Monthly Safety Training

**Spill Clean Up**

*By Sue Schauls*

Every automotive shop should maintain a spill cleanup kit on-site at the facility in the event of an emergency spill. Spills have a few issues with which to be concerned.

First is the protection of employees (and customers) if the spill contains hazardous material. To accomplish this task the appropriate type of spill cleanup kit must be selected from many choices available.

The second issue is to make sure that employees are trained on the use and locations of all spill cleanup kits. Simple to do as long as you do it, it’s called TRAINING.

Finally, if the quantity of material spilled is sizeable or made of acutely hazardous chemicals the spill must be reported to the regulatory agency. In some instances, an emergency response team will be discharged. These types of spill are infrequent at a well-equipped automotive repair facility.

**Choosing a Spill Kit**

*1. What liquids will be absorbed?*

Choose a spill kit with absorbents designed to absorb the automotive products present at the salvage yard.

* **Stock a general purpose oil absorbent such as granule “kitty litter” floor dry to absorb antifreeze, oil and fuel spills.**
* **Stock a hydrophobic (oil-only) absorbent mats or socks to absorb oily spills that are mixed with water (like rain or snow) to reduce the volume of waste material.**
* **Stock an acid neutralizer for battery acid spills. Commercially available products work well and are relatively inexpensive. Baking soda can be used. Battery acid is a sulfuric acid solution in water. Baking soda is a mild alkali bicarbonate of soda. Together they become neutral material.**

*2. What is the volume of a worst-case scenario spill?*

Determine the largest amount of liquid that could be spilled from a single container or holding tank. If liquids are stored in drums, this would likely be the contents of an entire drum, normally either 30 or 55 gallons. If you store liquid in totes, consider the volume of your largest tote – usually anywhere from 200 to 500 gallons.

Remember, that it may not always be practical to absorb the entire contents of a spill, especially if it is a large one. Spill kits can be used in conjunction with non-absorbent dikes and drain covers that help channel or contain liquids, so that they can be recovered with vacuums or pumps. After a bulk of the liquid has been removed, absorbents can then be used to remove the remainder of the spill.

*3. What type of container works best for the location?*

Some facilities choose to locate spill kits in every area prone to spills, such as the repair bays, dispensing stations and waste fluid storage areas. Others choose to have one or two kits that can be transported to the area where a liquid is spilled.

*4. Is Personal Protective Equipment (PPE) necessary?*

Acid resistant gloves and/or aprons for responses to battery acid spills are good PPE to keep on hand. A conveniently placed pair of safety goggles in the spill kit is also a good idea.

*5. What makes a suitable container for a spill kit?*

There is no regulation that tells you what a spill kit must include, or what the container must look like. If you already have a storage cabinet or old spill kit containers just restock based on your absorbency needs.

Present this Spill Clean Up training to employees as this month’s Safety Training topic. Following the presentation, have each employee sign a training log. A sample log can be downloaded at <http://www.ccar-greenlink.org/EmployeeSafetyTrainingLog.pdf>. Keep the monthly Safety Training Record on file (such as in the RED MSDS binder) in the event of an OSHA inspection.

**Conduct Employee Training**

Review this training material with all employees. Display a spill cleanup kit and identify each of the materials included in the kit with all employees.

*1. Where are spill kits located?*

* **Review the location all spill kits and PPE equipment with employees during this training event.**

*2. How do you use the spill kit material?*

* **Floor dry is used to absorb all regular small spills of automotive fluids.**
* **Oil-only material is used to absorb oil spill that are mixed with water (like rain or snow) to reduce the volume of waste material.**
* **Acid neutralizer such as baking soda is used for battery acid spills. Battery acid is a sulfuric acid solution in water. Baking soda is a mild alkali bicarbonate of soda. Together they become neutral material.**

**3***. What do I do with the waste?*

* **Small spills absorbed with floor dry or mats will be managed with the regular used absorbent at the facility.**
* **Large volume spills recovered with a vacuum or pump can be placed in the waste storage tank for the compatible material.**
* **Neutralized spill can be disposed of with regular trash.**

**Report spills that create hazardous conditions**

If a hazardous substance spill meets **any** of the following guidelines it may need to be reported to the state regulatory agency.

* The hazardous substance has the potential to leave the property by run-off, sewers, tile lines, culverts, drains, utility lines or some other conduit.
* The hazardous substance has the potential to reach a water of the state - either surface water or groundwater.
* The hazardous substance can be detected in the air at the boundaries of the facility property by the senses (sight and smell) or by monitoring equipment. There is a potential threat to the public health and safety.
* Local officials respond to the incident.
* The release exceeds a Federal Reportable Quantity (RQ).



Sue Schauls is an independent environmental consultant with automotive expertise. She is the Environmental & Safety Consultant for CCAR-GreenLink the EPA automotive compliance assistance center. She is the Executive Director & regulatory consultant for the Iowa Automotive Recyclers (IAR), she developed and implements the **I**owa – **C**ertified **A**uto **R**ecyclers **E**nvironmental (I-CARE) Program. She contributes articles to several trade publications and is a member of ARA Technical Advisory and Certified Auto Recyclers Committees. Sue has a bachelors of Arts degree in *Science: Environmental Planning* from the University of Northern Iowa, 1996.