



Design for the Environment Small Auto Refinish Shop Project in Philadelphia



What Is Design for the Environment?

The U.S. Environmental Protection Agency's (EPA's) Design for the Environment (DfE) Program is a voluntary, partnership-based program that works with small companies to integrate health and environmental considerations into business decisions. DfE's approach to environmental protection emphasizes making changes and choices—in materials and processes—that prevent pollution before it is created.

What Is the Project Goal and Game Plan?

The Small Auto Refinish Shop Project works with auto refinishers to identify and adopt safer, cleaner, more efficient practices and technologies. Through its research, the Project Team has uncovered many examples of health and safety improvements that increase efficiency and help shops save time and money—some are even cost-free. Other factors—like the quality of the refinish job and compliance with environmental regulations—also can advance the goal of a cleaner, safer shop.

Why Is This Project Important To You and Your Workers?

Auto refinishers use many potentially harmful chemicals, especially during painting operations. Of particular concern are isocyanates, solvents, and paint additives. Isocyanates, for example, are a major cause of occupational asthma. To safeguard their health, workers need to protect themselves from exposure during spray painting and related activities. The Small Auto Refinish Shop Project will identify better control technologies and more efficient workplace practices and will make this information available to interested shop owners. Use of these new practices and technologies will better protect workers and minimize the generation of waste and the release of chemicals in the environment.

Why Small Shops in Philadelphia?

The DfE Program selected Philadelphia for the project's first pilot because of the city's positive experience working with auto refinishers, concern for small businesses and the safety and environmental issues they face, and the large number of auto refinish shops in the Philadelphia area. The project focuses on small shops because they make up the majority of the auto refinish industry and often have the fewest resources to upgrade their shops.



What Improvements Are Shops Making?

The Philadelphia pilot for the Small Auto Refinish Shop Project will encourage use of improved practices and technologies such as the following:

- More efficient spray guns that reduce the amount of paint overspray and potentially harmful chemicals in the air.
- Better spray booths, filters, and filter changing practices that contribute to better air quality within and outside the shop.
- More careful, efficient paint mixing room and gun cleaning practices that will produce less waste and reduce releases of solvents.
- Better ventilation systems and adequate protective equipment, such as respirators and gloves, during tasks that involve exposure to harmful chemicals.

Why Should My Shop Consider Becoming a Partner?

A number of auto refinishers in the Philadelphia area and in other parts of the country have already installed new equipment and improved their practices. Whether your shop has made changes, or is interested in making them, the DfE Program hopes you will become a partner. By having partner shops at different stages of improvement, the Project Team can bring together experience and practical knowledge to share among partners. In the end, any shop that makes improvements may not only have helped its pocket book, but created a healthier work environment and a cleaner neighborhood.

How Do Partner Shops Help?

Partner shops serve as resources to the DfE Program. They offer a real-world perspective on health and safety matters in the shop: what are the barriers and incentives to change, how do you go about converting from the old—equipment, infrastructure and practices—to the new. The collective experience from partner shops will help the DfE Program design a blueprint for change. A DfE partnership team (industrial hygienist and project manager) will visit the partner shop and observe its operations, talk with management and workers, and gather information on improved equipment and practices. DfE will encourage partner shops to implement the recommendations the team might make for improvements and to participate in a workshop to educate other shops about the benefits of changing the way they work.

What Are the Incentives to Partner?

The DfE Program offers shops several incentives to partner: **access to the latest developments**—in safer shop equipment and practices, worker health issues, waste minimization, and work place efficiencies; **a free industrial hygienist consultation**—including advice on how to make additional improvements in the health and environmental profile of their shops; and, **recognition**—of their improvements and willingness to work with EPA to promote safer, cleaner auto refinish shops.

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Autobody Shop Project

Small Auto Refinish Shop Project Contacts:

If you're interested in partnering or would like to learn more about this project, please call Mary Cushmac, Project Manager in EPA's Design for the Environment Branch at 202 568-88073, or send her an e-mail at <cushmac.mary@epa.gov>.