



# The National Park Service EnviroFact Sheet

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## Managing Spent Solvents (SW-11)

DRAFT

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**Solvents** are substances that clean by dissolving oil, grease, or other materials. Solvents used at parks may include mineral spirit, stoddard solvent, petroleum naphtha, benzene, trichloroethane, xylene, or trichlorethylene.

Solvents are often used by hand or in part washers to clean engine and other mechanical parts or electronic components.

Some solvents, such as those used in parts washers, will eventually become **spent** and must be disposed of. Solvents become spent when they have been used to the point that they are no longer effective as a cleaner.

Spent solvents may be designated a "special waste" in your state, which might require them to be managed as a hazardous waste.

### FOR MORE INFO...

EPA Solvent Substitution Data System:

<http://es.epa.gov/ssds/ssds.html>

Illinois EPA, Office of Small Business, "Managing and Reducing Parts Washer Wastes":

<http://www.epa.state.il.us/small-business/parts-washer-wastes/>

EPA Case Study: Managing Solvents and Wipes:

<http://es.epa.gov/techinfo/research/reduce/rrrel454.html>

### APPLICABLE REGULATIONS

Generators of solvent wastes are required by 40 CFR 262.11(c) to determine whether their spent solvents are hazardous wastes and, if so, manage them as such (for more information, see the EnviroFact Sheet - "Hazardous Waste Generator Requirements (HW-1)"). Under the hazardous waste regulations, certain solvents are specifically listed as hazardous wastes when "spent." Such "listed" solvents include tetrachloroethylene, trichloroethylene, xylene, toluene, methyl ethyl ketone, and benzene.

Regulations applicable to identifying and managing spent solvents will generally be the same as federal regulations. However, since they may be more stringent, state hazardous waste regulations should be consulted and followed.

### HANDLING AND STORAGE

If a spent solvent is hazardous, specific labeling and container management requirements specific to hazardous waste may be applicable. For example, it should be labeled with the words "Hazardous Waste" and the type of solvent in the container. The label should also include the date when the spent solvent waste initially began accumulating in the container. The container should be made of a material that is compatible with the spent solvent and should be in good condition and free of leaks. Containers should remain closed at all times, except when adding materials.

It is recommended that parks provide secondary containment for areas in which spent solvents are stored before disposal. Only compatible materials should be stored together.

### DISPOSAL

Depending upon the solvent used and what it was used to clean, spent solvent is likely to be a hazardous waste. If so, regulations regarding disposal of hazardous waste will apply (see checklist items on the following page). Where feasible, spent solvents should be reused or recycled to the extent practical.

### POLLUTION PREVENTION

#### Source Reduction

The following steps can be taken to reduce the amount of hazardous solvent generated at an NPS facility:

- If the park is using a hazardous solvent, explore the possibility of using a non-hazardous product, such as aqueous or bio-based cleaners.
- Avoid using "listed" hazardous solvents, and prevent contamination of your cleaning solution with listed hazardous solvents by avoiding the use of aerosol spray cans near parts washers.
- Maximize parts washer solution life by washing parts only when necessary.
- Keep parts washers closed and away from heat to minimize product loss and air emissions from evaporation.
- Make sure parts washer solvent is too dirty to use before it is exchanged for new solvent.
- Drain parts thoroughly over the parts washer to reduce loss of cleaning solution.
- Keep different types of solvents in separate, clearly labeled, closed containers.
- When using aqueous cleaning units, select units with filtration and oil skimming to remove solids and oil from aqueous cleaning solutions and to extend solution life.



#### Recycling

**When feasible, the NPS recommends recycling as the preferred method of managing solvent waste.** The next preferable option is to send the spent solvent to a facility that uses the material for energy recovery. Both of these options often require careful segregation of each waste stream.



## SPENT SOLVENT COMPLIANCE CHECKLIST

Checklist Item	Notes
1. Determine whether the state has adopted hazardous waste handling standards specific to spent solvents.	
2. Ensure that a determination has been made regarding whether spent solvents generated at the park are hazardous or non-hazardous.	
3. Ensure that procedures have been established to prevent spent solvents from being mixed with any other waste streams (e.g., ensure that oily solvent from an auto shop parts washer is not mixed with used oil).	
4. Verify that all containers holding spent solvents are inspected regularly and that they are: <ul style="list-style-type: none"><li>• Maintained in good condition with no evidence of leaks;</li><li>• Compatible with the solvents stored inside;</li><li>• Stored on secondary containment pallets; and</li><li>• Labeled with the words "Hazardous Waste" and the name of the solvent, with any other state-required terminology, and the date accumulation began (if hazardous).</li></ul>	
5. Ensure that any spills of spent solvents are stopped, contained, and cleaned up by properly trained staff or contractors. If the spill was not limited to secondary containment determine possible reporting requirements.	
6. Confirm that adequate records are maintained documenting off-site shipments of spent solvent. They should include: <ul style="list-style-type: none"><li>• Quantity of shipments;</li><li>• Date of shipments;</li><li>• Name of transporter and EPA I.D. number; and</li><li>• Name of hazardous waste disposal facility, recycling facility, or collection center that accepted the waste.</li></ul>	
7. Ensure that non-hazardous solvents are used whenever possible.	
8. Ensure that spent solvents are recycled whenever possible.	