REDUCING, REUSING, & RECYCLING Waste Latex Paint in Rural Communities

Many communities struggle with how to help residents properly manage and reduce disposal of the significant amounts of leftover latex paint they generate. This fact sheet is designed to help local government officials in rural communities better understand options available for reducing, reusing, and recycling this paint.

Latex paint represents more than 80 percent of the paint that consumers purchase.¹ Disposing of unused latex paint wastes valuable resources and unnecessarily consumes landfill space. Before leftover latex paint can be thrown in the trash, it needs to be dried out – a process that can take weeks and requires protection from bad weather and access by pets and children. Because drying leftover paint is often not convenient, it ends up accumulating in basements and garages where it can go bad due to improper storage. Often, people do not know what to do with their unused paint and put the liquid paint in the trash, increasing the potential for releases to the environment. Decreasing the amount of waste paint can save local governments money on disposal fees.

Alternatives to disposal include: preventing too much paint from ending up as waste, facilitating the reuse of leftover latex paint, and collecting latex paint for recycling. Each of these is discussed below.

Preventing Waste Paint

Preventing the generation of waste paint is the best way to improve its management. Education is key to waste prevention. This can occur at the point-of-sale and after the job is completed. Retailers and local solid waste programs can encourage their customers and residents to purchase only the amount of paint they need for their project (see box on page 2). Consumers can learn to store unused paint properly so that they can use or donate it in the future.

What are the Benefits of Preventing Waste Paint?

- Households **buy less paint**, **save money**, and **reduce clutter**.
- Consumers **properly store** their leftover paint so that they can **reuse it**.
- Communities avoid a potential environmental or health hazard.

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¹Oil-based paint wastes are hazardous because of their toxic constituents and flammability and should continue to be handled through household hazardous waste (HHW) collection programs when available.

What are the Challenges & Options for Promoting Waste Prevention?	
Challenge / Consideration	Education Message
Consumers might purchase more paint than they need to complete their painting job.	 Before going to the store, perform easy calculations to determine the amount of paint needed for the job – see the box below for examples. Stores mix paint colors using standard formulas, so it is easy to buy more at a later date if necessary – buying too little is better than too much. Painters recommend having a maximum of 1-quart of paint left over for touch-ups. Store leftover paint properly so it's usable when needed.
Consumers often purchase the quantity of paint needed for the whole job and then decide they do not like the color after applying a small portion.	When experimenting with new color schemes, test it out at home by purchasing 4-ounce sample sizes of paint, or have the store mix 1-quart of the color to start with.
Paint is typically sold in gallon or quart sizes, and the pricing structure often means that buying two gallons is less expensive than buying one gallon and three quarts, leading to excess leftover paint.	Purchasing paint in quart containers means that there will be less leftover paint to manage.
To keep leftover paint fresh and reusable, contact with air must be eliminated and it cannot go through a freeze/thaw cycle more than once or twice.	Cover the can with plastic wrap before securely placing the lid, then store the can upside down. Do not store paint in unheated garages, attics, or outside storage sheds.
Households do not know where they can donate leftover paint for reuse.	Contact your local solid waste management office to find out about options in your area – see the box on page 3 for examples.

Tips on Calculating the Correct Amount of Paint Needed for a Job

Calculating the correct amount of paint to buy is easy!

- First, determine the number of coats of paint to apply.
- For interior rooms, estimate the floor dimensions, ceiling height, and number of windows and doors.
- For exterior siding, estimate the approximate wall height and width for each side of the structure and the total number of windows and doors in the structure.

Generally, one gallon of paint covers 400 square feet with one coat; however, dry porous wall material might require more.

Benjamin Moore offers a simple by-the-gallon paint calculator for interior rooms: www.benjaminmoore.com/en-us/ for-your-home/paint-calculator.

Lowes offers a more detailed by-the-gallon and quart paint calculator that works for both interior and exterior jobs: www.lowes.com/cd_Paint+Calculator_953562246.



How Can Municipalities Work Together with Retailers and Consumers to Prevent the Generation of Waste Latex Paint?

Rural communities need everyone to work together to find better solutions to managing waste latex paint. The chart on page 2 provides examples of specific prevention messaging to incorporate into outreach and education campaigns. Education efforts can include guidance to help residents distinguish between latex and oil-based paints and learn about their local reuse, recycling, and disposal options.

At Point of Sale: Local governments and/or volunteer groups can work with stores that sell paint and provide them with outreach materials that they can distribute to customers. This could be a brochure with local options for paint recycling and disposal or a simple sticker placed on the top of the can that alerts consumers to read the instructions included on the can's label. Paint stores can offer four-ounce sample sizes of paint colors and encourage customers to use them.

In the Community: Municipalities can distribute messaging on waste paint management in a variety of ways:

Paint Exchanges / Drop & Swaps

Community paint exchanges, often called "drop & swaps" are designed to facilitate the collection and reuse of latex paint. Residents bring their leftover latex paint to a designated location where others can pick it up for their use. Communities can offer this as an ongoing service or host special paint swaps in conjunction with other events, such as household hazardous waste (HHW) collection days.

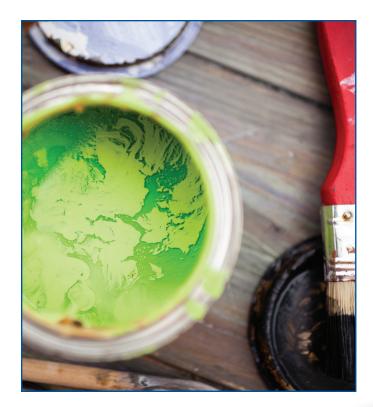
What are the Benefits of Drop & Swap Programs?

- Households reduce the amount of latex paint that they throw away.
- Municipalities and tax payers save money on paint disposal and recycling.
- Much of the paint that is swapped is unopened and in good condition so those taking advantage of the swap **obtain a great free product**.
- They are relatively easy programs to develop and maintain, and communities can often leverage an existing facility and personnel.

- Include an insert in regular town mailings such as tax bills, utility bills, and other communications about solid waste and HHW management
- Distribute a flyer at HHW collection and/or other community events
- · Place announcements in the local newspaper
- Put up posters on local community bulletin boards
- Post information on the town's website

Local governments and/or volunteer groups should conduct research to identify local options for donating good quality latex paint and include this information in the educational materials distributed to consumers. Options to investigate include:

- School and community theater programs
- Local governments for building maintenance
- Habitat for Humanity ReStores (www.habitat.org/restores)
- Posting on a local Freecycle group (www.freecycle.org), Craigslist (www.craigslist.com), or other materials exchange program website



What are the Challenges & Options for Drop & Swap?		
Challenge / Consideration	Possible Solution	
Only the "best" quality leftover paint can be reused. Paint that is being dropped off must be in a sufficient quantity so that it is usable (e.g., at least ½ can).	Have drop and swap staff review the paint as it is delivered and make a decision about its quality and quantity. If it is unusable, they could either collect it for disposal, or advise the resident about how to properly dry it and throw it away themselves.	
Requires staff and/or volunteers to manage the event/ ongoing service.	Hold swaps in conjunction with HHW events or at an existing HHW or solid waste facility.	
Often more paint is dropped off than picked up for reuse, so there may be a need to manage the excess material and send it somewhere for reuse, recycling, and/or disposal.	Contact local organizations, like a community theater, charity, or religious organization that needs paint and will take donations. Contract with a private company that will recycle or dispose of excess paint. See text boxes on pages 5 and 7.	
Commercial entities, such as painting contractors and small businesses, might try to get rid of a lot of paint, and pro- grams could be overwhelmed.	Municipalities should make a decision on whether or not to accept paint from non-households based on local needs and market the program accordingly. Charging businesses a small fee may help offset costs.	
Ongoing programs need storage capacity, such as a building or shed with shelving and spill containment/cleanup materials. Improper storage may lead to paint that is unusable due to freezing, bacteria, and other contaminants.	Hold in spring/summer months only so there is no need for heated storage.	
With a "swap shack" or storage shed, people might drop off materials other than usable latex paint, creating a liability.	Locate the shed at an existing solid waste transfer station or other monitored and secure facility. Have residents fill out forms stating that the paint they are dropping off is latex and in good condition. Have customers picking up paint sign a form stating that they understand that the paint is not new and is subject to inconsistencies in quality and quantity.	
Communities need to market the program to attract consumers both for drop-off and pick-up.	Encourage people to donate paint for reuse. Include this information with existing marketing campaigns for HHW collection or solid waste disposal – see sidebar on page 3 for examples.	

The American Coatings Association's *Guidance Manual for Paint Reuse Programs* – www.productstewardship.us/ associations/6596/files/paint_reuse.pdf – provides detailed guidance on implementing a drop & swap program, as well as examples of liability forms.

Latex Paint Exchange in

Fulton County, NY

Fulton County is located in central New York and consists of 16 mostly small towns and villages with a combined population of 55,000. The Fulton County Department of Solid Waste (DSW) operates the Latex Paint Exchange at their solid waste transfer station in Johnstown every Saturday during June, July, and August. This low cost and low tech program accepts good, reusable latex paint from residents and offers it back to the public at no charge. Residents sign a waiver when taking paint and are limited to five gallons per week. The transfer station employs a summer intern that helps manage the paint, among other duties.

In 2012, the program helped people swap more than 340 gallons of latex paint. At the end of the season, 15 gallons remained, and were donated to a local community theater program for painting signs, backdrops, and sets. In cases where the paint that is dropped off is unusable, the staff dries it out and disposes of it as solid waste. Since this program began in 2001, it has diverted 3,793 gallons of latex paint from disposal.



Fulton County latex paint poster



Fulton County Scalehouse Operator, checking in paint

Latex Paint Exchange in

Chenango County, NY

Chenango County, also in central New York with a population of 50,000 residents, runs a free latex paint exchange for residents on Tuesdays through Fridays from May through September at their North Norwich Transfer Station. Residents drop off latex paint and sign a form stating that the paint is from a household. Personnel at the transfer facility inspect each can as it comes in. If it looks unsuitable, they accept it and use the opportunity to educate the resident as to why the paint is no longer usable. They set it aside and add clay absorbent to facilitate drying. The paint usually dries out in four or five days and is then discarded as solid waste.

Staff sorts the usable paint by color and stores it for the paint exchange. Residents can take paint for free after signing a form stating that they will use the paint for its intended purpose. The program generally takes in 300-400 cans per season, and it moves fast. Residents have reported that they would like to be able to drop and swap paint all year, but the community's storage area is in an unheated building. If there is any leftover paint at the end of the season, the staff brings it to the annual HHW collection day. Golden Artist Colors Inc., a local paint manufacturer, adds it to the other reusable latex paint collected that day, takes it back to its facility where they sort it by color, re-blend it, and then give it back to the County in five-gallon containers, free of charge.

Latex Paint Recycling Companies

Acrylatex Coatings & Recycling, Inc.

(www.acrylatex.com) Azusa, CA Phone: 888-824-6880

Amazon Environmental, Inc. – A Division of Envirosystems

(www.amazonpaint.com) Riverside, CA Phone: 951-588-0206

Fridley, MN Phone: 763-572-0800

Pyror, OK Phone: 918-825-4843

Kelly Moore – Division of Amazon Paint

Sacramento, CA Phone: 916-922-0206

Calibre Environmental, Ltd.

(www.recyclepaint.com) Calgary, Alberta, Canada Phone: 403-287-7726

Earth Paints Collection System

(www.earthpaintscs.com) Grayslake, IL Phone: 847-231-6044

GDB International, Inc.

(www.gdbinternational.com/paint) Nashville, IL New Brunswick, NJ So. Brunswick, NJ Laredo, TX Phone: 732-246-3001 ext. 303

The Paint Exchange, LLC

(www. recyclereuserepaint.com) Scituate, MA Phone: 781-545-1272

Visions Recycling, Inc.

(www.visionsrecycling.com) McClellan, CA Phone: 800-770-7664

Paint Recycling

Recycled paint manufacturers take leftover latex paint and recycle it into a new product (see sidebar on page 5). Most of these firms prefer to receive the paint in its original container, and take all leftover latex paint, including cans in poor condition. Municipalities may offer collection for recycling as an ongoing service or host special collection events for latex paint, for example in conjunction with HHW collections.

What are the Benefits of Paint Recycling?

- Through the recycling process, a high percentage of leftover paint is used, **recovering significant value from the material**.
- Recyclers seek the **highest and best use of all paint components** – metal and plastic cans are recycled and solids that cannot be used in new paint may be used as an additive in cement production.
- Most of the leftover paint and packaging materials collected are **diverted from disposal**.



Photos courtesy of GDB International

What are the Challenges & Options for Paint Recycling?	
Challenge / Consideration	Possible Solution
Recycled paint manufacturers charge a fee to accept leftover paint (approximately 15 cents per pound), and transportation to the facility may or may not be included.	Community programs can charge a fee to residents to drop off leftover paint to help offset the costs for recycling.
Requires staff and/or volunteers to manage collection of latex paint.	Hold the collection in conjunction with a HHW event or at an existing HHW or solid waste facility.
Recycled paint manufacturers may not be located nearby, so the collected paint needs to be properly stored until a sufficient quantity is accumulated for economical transport to the recycling facility (a truckload can handle about 4,000 paint cans).	If heated storage space is not available, the program could collect latex paint during the summer months and then team up with other communities in the area to gather a sufficient quantity to fill a truck at the end of the season.
There are material and labor costs for packing the shipment containers (typically, Gaylord boxes or shrink wrapped pallets).	Utilize volunteers to help offset labor costs.

Are Consumers Likely to Pay to Drop-Off Their Leftover Paint?

There are several examples where the answer is an enthusiastic YES.

The Paint Exchange, LLC in Scituate, Massachusetts is a feebased latex paint recycler. The Paint Exchange charges \$2.00 per can and relies on households and small businesses to drop off latex paint at their recycling location. People come from throughout New England and pay to drop-off anywhere from 2 to 100 cans of paint at a time. The Paint Exchange has been successful with their fee-based program and report that they recycle thousands of gallons of paint each year. They produce *reColor Premium Recycled* latex paint that is sold for about half the cost of virgin latex paint through a network of hardware and other shops throughout Massachusetts. All metal and plastic cans are scrapped dry and sent for recycling. Any unusable paint is dried and sent for disposal. More information at: www.recyclereuserepaint.org.



Photos courtesy of The Paint Exchange



Photo courtesy of NEDT

New England Disposal Technologies (NEDT) in Central Massachusetts and Hazman in Western New York provide another fee-based model for waste paint collection centers. These companies operate year-round household hazardous waste collection centers that also accept latex paint on a "pay-as-you-throw" basis. NEDT accepts latex paint from households and municipal programs and charges 55 cents per pound, while Hazman charges 50 cents per pound and accepts latex paint from households, municipal programs, and small businesses. NEDT solidifies the paint prior to disposal. Hazman currently sends their paint as a liquid to a waste-to-energy facility and captures the metal cans for recycling. Both companies are considering recycling options for the latex paint as well.

Latex paint is the largest waste stream collected by both NEDT and Hazman, and they report that many people are willing to travel from significant distances and pay a fee to ensure its proper management. More information at: www.NEDT.org and www.hazmanusa.com.





How Does Extended Producer Responsibility Fit in With These Options?

Extended produce responsibility (EPR) is a mandatory type of product stewardship that includes, at a minimum, the requirement that the producer's responsibility for its product extends to post-consumer management of that product and its packaging. An EPR program for paint requires manufacturers of oil-based and latex paint sold in participating states to collect unwanted, leftover cans of paint and finance the costs of their recycling and safe disposal.

EPR complements the three management options presented in this document:

- *Prevention* is always best it's the "reduce" in the *Reduce, Reuse, Recycle* hierarchy.
- Drop & Swaps are local direct reuse options. Keeping the material local reduces the amount of paint requiring transport for disposal/recycling and the associated pollution.
- *Recycling* is what will increase with EPR, with the expense problem solved.

In recent years, the states of Oregon (2010) and California (2012) passed EPR laws for paint. Since 2012 Connecticut, Maine, Minnesota, Rhode Island, and Vermont have passed similar legislation and are in various stages of implementation.

Under these EPR programs, local government solid waste programs have the option of working with PaintCare, a non-profit stewardship organization created by paint manufacturers, to collect unwanted paint from residents and small businesses at permanent collection sites and/or periodic collection events. Municipal transfer stations, retail paint stores, and other facilities can enter into a contract with PaintCare and receive double-containment bins, education materials, and procedure manuals. PaintCare also contracts with haulers to pick up the items from participating locations and arranges for the collected paint to be recycled (latex) or burned for energy recovery (oil-based).

For more information about product stewardship and EPR for paint and other products, check out the Product Stewardship Institute (PSI) at: www.productstewardship.us.

Information about PaintCare and states that have implemented EPR legislation is at: www.paintcare.org.

This document was developed by the Northeast Waste Management Officials' Association (NEWMOA) with input from the following Project Partners:

- Androscoggin Valley Council of Governments (AVCOG) Maine
- Eastern Rensselaer County Solid Waste Management Authority (ERCSWMA) New York
- Erie County Department of Environment and Planning New York
- Montgomery Otsego Schoharie Authority (MOSA) New York
- Rutland County Solid Waste District (RCSWD) Vermont
- Solid Waste Alliance Communities (SWAC) of Rutland Co. Vermont
- Maine Dept. of Environmental Protection (ME DEP)
- New York State Dept. of Environmental Conservation (NYS DEC)
- Vermont Dept. of Environmental Conservation (VT DEC)
- PaintCare (www.paintcare.org)

This document was developed as part of NEWMOA's "Promoting Strategies to Increase the Reuse and Recycling of Waste Paint in Rural Communities" project. The purpose of this initiative is to provide technical assistance to rural communities in the Northeast to help them implement more sustainable systems for reducing, reusing, and recycling waste latex paint. More information about this project is at: www.newmoa.org/solidwaste/projects/paint.

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