

US EPA ARCHIVE DOCUMENT



Could your family be affected?

30 states have restricted or banned the use of liquid methyl methacrylate monomer.

Methyl methacrylate monomer is an ingredient used in some artificial nail products which bond strongly with the nail.

— U.S. EPA

In 1996 there were approximately 125,000 nail salons in the United States, employing over 500,000 nail technicians with total sales of over 4.5 billion dollars.

— Indoor Air Pollution Control

About 90% of nail salon owners belong to ethnic minority groups, and large majorities of owners, employees, and customers are women.

— Indoor Pollution Control



Reducing Air Pollution from: Nail Salons

Why do nail salons need to reduce air pollution?

People are exposed to toxic air pollutants 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 reduce or eliminate air pollution at the source.

Nail salons offer manicure and pedicure services to their customers. These activities include shaping, polishing, and otherwise maintaining natural and artificial nails, all of which may release pollutants into the air and may contribute to health concerns in the salon and in the community.

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

What kinds of air pollutants may come from nail salons?

- The products used in nail salons usually contain solvents and other chemicals that may have adverse health effects on workers and customers. Many nail salon products contain solvents, which 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.

- Exposure to some artificial nail products, such as ethyl methacrylate, can cause asthma. Ethyl methacrylate is commonly used as an alternative to methyl methacrylate monomer.
- Some nail salon products may also contain toxic air pollutants. While federal, state, local, and Tribal regulations limit the amount of emissions from nail salons, dangerous releases of VOC and toxic air pollutants can occur if a nail salon is not in compliance with regulations.
- Filing artificial nails generates particle pollution (dust). This dust can cause eye irritation and redness.

How can nail and beauty salons reduce air pollution?

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

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

Keep Containers Closed

- Keep stock containers closed at all times except when dispensing product.
- Dispense only what is needed.

Provide Adequate Ventilation

- Use a dedicated ventilation system for rooms where product stock is kept.

COMMUNITY INFORMATION SHEET

Nail Salons

- Install a local exhaust ventilation system at each manicure station.

Contain Vapors

- Ventilation systems should not be shared with neighboring businesses.

Minimize Dust

- Workers should wear a mask when filing nails or working with nail powders.
- Dust-controlling filing techniques, such as using oil on nails when filing, should be practiced to reduce the amount of particle pollution generated.

Practice Proper Waste Disposal

- Place chemical-soaked gauze pads into sealed bags.
- Change trash can liners daily.

Substitute Materials

- Use acrylic nails that do not require a primer.
- Use formaldehyde-free nail hardeners and extending top coats.

See *Owner/Operator Information Sheet* for more reduction measures.

As a community, what can you do to help reduce air pollution from nail salons?

Make Connections

- Get to know local nail salon 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 local nail salon 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.

Sponsor Training and Translation

- Small salons may need funding in order to attend or provide training.
- Improved skills lead to less exposure for workers.
- For some ethnic minority groups, language may be a barrier. Sponsor translation of pollution prevention materials into languages commonly spoken by owners and operators.

Reward Shops

- Use media connections to provide coverage for successful efforts. Positive publicity can mean increased business.
- Visibly displayed awards or certificates may also increase business.

For Further Information

- Cosmetic, Toiletry, and Fragrance Association: www.ctfa.org, 202-331-1770
- Community information, regional, state contacts: www.epa.gov/epahome/wherelive.html
- Community-Based Projects: www.epa.gov/air/toxicair/community.html
- Pollution prevention awards: State, local, and Tribal governments agencies, universities
- U.S. EPA Design for the Environment: www.epa.gov/dfe/projects/salon/, 888-884-2478, x58326
- Toxicity of solvents: Integrated Risk Information Systems (IRIS) (www.epa.gov/iris), Air Toxics Health Effects Notebooks (www.epa.gov/ttn/atw/hapindex.html)

