Waste Management: Antifreeze

Washington State classifies antifreeze containing more than 10% ethylene glycol as a dangerous waste due to its toxicity. If your business produces waste antifreeze, you have two options: dispose of it as dangerous waste, or recycle it. If you choose to dispose of antifreeze, you will need to document how much your business generates monthly and yearly, as well as the vendor who disposes of it. Keep in mind that if you produce over 220 pounds of dangerous waste (including spent antifreeze that is not recycled) in a month or accumulate greater than 2,200 pounds of waste at any one time, your business is either a “medium” or “large” quantity generator of dangerous waste and must comply with numerous requirements, including submitting an annual report to the Department of Ecology (DOE). However, if you recycle your antifreeze, there is no limit to the amount of antifreeze your facility can manage, plus there are no DOE reporting requirements.

Small quantity generators are regulated at the local level by Thurston County Environmental Health Division. All liquid dangerous wastes must be stored in secondary containment, and businesses must retain proof of proper disposal or recycling. Businesses are encouraged to reuse or recycle antifreeze as much as possible and maintain a manifest of how much, by whom, and when it was disposed or recycled.

HazoHouse, located at 2418 Hogum Bay Road NE, is a local option for antifreeze recycling for both businesses and homeowners.

Management Suggestions:

- Keep antifreeze separate from materials such as water, oil, or gas.
- Label and keep waste antifreeze containers closed. It is highly toxic and animals are attracted to its odor.
- To avoid potential spills, provide secondary containment for all antifreeze.
- Recycle your antifreeze often.
- Maintain your disposal and/or recycling paperwork for five years (longer if possible).

For more information on how to recycle antifreeze, call the Thurston County Hazardous Waste Line at (360) 786-5457.

Antifreeze Recyclers

The following is a partial list of vendors that serve Thurston County:

- Emerald Services
  - (888) 832-3008
- Envirotech Systems Inc.
  - (800) 922-9395
- Onyx Environmental Services
  - (800) 334-2387
- Petroleum Reclaiming
  - (239) 383-4175
- Philip Services
  - (800) 327-7759

- Protective Environmental
  - (206) 624-5503
- Safety-Kleen
  - (800) 248-0311
- Spencer Environmental
  - (800) 286-0896
- Thermo Fluids
  - (800) 350-7565

Automotive Service Industry Campaign gets Underway

Throughout 2007 the Thurston County Business Pollution Prevention Program will conduct a technical assistance campaign for the automotive service industry. Auto services are good candidates for technical assistance because of the variety of hazardous wastes that they typically generate.

The campaign will provide the industry with updated regulatory information on hazardous materials management and waste disposal. Information regarding waste minimization, recycling, and less-toxic chemical alternatives will also be offered.

Auto repair shops make up a large segment of the automotive service industry. The Thurston County Environmental Health Division has been conducting technical assistance campaigns since 1994. Past campaigns have included wrecking yards, marinas, dental facilities, furniture manufacturers, and school chemistry laboratories.

As some of you may recall, Thurston County conducted a similar automotive campaign in 1996. During that time, county staff visited approximately 300 businesses and helped roughly 100 previously incompliant businesses meet state and local regulatory requirements.

Technical assistance visits are conducted with an educational approach and are not solely based on regulatory enforcement. We will, however, provide information to help businesses maintain or achieve compliance with the Thurston County Nonpoint Source Pollution Ordinance and local sanitary sewer (LOTT Alliance) regulations. If issues are found that cannot be corrected during the visit, we will provide information to assist with corrective actions and conduct a follow-up visit to help attain compliance.

Businesses will receive notification by mail prior to their site visit. For additional information about the program, please visit our website at www.co.thurston.wa.us/health/ehhw/index.html.
Chances are good that your business has not had to deal with any spills larger than a quart of oil or container of cleaning product. Careful handling and proper storage go a long way toward preventing spills in the first place. The best way to prepare for spills is to ensure that they do not occur or will be contained if they do happen. However, accidents and spills do happen.

What would you do if you were faced with a significant spill? What if the material that spilled was a strong acid or highly concentrated alkaline cleaner? What if the spill was growing and heading for a doorway, ready to leave your shop or building? Would you and your employees be able to deal with these situations? A carefully designed spill plan with appropriate spill control and cleanup materials can help businesses safely manage most spills that may occur.

Many businesses don’t have spill plans because they’re sure that spills do happen. However, accidents and spills do happen.

Chances are good that your business already knows what to do in the event of a spill. While employees may have the right answers and be able to figure out what to do when asked at the monthly safety meeting, they may forget key information at the time of a spill. A written spill plan complements the knowledge of employees, and can provide forgotten information at critical times during a spill response.

Spill plans need to address five main topics. The complexity of the spill plan will generally reflect the size and intricacies of the business operation, so it is important to consider all parts of the business. The first section provides information about the business and an inventory of all hazardous materials and/or wastes stored on site. A map of storage locations is a great addition to the plan. This information and diagram may be critical for emergency services personnel who might respond to a large spill or incident. The second category of information regards spill prevention and control. Businesses should note what techniques or equipment are present to prevent spills, as well as where spill control supplies are located, and which employees are trained to assess and control spills. When inventorying available spill control materials, take a minute to think if these supplies are appropriate to clean up stored materials. For example, kitty litter or dry absorbent is great for oil spills, but are not suitable for acids.

The third section of a comprehensive spill plan addresses how contaminated absorbent materials need to be handled, including storage, labeling, and final disposal. The plan should also note which employees are trained in dealing with hazardous wastes, and how stored hazardous wastes are handled.

The fourth section of the spill plan spells out procedures for responding to an emergency situation. The plan should list what types of situations qualify as an “emergency” and which emergency services organizations should be contacted. After-hours contact numbers for business owners or managers should also be listed. The plan may also list the roles and responsibilities for key employees in an emergency.

Spill Preparedness: Have a Plan

HAS P A R T I C I P A T E D

The second category because they're sure that spills may occur. Significant spills, including any spills that enter soils or water resources, must be reported to the Department of Ecology [(360) 407-6300] and the Business Pollution Prevention Program [(360) 754-4111]. These contact numbers should be listed in the plan. Periodic inspections of spill prevention plans and spill control equipment should also be conducted. Records of each inspection should be kept with other environmental information, which might include pollution prevention inspection reports, correspondence, fact sheets, and waste disposal invoices.

The finished spill plan should be posted throughout the business, and accessible to all employees. Consider laminating copies of the plan and placing them in containers with spill cleanup materials. Important contact numbers should be posted near all phones.

Although creating a detailed spill plan may seem like a difficult task, it can be easy to write with some assistance from the Business Pollution Prevention Program. Hazardous waste specialists are happy to answer questions about spill control and prevention, review draft spill plans, or visit your business to assess areas that need specific attention in a spill plan. For more information about spill plans or to request a technical assistance visit, please contact Mark Koster at (360) 754-3355 x6785.

Thurston County Environmental Health (TCEH), a division of the Public Health & Social Services Department, conducted a technical assistance campaign for the metal machining industry. Machine shops were identified as good candidates for technical assistance due to the large quantity of potentially hazardous wastes produced. Wastes such as oils, solvents, and coolants should be managed in a manner to prevent spills and protect the environment.

Twenty-two sites were initially identified for technical assistance. The majority of machine shops were small, single-owner operations that did not generate large amounts of waste. Of the 22 sites identified for technical assistance, 14 were selected for site visits. Eight sites were removed from the list, since they were found to not generate hazardous waste or were no longer in business. Seven of the original 22 sites were found to be home-based businesses, some only operating on a part-time basis. After completing the initial inspections, 3 of the 14 businesses (21%) were not in compliance with the Thurston County Sanitary Code. The only compliance issue identified was a lack of secondary containment for chemical storage areas. As a result of the campaign, approximately 700 gallons of oil and lubricants were relocated to safe storage areas. Other notable industry findings are listed below:

- 57% use water-soluble metalworking fluids and lubricants
- 50% conduct some form of metalworking fluid recycling (i.e. vendor services, fluid separation, etc.)
SPILL PREPAREDNESS: HAVE A PLAN

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The final section of the spill plan describes reporting and recordkeeping procedures related to the business. Significant spills, including any spills that enter soils or water resources, must be reported to the Department of Ecology (360) 407-6300 and the Business Pollution Prevention Program (360) 754-4111. These contact numbers should be listed in the plan.

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A typical spill kit includes protective clothing, goggles, absorbent materials and a leak-proof container for contaminated clean-up materials.

Report from the Field: Machine Shops

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- 64% conduct fluid management practices to prolong metalworking fluid life and reduce waste (i.e. biocides, aeration, etc)
- 71% recycle scrap metal and chips

After concluding the campaign, it was evident that the local metal machining industry effectively manages hazardous materials. The majority of machine shops in Thurston County are small, specialized businesses and typically produce minimal quantities of hazardous waste. Aside from several secondary containment issues, no other compliance trends were observed.

For more information about this campaign, or the Business Pollution Prevention Program, please feel free to call the Hazardous Waste Hotline at (360) 786-5457, TDD (360) 754-2933, during regular business hours.

Managing hazardous materials safeguards employees and the environment.
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