

US EPA ARCHIVE DOCUMENT

COMMUNITY INFORMATION SHEET



Could your family be affected?

Finding alternatives to chemical paint strippers can result in an improved working environment, health, and safety for workers, reduced regulatory compliance burden, savings on materials and disposal cost, and marketing advantages as an “environmentally friendly” business.

— Minnesota Technical Assistance Program

95 percent of all paint stripper used by the consumer is for stripping furniture.

— Source Reduction Research Partnership



Reducing Air Pollution from: Paint and Coating Stripping Operations

Why do paint and coating stripping operations need to reduce air pollution?

People who are exposed to air toxics at sufficient concentrations, for sufficient durations, may increase their chances of getting cancer or experiencing other serious health effects, such as reproductive problems, birth defects, and aggravated asthma.

Pollution prevention can reduce the impact of air pollution by using materials, processes, or practices that can reduce or eliminate air pollution at the source.

Paint and coating stripping operations strip paints and coatings from surfaces of metal and wood furniture and parts. Paint and coating removal may be needed either as part of the manufacturing process or to allow for maintenance or repair operations.

The best paint and coating removal operations implement pollution prevention strategies not only to help comply with federal, state, local, and Tribal laws, but also to go beyond compliance and further minimize impacts on human health, the environment and costs. Check with your state, local, and Tribal agencies for existing regulations.

What kinds of air pollutants may come from paint and coating stripping operations?

- Solvents in chemical paint strippers can release volatile organic compounds (VOC) and some toxic air pollutants. Chemicals in these substances can also react in the air to form ground-level ozone (smog), which has been linked to a number of respiratory effects.
- Methylene chloride is found in many chemical paint strippers. While federal, state, local, and Tribal regulations limit the amount of emissions from paint and coating stripping operations, dangerous

releases of methylene chloride can occur if a paint and coating stripping operation is not in compliance with regulations.

- Lead, chromium and cadmium are metals that may be generated as particle pollution (dust) during abrasive paint removal or mechanical paint stripping. Breathing dust can cause respiratory problems and other harmful health effects.

How can paint and coating stripping operations reduce air pollution?

Making changes in operation work practices can stop pollutants at the source and increase production efficiency. By evaluating and improving work practices, operations can decrease emissions, reduce production costs, and protect employee and public health.

Examples of changes in work practices that help reduce air pollution include:

Evaluating Painting and Coating Processes

- Investigate how painting or coating processes can be improved, so surfaces will not need to be stripped and repainted.

Using Alternatives to Chemical Stripping

- Consider using abrasives, with proper particle pollution controls, to remove paint.
- Investigate thermal or cryogenic stripping techniques.
- Use paint strippers that do not contain chemicals that produce toxic air pollutants.

Controlling Dust from Abrasive Technologies

- Protect worker health and safety by using respirators as needed.

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Paint and Coating Stripping Operations

As a community, what can you do to help reduce air pollution from paint and coating stripping operations?

Make Connections

- Get to know local paint and coating stripping operation owners and operators. They know best about the materials and processes used in their business and the regulations with which they must comply.
- Keep local media aware of progress by sending them updates. Publicity can reward success and attract more public involvement.

Make a Plan

- One idea is to form a work group that includes both community leaders and paint and coating stripping operation owners and operators to develop and implement workable pollution reduction plans.

Locate Resources

- Use the “For Further Information” list below to find governmental and nonprofit contacts who can provide help with analysis, technical information, equipment, and funding.

See Owner/Operator Information Sheet for more reduction measures.

Sponsor Training and Translation

- New skills or new technology that reduces hazardous material usage and generation and results in reduced exposure for workers.
- Small operations may need funding in order to attend or provide training.

Reward Shops

- Use media connections to provide coverage for successful efforts. Positive publicity can mean increased business.
- Present pollution prevention certificates to shops that reduce pollution.

Be an Informed Consumer

- Patronize operations that implement pollution prevention strategies.
- Find out how items will be stripped before refinishing.

For Further Information

- National Paint and Coatings Association: www.paint.org, (202) 462-6272
- Community-Based Projects: www.epa.gov/air/toxicair/community.html
- Community information, regional, state contacts: www.epa.gov/epahome/whereyoulive
- Pollution prevention awards: State, local, and Tribal government agencies, universities
- EPA Sector Strategies Program for the Paint and Coating Sector: www.epa.gov/sectors/paintcoatings/index.html
- EPA's *Guide to Cleaner Technologies: Organic Coating Removal*: www.p2pays.org/ref/02/01048.pdf
- Paints and Coatings Resource Center: www.paintcenter.org
- Solvent Alternatives Guide: www.sage.rti.org
- Training opportunities: Paint and coating stripping technology vendors
- Source Reduction Research Partnership's *Source Reduction and Recycling of Halogenated Solvents in Paint Stripping*: www.p2pays.org/ref/01/00666.pdf
- Toxicity of paints and solvents: Paint suppliers, Integrated Risk Information System (IRIS) (www.epa.gov/iris), Air Toxics Health Effects Notebooks (www.epa.gov/ttn/atw/hapindex.html)
- For more information, please see the Resources section of the Owner/Operator Information Sheet.

