Reducing, Reusing, & Recycling Waste Paint: Lessons Learned from Five Rural Areas in the Northeast

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Webinar Outline

• Project background & activities
• Detail on 3 focus areas
  – Prevention
  – Local reuse
  – Recycling
• Questions
• Results
• Demonstrate resources developed
• Final questions
What is NEWMOA?

- Non-profit, non-partisan interstate association
- Solid waste, hazardous waste, waste site cleanup, & pollution prevention programs
- CT, ME, MA, NH, NJ, NY, RI, & VT
- Formally recognized by EPA in 1986
- [www.newmoa.org](http://www.newmoa.org)

NEWMOA is an equal opportunity provider & employer
Why Waste Paint?

• Large volume:
  – 2.3 gallons of paint sold/person/year
  – ~80% is latex
  – ~10% is leftover
  – Even for a small community of 5,000 people = ~1,150 gallons leftover each year

• Difficult to properly manage for consumers
• Costly to manage for municipalities
• Disposal is a waste of resources!
Current Management Options

• Oil-based: HHW collection events or facilities
• Latex: dry out or mix to make solid & dispose in the trash

Proper management is not convenient
– leads to accumulation
– improper disposal
USDA Waste Paint Project

• Promote strategies to
  – Prevent paint waste
  – Increase reuse & recycling

• Focus on rural areas
  – Communities in Maine, New York, & Vermont

• Develop
  – Best management practices & outreach
  – Customized workshops
  – Needs assessments & action plans
Project Activities

• Established Project Steering Committee
• Established 5 Stakeholder Workgroups
• Published brochure on waste latex paint management practices
• Published consumer handout on waste paint prevention
• Conducted workshops
Project Partner Locations

• Maine
  – Androscoggin Valley Council of Governments

• New York
  – Eastern Rensselaer County Solid Waste Management Authority
  – Erie County Department of Environment & Planning - Northeast Southtowns
  – Montgomery Otsego Schoharie Authority

• Vermont
  – Rutland County Solid Waste District
Stakeholder Workgroups

• State & local government officials
• Painting contractors
• Retailers
• Solid waste facility operators
• HHW contractors / facility operators
• Recycling coordinators
• Waste haulers
• Environmental advocates / community groups
**Focus of Discussions**

"Reduce, Reuse, Recycle"

- Prevent Waste Paint Generation
- Promote Local Reuse Such as Donations & Paint Exchanges
- Facilitate Recycling Opportunities Where Available*

*Includes extended producer responsibility (EPR) / product stewardship
Focus of Discussions

• Prevention Through Education
  – purchase less paint
  – store leftover paint properly so it is reusable

• Paint Exchanges (aka “Drop & Swaps”)
  – facilitate local reuse

• Recycling Programs
  – product stewardship for paint recycling recently passed in ME & VT
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. 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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1 Oil-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.
Prevention
Prevention - Benefits

• Customers buy less paint = save $$$; less leftover paint

• Paint is properly stored so it can be reused

• Reduces potential environmental or health hazards from drying process, improper, or illegal disposal
Educational Messages

Purchase only the amount of paint needed

– Measure the square footage of the room or use an online paint calculator before going to the store
Paint Calculators

• Benjamin Moore:  
  www.benjaminmoore.com/en-us/for-your-home/paint-calculator

• Lowes:  
  www.lowes.com/cd_Paint+Calculator_953562246

• PaintCare:  
  www.paintcare.org/calculator.php

• King Co., WA HW Management Program:  
  www.lhwmp.org/home/HHW/paint-calc.aspx

And Many More!!!
Educational Messages

Purchase only the amount of paint needed

- Stores use formulas when mixing paint – you can get more later

- Use 4-ounce samples or quart sizes of paint when experimenting with new colors
Store unused paint to preserve its quality

- Tightly close lid
- Some recommend covering first with plastic film & storing upside down
- Don’t store in attics, garages, or sheds
Donation Options

• School & community theater programs
• Local governments for building maintenance
• Habitat for Humanity ReStores
• Materials exchange program websites
TIPS for Minimizing Paint Waste

Many people find that properly managing paint waste is a hassle — so the cans keep accumulating. If you face this problem, try to minimize the amount of leftover paint by knowing your coverage requirements ahead of time and buying only what you need, and correctly store your leftover paint so that it can be reused.

**Buying the Right Amount of Paint**

By purchasing only what you need, you will save money and reduce the clutter in your home or storage area. Before going to the store, take a minute to quickly estimate how much paint you need. Just answer these few easy questions:

- How many coats of paint do I want to apply?
- For interior rooms, what are the floor dimensions and ceiling height?
- For exterior siding, what is the approximate wall height and width for each side of the structure?

Use these estimates to calculate the square footage of the entire area. Generally, one gallon of paint covers 400 square feet with one coat; however, dry porous wall material might require more. So for example, if you estimate that you have a total of 400 square feet of wall space and you want to apply 2 coats of paint, you should buy 2 gallons of paint.

For a more accurate estimate, consider the number of windows and doors in the structure. Ask the store clerks for help, or check out:

- Benjamin Moore's paint calculator for interior rooms: www.benjaminmoore.com/en-us/do-your-home/paint-calculator

**Other Tips for Paint Purchasing**

If you are trying a new color, test it out at home by purchasing a 4-ounce sample size. Then if you don’t like how it looks, you won’t have a whole gallon (or more) that you can’t use.

Stores mix paint colors using standard formulas, so it is easy to buy more at a later date if necessary. Professional painters recommend having 1 quart of paint left over for touch-ups.

Look for recycled content paint, which is priced significantly lower than virgin paint and has the same quality. By using recycled content paint, you are preventing it from being landfilled and saving the resources needed to manufacture new paint.

**Storing Leftover Paint So It Can Be Reused**

In order for leftover paint to be usable at a later date, it needs to be stored so it doesn’t have contact with air or go through a freeze/thaw cycle more than once or twice. Follow a few simple steps to keep leftover paint fresh and reusable:

- Do not store in unheated garages, attics, or outside storage sheds — these areas may experience freezing temperatures.
- Cover the opened can with plastic wrap before securely placing the lid back on, then store the can upside down.

What NOT to Do with Leftover Latex Paint

Liquid latex paint that is thrown away in the trash or is poured down the drain can be released to the environment and cause contamination.

**DO NOT:***

- Throw containers with even small amounts of latex paint in the trash
- Pour leftover paint down the drain or sewer
Outreach

• Distribute through
  – paint retail locations
  – HHW events
  – other local events

• Insert in regular town mailings
  – tax bills
  – utility bills
  – communications on solid waste or HHW management

• Place announcements in local newspaper
• Hang posters on community bulletin boards
• Post information on town websites
Considerations

• Retailers
  – Competition for counter space
  – Need to keep them stocked at stores

• Donations
  – Need to find options & keep up-to-date

• Bottom line: someone has to follow through on ongoing outreach
Drop & Swap
Drop & Swap - Benefits

• Reduces the amount of good latex paint wasted

• Reduces $ spent on disposal/ recycling

• Great free product!

• Relatively easy to develop & maintain by leveraging an existing facility & personnel
Considerations

• Paint must be in good condition
• Sufficient quantity so it’s usable (at least ½ can)
• Requires proper storage
• Monitored by staff or volunteers
• Marketing & outreach
• Manage paint that is not swapped
Fulton County

- Swapped 340 gallons in 2012 (3,793 since 2001)
- Summer only at solid waste transfer station
- Unusable paint is combined with that collected on HHW day, dried out by staff, & disposed of as solid waste
- Un-swapped paint is donated to local community theater (15 cans in 2012)
Chenango County

• Swap 300-400 cans of latex paint per season
• Liability forms signed at drop-off & pick-up
• Spring & summer at transfer station
  – Stored in unheated building
• Staff sort usable paint by color & place on shelves
• Leftovers consolidated / re-blended by local paint manufacturer & given back to the county for free
Recycling & Fee for Service
Recycling - Benefits

• Takes all latex paint
• High percentage is reused as paint
• Highest & best use of all components
  – Metal & plastic cans are recycled
  – Solids can be used as an additive in cement
• Leftover paint & packaging materials are diverted from disposal

Photo Courtesy of GDB International
Recycling Methods

There are essentially two ways that communities can facilitate paint recycling:

• Contract with Private Companies
  – recycled paint manufacturers

• Adopt Product Stewardship Laws (EPR)
  – run by PaintCare (non-profit association of the paint industry)
Incoming Cans

Photo Courtesy of GDB International
Recycling Maximized

Photos Courtesy of GDB international
Considerations

• Collection requires staff or volunteers
  – recyclers only take latex paint
  – also need to pack shipping container(s)
• Recyclers not located in the northeast
  – transportation $
• Need ~4,000 cans for a truckload
  – requires proper storage
  – team up with other towns for a “milk run”
• Manufacturers charge a fee (~15¢/lb)
  – charge a drop-off fee to help offset costs
Would consumers pay to get rid of their excess paint? – Maybe….

- Need convenient hours
- Users tend to be those doing house cleanouts &/or moving
- Fee covers cost of management
Several examples where consumers are willing to pay to recycle or dispose of their leftover paint.
The Paint Exchange
Scituate, MA

- Accepts only latex paint
- Fee: $2.00 per gallon
- Recycles paint
  - Sell reColor at hardware & design shops in MA
- Scrapes cans empty & recycles
- Un-useable paint dried & disposed
- 1000s of gallons/year
  - Source: throughout NE
  - Usually drop 2-100 gallons
New England Disposal Tech
Sutton, MA

- Local HHW event contractor
- HHW facility open Tues & Thurs 9-4 & Sat 9-12
  - Accepts HHW & latex
  - Households & municipalities
  - Fee: 55¢ per pound
- Latex dried & disposed
- People travel from surrounding states
• Local HHW event contractor
• HHW facility
  – Open M-F 8-4
  – Accepts HHW & latex
  – Households, municipalities, & small businesses
  – Fee: 50¢ per pound
• Good latex donated to local Habitat for Humanity ReStore
• Other latex to waste-to-energy facility
Extended Producer Responsibility

- Following states have EPR paint laws: CA, CT, ME, MN, OR, RI, & VT
- Fee is added to paint sold—visible at the point of purchase
- Consumers bring leftover paint to designated locations free of charge
  - retailers
  - transfer stations
- Paint manufacturers manage the collection, transportation, & recycling through PaintCare, a third party organization
PaintCare Program

Latex Paint Collection
- From all residents
- From all businesses

Oil-base Paint Collection
- From all residents
- From CEG businesses

Photos Courtesy of PaintCare
• Need markets for recycled paint
  – Demand helps drive activity
• Comparable quality at ~half the price
• Ideas to increase the market
  – Ask retailers to stock
  – Spec in government contracts
Project Results: Recommendations for Communities
1. Encourage prevention through consumer education
   - Distribute the consumer handout
   - Utilize PaintCare-developed outreach materials

2. Facilitate the local reuse of paint
   - Cultivate additional donation options
   - Educate towns on logistics of drop & swap programs

3. Work with PaintCare to advance paint recycling
1. Encourage prevention through consumer education
   – Distribute consumer handout in 2014 calendar mailing

2. Facilitate the local reuse of paint
   – Cultivate additional donation options
   – Continue evaluating feasibility of accepting good quality leftover latex paint at affiliated thrift store
   – Continue evaluating logistics of drop & swap at annual HHW event
1. Encourage prevention through consumer education
   - Distribute the consumer handout

2. Facilitate the local reuse of paint
   - Cultivate additional donation options
   - Continue evaluating logistics of drop & swap at annual Northeast Southtown HHW event
   - Continue evaluating feasibility of stand-alone drop & swap events
1. Encourage prevention through consumer education
   – Distribute the consumer handout & post on website

2. Facilitate the local reuse of paint
   – Cultivate additional donation options
   – Continue evaluating logistics of drop & swap at transfer stations & HHW events
1. Encourage prevention through consumer education
   - Distribute the consumer handout
   - Utilize PaintCare-developed outreach materials

2. Facilitate the local reuse of paint
   - Cultivate additional donation options
   - Educate towns on logistics of drop & swap programs

3. Work with PaintCare to advance paint recycling
Summary

• Opportunity in all locations to promote
  – Prevention messaging & local donation
  – Need champion

• Drop & Swap important but more complicated
  – Need resources to manage

• Recycling completes diversion
  – Cost prohibitive for small communities
  – Extended producer responsibility is beneficial
Project Materials
www.newmoa.org/solidwaste/projects/paint
Disclaimer

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