

## Tips for Managing Hazardous Waste in Radiator Repair Shops

### PURPOSE

Radiator Repair Shops commonly generate hazardous waste, such as lead. This guide is intended to help radiator repair shops stay in compliance with hazardous waste regulations and provides recommendations to reduce hazardous waste contamination caused by repair shops. In turn, the proper management of hazardous waste may help repair shops save money through more innovative ways to reduce and/or recycle the waste generated and prevent the assessment of fines that could result from improper management. This guide is not intended to be used as a substitute for the actual regulations.

### WHAT IS HAZARDOUS WASTE AND WHY IS IT REGULATED?

Hazardous waste has properties that make it dangerous or capable of having a harmful effect on human health or the environment. Determining what is a hazardous waste, whether your radiator shop generates it, and how much is generated is fundamental.

Hazardous waste exists in many forms, including liquids, solids, gases and sludges. The most common waste generated by radiator repair shops is lead. A generator determines whether a substance is a hazardous waste by running tests or using knowledge of the processes that generate the waste. For more information on how to determine if your shop generates hazardous waste, consult the RCRA *Code of Federal Regulations* Web site at: <http://www.gpoaccess.gov/nara/index.html> or [www.ccar-greenlink.org](http://www.ccar-greenlink.org).

### WHAT IS RCRA?

RCRA is the Resource Conservation and Recovery Act. Its primary goals are to protect human health and the environment from the potential hazards of waste disposal, to conserve energy and natural resources, to reduce the amount of waste generated, and to ensure that wastes are managed in an environmentally sound manner. The federal regulations relating to hazardous waste management may be found in Title 40 of the Code of Federal Regulations (CFR).

### Classification of Generators

Once a radiator shop has determined that it generates hazardous waste, it must determine its classification as a generator:

Conditionally Exempt Small Quantity Generator (CESQG)	Small Quantity Generator (SQG)	Large Quantity Generator (LQG)
<ul style="list-style-type: none"> <li>• Generate no more than 220 lb. of waste in any calendar month</li> <li>• Accumulate no more than 2,200 lb. of waste onsite at any time</li> <li>• Waste must be delivered to a permitted off-site treatment and/or disposal facility</li> </ul>	<ul style="list-style-type: none"> <li>• Generate between 220 and 2,200 lb. of waste in any calendar month</li> <li>• Accumulate no more than 13,328 lb. of waste onsite at any time</li> <li>• If one-half to five 55-gallon containers of hazardous waste are generated each month</li> <li>• Waste must be delivered to a permitted off-site treatment and/or disposal facility</li> </ul>	<ul style="list-style-type: none"> <li>• Generate more than 2,200 lb. of hazardous waste in any calendar month</li> <li>• Five or more 55-gallon containers of hazardous waste generated in any calendar month</li> <li>• Waste must be delivered to a permitted off-site treatment and/or disposal facility</li> </ul>

## Do's and Don'ts for Radiator Shops

### DO

- Use lead-free solder
- Learn which wastes are generated from your radiator shop
- Install drip pans throughout the shop
- Use propylene glycol antifreeze instead of ethylene glycol antifreeze
- Mark containers of old antifreeze with “waste antifreeze” and “toxic”
- Use a high-pressure, low-flow water spray system for the flushing booth
- Collect/reuse rinse water for the boil-out tank
- Recycle solder drippings
- Solder in a place that allows for catching drips before they fall into the tank
- Use only minimum required chemicals for the processes
- Close all containers holding hazardous waste during storage
- Date and label each container with the words “Hazardous Waste”
- Allow for aisle space in hazardous waste storage area
- Have proper equipment and communication systems in the hazardous waste storage area
- Inspect storage area weekly
- Ship and manifest all hazardous waste using a licensed hazardous waste transporter

### DON'T

- Allow sludge to dry in open containers
- Discard antifreeze or any waste into the land, septic systems, storm drains, drywell or surface water without proper permitting
- Throw contaminated rags, gloves or towels in the trash
- Throw floor sweep into the trash
- Use an electric band on containers holding sludge
- Use thermal treatment (heat) of any kind to dry sludge
- Use a tank to dry sludge unless the tank meets all of the CFR tank regulations for your generator class
- Dispose of glass bead dust, chips, metal shavings, or dust residue unless certain it is determined not a hazardous waste
- Mix used oil with any other waste. The waste should be kept separate from the oil
- Store containers of liquid hazardous waste outdoors unless they are closed and placed on a paved and waterproof surface

Although CESQGs are not required to perform some of the above, it is strongly recommended.

Also see *Managing Hazardous Waste - A Handbook for Small Business*, [www.azdeq.gov/environ/waste/hazwaste/download/managehw.pdf](http://www.azdeq.gov/environ/waste/hazwaste/download/managehw.pdf).

### ADDITIONAL INFORMATION

For more information regarding managing hazardous waste in radiator shops, please contact:

ADEQ Inspections and Compliance Section

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Hearing impaired persons call

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