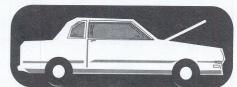
# AUTOMOBILE DE ALERS

# Handling and Disposal of Still Bottoms from Solvent Distillation Units



#### What are still bottoms?

Still bottoms are the residues (e.g., paint solids, dirt) that accumulate and settle at the bottom of solvent distillation units used to reclaim solvents. These bottoms must be periodically removed to ensure proper functioning of the distillation unit.

Just as the composition of distilled spirits varies depending on the materials put into it, so does the composition of the still bottoms. Common distilled paint wastes include mineral spirits, lacquer thinners, acetone, xylene, toluene, and MEK.

### Are still bottoms hazardous waste?

If any of the paint wastes or solvents put in the still for processing are "listed" wastes, then the still bottoms will be considered listed hazardous waste, regardless of testing results. Check the MSDS provided with the material you are distilling to see if it contains hazardous chemicals.

Even if these chemicals are not present in the distilled solvents, the still bottoms may still be considered "characteristic" hazardous waste (i.e., *ignitable*, *toxic*, *corrosive*, *reactive*) based on results from the toxicity characteristic leaching procedure (TCLP) test. Also, states may have more stringent requirements than federal regulation.

In the majority of states, still bottoms are considered to be a listed hazardous waste because they result from the distillation of F-listed solvents. On the other hand, still bottoms resulting from the distillation of "characteristic" hazardous wastes would, in most cases, require testing to classify them as non-hazardous. To avoid potential liability problems, most still manufacturers recommend disposing of still bottoms as hazardous waste regardless of the wastes being distilled.

# How should dealerships dispose of still bottoms?

Hazardous still bottoms, whether listed or characteristic, should be picked up by a licensed hazardous waste hauler and disposed in accordance with hazardous waste regulations. You should also contact your specific state agency or state dealer association.

# How can dealerships minimize still bottoms disposal costs and liability?

Cutting down the generation of paint and solvent waste is the most success-

#### Did you know that...

- From distilling 5 gallons of paint and thinner wastes, 4 1/2 gallons of thinner can be reclaimed and 1/2 gallon of sludge may be generated?
- The average still costs approximately \$2,400 and often pays for itself in approximately 6 months?
- On-site recycling is convenient, takes only hours, and decreases liability associated with the transportation of thinners and solvents?

#### RECOMMENDED BEST MANAGEMENT PRACTICES

- Minimize still bottoms waste stream by reducing hazardous solvents used at the facility for painting and cleaning operations.
- Reduce the amount of toxicity of your liquid wastes by re-examining cleaning requirements and procedures, using solvents carefully, and using less toxic solvents.
- Have still bottoms hauled off as hazardous waste by a licensed hazardous waste hauler.

ful way to reduce costs associated with still bottoms. The following practices can help to minimize solvent and paint use to reduce disposal costs:

## Re-examine cleaning requirements and procedures

- Evaluate whether you can reduce the amount of solvent used for gun and other parts cleaning.
- Scrape and brush all parts before cleaning.
- Pre-clean parts with soap and water before solvent cleaning.
- Clean spray guns in enclosed gun cleaners.
- Try mechanical paint stripping methods such as sandblasting, glass bead blasting, or cryogenic stripping (carbon dioxide pellets), where appropriate.

#### Use solvents carefully

 Minimize contamination of cleaning solvents, e.g., eliminate "dragin" of water during solvent cleaning.

- Monitor solvent quality--replace only when truly dirty.
- Separate paint sludges from thinners by gravity separation.
- Consider segregating paint cleaning solvents according to color so you can use them as thinner the next time you paint with that color.
- Buy as few different types of solvents as possible.

#### Use less toxic solvents

- Check ingredients of cleaning products used.
- Try a less hazardous cleaning process. These alternatives include: high pressure spray, steam cleaning, or hot soapy water washers; aqueous and semi-aqueous solutions; nonhalogenated petroleum-based solvents (e.g., naphtha, mineral spirits, stoddard solvent); terpenes (e.g., d-limonene), and possible biological degradation methods.

#### Do you need more information?

Contact your state environmental agency or state dealer association for state-specific regulatory interpretations. Some pollution prevention/recycling/reuse practices encouraged in some states are not allowed in others. For more information on successful best management practices and for state agency contacts, call your state automobile dealers association or:

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