
Percent Latex	83%	73%	80%	81%
Percent Oil-Based	17%	27%	20%	19%
Percent of Latex Reused or Recycled	74%	80%	81%	97%

\*Most recent program data available as of June 2019.

\*\* Based on total figures for all states combined.

to help nurture innovations that are higher on the waste management hierarchy than the current practice of using it for landfill cover. PSI has also conducted evaluations for four state programs. These studies feed information back into the programs for continuous improvement and provide state and local governments an avenue for on-going input on the implementation of programs. As the recycled paint industry has matured and quality has risen so that it is equal to virgin paint among IPRA member companies, the reputation of recycled paint has improved, but the industry still faces challenges for achieving broader market acceptance. The establishment and growth of IPRA will bolster the recycled paint industry and support continued expansion of EPR for paint programs. Regulators are also increasingly interested in tracking and understanding the ultimate destination of paint collected through these programs, particularly the portion of recycled paint that is sold to export markets. **CW**

**Sources:**

*Much of the information in this article was derived from PSI published and unpublished sources, as well as PaintCare annual reports.*

*PaintCare annual reports and summaries are available via <https://www.paintcare.org/paintcare-states/>*

*A description of the process used to establish paint stewardship in the U.S., along with more information about paint stewardship in the U.S., can be found at [https://www.productstewardship.us/page/PSI\\_and\\_Paint](https://www.productstewardship.us/page/PSI_and_Paint)*

*A version of this paper was presented at the International Stewardship Forum in Paris, July, 2019.*

*To learn more about IPRA and recycled paint, visit [recycledpaint.org](http://recycledpaint.org)*

Maine	Minnesota	Oregon	Rhode Island	Vermont	Totals
1,338,404	5,611,179	4,190,713	1,057,315	626,299	62,351,639
35,379	86,936	98,379	1,545	9,616	505,255
39%	73%	81%	91%	39%	
75	200	121	25	67	1,334
39	53	26	4	9	360
3	4	26	-	1	59
117	257	173	29	77	1,753
94.2%	93.4%	96.7%	99.9%	99.5%	
129,907	993,564	795,786	84,210	110,567	7,031,903
76%	81%	80%	77%	76%	
24%	19%	20%	23%	24%	
83%	50%	59%	82%	81%	70%**