

# Step in the Right Direction: Gun Wash

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The EPA's new **Paint Rule** governing the collision repair industry is under way at this point. The purpose of this rule is to reduce emissions of lead, nickel, cadmium, chromium and manganese. These chemicals are designated hazardous air pollutants (HAPs) known or suspected to cause cancer and other adverse health effects and can be found in paint used in the automotive refinishing industry.

The first deadline was to notify the EPA that the shop is governed by the Paint Rule and sending in an Initial Notification form by January 11, 2010. If the facility has not yet filed the Initial Notification form, **do it now**. The form can be downloaded at <http://www.epa.gov/collisionrepair/pdfs/initialnotification.pdf>.

The Paint Rule requirements, include:

- Notification Form → by January 2010
- Paint booth exhaust systems of 98% efficient booth filters
- Spray booths/prep stations must be used
- Spray guns must be efficient types, such as HVLP
- **Spray gun cleaning does not allow atomization of thinner through gun for cleaning and recommends an automated enclosed gun wash**
- Painter training requires gun set-up and spray techniques training material be presented along with a hands-on requirement → by January 2011
- Final Notification of full compliance → by March 2011
- Five-year continuing education



## Spray Gun Cleaning Operations

No atomization of solvent through spray gun for cleaning purposes. Implement healthy gun cleaning practices that minimize painter exposure to solvents. Atomization of cleaning solvent through the paint gun (even in the paint booth) is not allowed for cleaning purposes.

Invest in a fully enclosed automatic gun wash system as the best management practice to protect employee health.

Solvent (paint thinner) purchase and disposal fees constitute a major expense for automotive body shops. When considering pollution prevention options for the automotive painting industry, using an automatic gun wash unit in place of manual gun washing is one recommendation to decrease the frequency and the cost for product purchase and waste disposal.

There are several types of automatic gun wash units, ranging from one gun capacity to four, covered and uncovered versions, as well as units that are paired with solvent distillation units. All paint gun washers flush and clean paint guns within a closed system. Determining which type of unit is appropriate for a facility

involves the size of the facility, amount of solvent used and the number of gun washings performed per day.

Use of a gun wash unit is a highly recommended pollution prevention option for three main reasons:

1. It decreases the number of man hours spent cleaning paint guns. It is estimated that the typical auto body shop conducts three gun washings per day, lasting anywhere between five and 20 minutes each. Typical automatic gun washers complete the cleaning cycle in 60 seconds.
2. It decreases health risks to employees. The scene of an employee sitting over an open bucket of solvent cleaning a spray gun with bare hands is common. It is true that many solvents are known cancer-causing agents. Using an automatic gun washer greatly decreases the employee's exposure to such agents.
3. It reuses dirty solvent that would normally be disposed, resulting in decreased purchase of virgin solvent and disposal fees, saving the facility money over time. Solvent in the washer is used numerous times before disposal is required. Depending on the use of solvent in the facility, cleaning solvent consumption may be reduced by 50%. Some sources claim reduction up to 90%.



Pairing the use of an on-site solvent distillation unit with an automatic gun wash unit can add increased advantages, such as decreasing virgin solvent purchases and waste disposal fees even more. This is true because solvent distilled on site is easily used in gun wash units.

### **For More Information**

Go to:

[\*\*EPA Collision Repair Campaign web site\*\*](#)

[\*\*CCAR-GreenLink "Paint Rule" page\*\*](#)

Visit the Design for the Environment website for more information at <http://www.epa.gov/dfepubs/auto/trainers/cleanguncheck.htm>

Code Citation: 40CFR63 Subpart HHHHHH of the National Emission Standards for Hazardous Air Pollutants (NESHAP) for [\*\*Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources.\*\*](#)

E-mail your questions to: [paintrule@ccar-greenlink.org](mailto:paintrule@ccar-greenlink.org)