



Many leftover painting materials are considered hazardous waste. This fact sheet provides information on how to effectively reduce and manage these wastes.

Options for old paint and paint-related materials

Many leftover painting materials are considered *hazardous* waste. These materials include ignitable wastes, such as solvents and other cleaners; paint, paint thinners, adhesives, and glues; and toxic wastes with heavy metals. In Minnesota, any amount of business-related hazardous waste is regulated regardless of quantity. These regulations include licensing, managing, and reporting requirements from the Minnesota Pollution Control Agency (MPCA) or a Twin Cities county hazardous waste office. This fact sheet provides information on how to effectively reduce and manage these wastes.

Waste Reduction

Businesses can practice a number of simple techniques to reduce waste and remain competitive. The following techniques will help your company reduce waste and keep a competitive edge in the industry.

Best Estimates

Over-estimating the paint needed for a job costs a painter twice: once for the raw materials and again for disposal. Ordering the right amount of paint sounds basic, but is not always easy to do. Order enough paint for the first half or three quarters of the job and then re-estimate the job at the halfway point. While an additional delivery may be necessary, you save money by not buying more than is needed for the job.

Inventory Control

Reduce the amount of waste materials by following the product label directions for shelf-life limits and proper storage conditions.

Scheduling

Think about how job and employee schedules can be arranged to reduce the need for equipment cleaning, a major source of waste. Poor scheduling often results in cleaning between tasks, shifts, and color changes.

Record Keeping

Record keeping develops consistent procedures, and reduces guesswork and mistakes. Successful ideas must be recorded for businesses to review and improve on successes.

Maintenance

Painters depend on their tools. Poorly maintained tools can reduce transfer efficiency resulting in repeat application, which requires additional raw materials and labor.

Buy Recycled

Purchasing recycled and/or remanufactured paint may save your company money. Additionally, purchasing recycled paint further develops the market for recycled paint and reduces the amount of paint that is landfilled.

Training

Training promotes efficient and consistent work habits. Training opportunities for painters are increasing. An example of a training tool is a laser pointer which attaches to any spray gun assisting the user with aim, gun-to-part distances, and overlap targeting. Trade associations, equipment suppliers, paint dealers, and local technical colleges are good sources for professional training opportunities. MnTAP's Web site includes additional training resources.

Disposal Options

If waste or unwanted materials have accumulated at your facility, consider the following options for disposal.

Donate

Community or high school theaters, and community fix-up projects are generally looking for donations of unopened, one-gallon cans or larger quantities of light-colored latex paints. Also, with customer approval, small quantities of paint may be left at the job site as touch-up paint.

Identify Usable Materials

Material that is useful should be logged into inventory for use.

- Use old paint as a base coat or primer. Mix the same or similar types of paint when mixing different colors.
- Reuse the clean parts of the thinner after it has separated from the contaminants.

Inventory Your Facility

Check for unopened materials and return unwanted, usable materials to the distributor or manufacturer. Develop agreements with your vendors to make this a routine procedure.

Materials Exchange

Materials Exchange, coordinated by MnTAP, connects you with others who may be able to use your unwanted coatings. <www.mnexchange.org>.

Recycle Latex Paints

Amazon Environmental has a waste collection program that remanufactures latex paint. A recycling collection fee may be required. Contact Amazon Environmental, your solid waste officer, or MnTAP for additional information on latex paint recycling.

Waste Management

Even when waste is successfully reduced some will still be generated. **The MPCA considers paint waste hazardous until properly evaluated and shown as nonhazardous.** Recycling latex paint or other materials as a "feedstock" saves businesses money and is a favorable alternative to disposal as a hazardous waste. See the MPCA fact sheet **Recycling Hazardous Waste—Feedstocks, By-products and Sludge** [#2.42]. The following section addresses proper management of unavoidable liquid and solid wastes.

Liquid Wastes

Unusable liquid materials are considered waste; these may include oil-based paints, stains, and consolidated bulk liquid. Liquid wastes can be pumped, poured, and handled relatively easily, often making them the least costly to manage.

Consolidating. While consolidating offers some advantages, mixing products together changes the ability to rely on manufacturer information contained in the Material Safety Data Sheet (MSDS). An MSDS, available from product vendors, contains product information that will help disposal companies determine whether or not they can manage the waste material. Laboratory sampling and analysis often will be required to evaluate components in random mixtures before they can be managed and/or disposed.

Paint remanufacturing companies prefer receiving materials separated based on color and usability to ensure quality of their products.

Compatibility. The ability of liquids to mix together, especially with water, acid, and alkaline materials, presents special safety problems because of potential chemical reactions. If you have any doubt about compatibility, seek advice from vendors, consultants, your transporter, or disposal facility. Compatible liquids may be consolidated into 55-gallon U.S. Department of Transportation (DOT) approved shipping drums. Check with your permitted hazardous waste disposal facility for specific requirements before consolidating liquids.

Combustible materials. Combustible materials, such as oil-based paints and stains, and other petroleum-based liquids are often used as alternative fuel sources at permitted hazardous waste disposal facilities. Waste waterborne (latex) paints have little or no combustible value and should be managed separately from other liquids.

You may be able to sewer washwater from latex paint cleanup and water-based cleaners. Disposal into storm sewers or septic tank systems is not permitted. Check with the MPCA or your local treatment plant for permission and restrictions.

Very old latex paints that contain mercury-based fungicides (typically phenyl mercuric acetate) must be tested or handled as a hazardous waste and should be managed separately from other material.

Solvents and thinners. In large amounts, solvents and thinners can be managed separately from other wastes for recycling purposes. Your disposal company can provide you with disposal costs that compare separated wastes and combined wastes.

Paint strippers and other chlorinated solvents, such as methylene chloride, should always be managed separately. Chlorinated solvents, even in small concentrations, can affect disposal options and add significantly to disposal costs.

Nonliquid Waste

Unusable, nonliquid wastes include: nonpourable materials or cured hardeners, cements, epoxies, adhesives, and glazes. Often these materials cannot be separated from the container and disposal may require placing the entire package into a larger shipping container or "lab pack." Disposal of lab packed material is expensive and should only be used if materials cannot be consolidated (for example, sludges or dry paint). A hazardous waste disposal company should be contacted for specific information on lab packing.

Dry latex paint. Small quantities of dry latex paint may be placed in the trash. Consult your solid waste hauler for approval.

Empty containers. Outlets for recycling empty plastic and metal containers are available, contact recycler directly for requirements as they vary. Most require the containers to be completely empty; use a stiff kitchen spatula to thoroughly clean out the containers. If an outlet is not available in your area ask your solid waste hauler if they will accept containers.

Spray paint cans and other aerosols. Pressurized and spray containers that are not empty and no longer usable are subject to hazardous waste disposal rules.

To reduce the number of cans that need to be handled as hazardous waste, keep nozzles unclogged, which will allow you to empty the containers. To prevent nozzle tips from clogging, invert the can after each use and spray the nozzle to clear any residual paint. Clogged aerosols may also be fixed by cleaning or replacing the nozzle tip. Aerosol cans with clogged nozzles may be emptied using specially designed equipment. Residues from cans containing the same materials may be collected and reused. Add residues from cans containing different materials to other compatible wastes.

Businesses can lower purchase costs and reduce or eliminate empty container disposal costs by using reusable aerosol containers. Reusable aerosol containers or pump sprayers may be used to spray a variety of liquids that are available in bulk, such as solvents and cleaners.

Additional Resources

- Minnesota Pollution Control Agency <www.pca.state.mn.us>, 800.657.3864 or 651.296.6300
- Amazon Environmental, Fridley, Minnesota <www.amazonpaint.com> Contact John Segala at 763.572.0800 or jsegala@aol.com.

- Minnesota Pollution Control Agency Recycled Latex Paint Web page, <www.pca.state.mn.us/oea/lc/purchasing/latexpaint.cfm>.

- Twin Cities Area Hazardous Waste Offices:

Anoka County: 763.422.7093

Carver County: 952.361.1800

Dakota County: 952.891.7020

Hennepin County: 612.348.3777

Ramsey County: 651.773.4466

Scott County: 952.496.8177

Washington County: 651.430.6655

- MnTAP, can help you reduce the amount of hazardous waste that you generate. MnTAP has a variety of free publications available on reducing your wastes and improving efficiencies.



For More Information

MnTAP has a variety of technical assistance services available to help Minnesota businesses implement industry-tailored solutions that maximize resource efficiency, prevent pollution, increase energy efficiency, and reduce costs. Our information resources are available online at <mntap.umn.edu>. Please call MnTAP at 612.624.1300 or 800.247.0015 for personal assistance or more information about MnTAP's services.