



ShopTalk

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A quarterly
publication for
hazardous waste
generators

A Break For Those Recycling Antifreeze

Auto repair shops and regulators agree that recycling is the best way to handle used antifreeze. So, Ecology has launched a pilot program to encourage greater antifreeze recycling. Generators who recycle used antifreeze and follow certain best management practices will be allowed to discontinue "counting" used antifreeze toward their monthly hazardous waste totals.

The exemption was created in partnership with industry, and is designed to relieve some regulatory burden from shops while encouraging greater recycling of antifreeze. This partnership gives both groups an equal stake in ensuring its success;

industry will fund a two-part research study of antifreeze management, while Ecology will be more willing to enforce against shops that mismanage used antifreeze.

Solid and Hazardous Waste Program Manager Tom Eaton says, "The new guidance on used antifreeze is different from anything we've tried before. Ecology wanted to take a step forward in terms of more recycling and better management, while maintaining reasonable regulatory control. Industry's main interest was not wanting to count used antifreeze

when it is properly managed. For the typical shop that is already recycling antifreeze, the new guidance should

mean very little change — it should be business as usual. But now these shops won't need to count antifreeze toward their hazardous waste totals and they will have a longer time frame for accumulating antifreeze on site."

Shops that generate hazardous waste are subject to more stringent requirements as the amount of hazardous waste they produce increases. By recycling antifreeze and following the best management practices, shops may lower their generator status from medium or large quantity generator to small quantity generator.

Recycling rates will be tracked to see if this effort is successful in promoting antifreeze recycling. A shop will lose the benefits of the exemption if an inspection reveals that antifreeze is being mishandled (i.e. dumping it on the ground.) The program will be offered on a temporary basis and will be continued if successful.

The fact sheet *FOCUS: "Counting" Exemption for Recycled Used Antifreeze*, listed in *Resource Center* on page 4, provides more information on the counting exemption, required best management practices and a sample form for logging antifreeze recycling.

Erik DeKoker of Country Tractor in Chehalis, Washington shows their custom built, anti-spill funnel. The funnel allows easy access to the antifreeze collection barrel, yet the container can be quickly resealed.

Inside:

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Automotive Shop Sweeps: *Early Results*

For Ecology inspectors, the best part of the Shop Sweeps was contact with more shops, a friendly reception and a feeling of fostering a sense of community.

Nearly 1,400 shop sweeps were performed statewide, aimed at providing quick, basic hazardous waste management tips to prepare shops for future compliance inspections. Hats off to the shops that so willingly participated, as well as the auto industry associations and local government staff who were involved. Visits ended in Fall '92, but the job of compiling and analyzing the data continues.

In addition to allowing more direct contact with generators, shop sweeps allowed Ecology to gather data from around the state. It will also help us paint a better picture than we've ever had of the typical auto repair shop allowing us to focus on areas that are most important for protecting public health and the environment.

What did we find? While not all the results have been compiled, here is a sample of information about the typical repair shop in Washington state.

General Information

- ✓ Around 62% are small quantity generators, 36% are medium quantity generators and 3% are large quantity generators.
- ✓ Approximately 19% recycle their used oil filters.
- ✓ 32% use spray cans with dangerous chlorinated solvents.
- ✓ 10% throw away their dirty shop towels; 85% use a laundry service.

Antifreeze

Antifreeze has been a hot topic. (See *Antifreeze Counting Exemption*, on page 1.) Here are some facts we learned about that waste:

- ✓ Nearly half (46%) of all shops visited generate used antifreeze.
- ✓ One-third (33%) of shops that generate some amount of used antifreeze are regulated generators

(generate per month, or ever accumulate, over 220 lbs. of hazardous waste) due to used antifreeze alone.

✓ Five percent (5%) of these are using closed-loop recycling, 6% other on-site recycling, 27% use off-site recycling or hazardous waste disposal and 24% claim re-use as a product. *Unfortunately, this leaves 38% who may be mismanaging used antifreeze.*

Area of Concern: Floor Drains

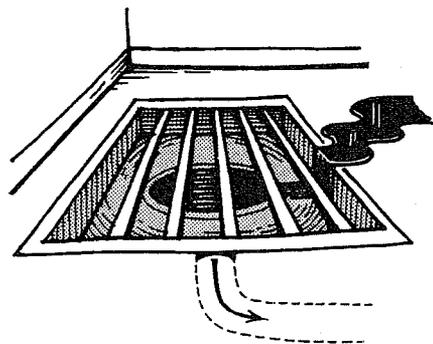
Nearly 1,600 floor drains were found during the shop sweep visits. Only 16% of the floor drains lead to a sewer; the remaining lead to unknown sources (75%) or to known dry wells, storm drains or septic systems (9%).

Floor drains that aren't connected to a sewer pose a definite threat to public health and the environment through possible contamination of soil and ground or surface water such as streams, lakes and estuaries. Illegal direct dumping or even floor cleaning can put a shop at risk for violations of the federal Safe Drinking Water Act, Clean Water Act, Resource Conservation and Recovery Act and the State Model Toxics Control Act.

Floor Drain Precautions:

- ✓ Check with your sewer utility or city engineering department to find out for sure where your drains lead—many don't go to a sewer.
- ✓ If your floor drain is connected to a sewer, make sure the sewer utility approves the wastes you put down the drain.
- ✓ If your drain doesn't lead to a sewer, close it off. Many shops operate without floor drains. These "dry" shops have found other ways to dispose of floor cleaning and other wastes. "Blind" sumps that catch and hold wastes, self-contained floor scrubbers, and keeping the floor clean in the first place by catching leaks and putting the waste in the appropriate waste container can

replace the need for a floor drain. For more information on floor drains, request the brochure *Does Your Facility Generate Industrial Wastewaters?* from the Resource Center number on page 3 or your nearest regional office.



Where does your floor drain lead? Hazardous wastes entering floor drains can contaminate soil or ground and surface water.

Pesticide Applicators Also Visited

An Ecology pilot project recently reviewed waste management practices of the pesticide application industry. The project included technical assistance visits to public as well as commercial pesticide applicators. Pesticide application services included: wood treatment, right-of-ways, parks, golf courses, schools, residential yard care, and agriculture. Inspectors provided information on how to identify and safely manage pesticide wastes. Inspectors also emphasized techniques which reduce the amount of hazardous waste pesticides generated.

Look for information about the findings of the pesticide campaign in the next issue of *Shoptalk*.

Resource Center

These materials are available from Ecology. Call 1-800-RECYCLE or (206) 459-6472.

Leasing Equipment For Pollution Prevention. A one page discussion on why your business might prefer to lease pollution prevention equipment. A list of Western Association of Equipment Lessors is provided as a public service.

Success Stories Volume III. Seven Washington businesses share their experiences with pollution prevention planning.

Regulation of Hazardous Wastes Being Recycled. This guidance document is designed to help generators determine if a recycling activity involving hazardous materials is regulated under Washington State Dangerous Waste Regulations.

Focus: "Counting" Exemption for Recycled Used Antifreeze. This three page guidance document lists the best management practices required for participation in the pilot project. A sample form is included for logging your antifreeze recycling.

Does Your Facility Generate Industrial Wastewaters? A brochure telling how waste water entering a drain can violate federal law and what to do about it.

Focus: Hazardous Waste/Materials Transportation. This short document tells which vehicles are regulated as transporters of hazardous materials, the responsible agencies and contact numbers for questions.

Step 8: Arrange for Proper Transportation and Disposal. A fact sheet outlining generator requirements for transportation and disposal of hazardous waste.

What Does Recycling Mean?

More and more businesses are recycling. It's clear that the reuse of wastes conserves resources and avoids the environmental problems of disposal. Businesses that generate hazardous waste often hire a service company to pick it up for off-site recycling.

But do you know what happens to your waste when it is sent off-site to be recycled? How your waste is recycled could change your planning status under the Hazardous Waste Reduction Act. Businesses can also lower their annual hazardous waste planning fees by reporting both on-site and off-site recycling credits.

Unfortunately, many businesses are confused by the different types of recycling and what they mean. Did you know there are actually three different ways to recycle?

- ✓ Reclamation
- ✓ Use/Reuse
- ✓ Burning for Energy Recovery

The following examples will help clarify the differences:

Reclamation means to process a material so that you can recover a useable product or restore the material to its original condition.

Example: Solvent used for cleaning paint equipment is often reclaimed. Every time you put the dirty solvent in a distillation unit and clean solvent is generated to be used again, you're doing reclamation.

Reclamation qualifies for recycling credits.

Use/Reuse means that the waste can be added as an ingredient to make a product or used as a substitute for a commercial product.

Example: If the paint still bottoms in the above example are sent off-site to be used as a base stock for pigments in (base coat) paints, that's reuse.

Use/Reuse qualifies for recycling credits.

Burning for Energy Recovery means a waste which qualifies as a fuel is burned instead of using virgin fuel.

Example. Used oil is often used as a fuel in industrial boilers rather than being re-refined.

Burning for energy recovery does NOT qualify for recycling credits.

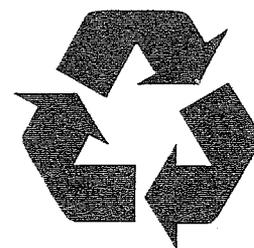
How your waste is recycled may be important to you. When hiring a facility to handle your hazardous waste, consider the following:

✓ How the company recycles the different wastes it handles. It's important to know that a receiving facility determines how it will recycle hazardous waste. Many companies use all three types of recycling methods and your waste may be handled differently each time it arrives.

✓ Is the facility willing to reclaim or reuse the waste BEFORE burning for energy recovery? You may be able to influence how your wastes are being recycled.

✓ Find out as much as you can about the companies before you hire them. You're responsible for the waste you generate from cradle to grave. Make sure the companies you deal with are adequately insured against accidents.

✓ Check with the Department of Ecology, or counterpart in another state, to find out if they are in compliance. Government agencies can't make recommendations, but can give information that will help you make an informed decision.



Case Study: Simple Process Change Yields Big Savings

Hytec/Lasco, manufacturer of fiberglass tubs and shower stalls in Yelm, Wash., is on the road to becoming a small quantity generator. A simple change in the manufacturing process has saved \$46,700 in one year and reduced acetone use by 60%.

Tub and shower molds are covered with a colored gel coat, then finished with several layers of fiberglass, polyester resin and reinforcing materials. Colors are run in batches. Gel coat color is changed about seven times a day. To change colors, clean acetone was used to flush the gel coat pumps and guns. The acetone/gel coat waste was distilled on-site to reclaim the acetone.

Through the efforts of employees Lyle Sundsmo and Bob McDaniel, a different product has replaced the acetone. Now, un-catalyzed, clear resin is used instead of acetone. The resin is captured and used in the reinforcing layers where a little color contamination doesn't matter.

This simple process change eliminated all waste from changing gel coat colors. The company's acetone use was reduced by 60% which allowed it to reduce hazardous waste related activities from five to two days per week.

For only the cost of a \$4 funnel, the company was able to save \$46,700 in material and labor costs.

Hytec/Lasco is continuing its waste reduction efforts. Additional projects include:

- ✓ Switching to an aqueous system for cleaning rollers and other layup tools. This will eliminate distillation and reduce the total amount of acetone used by 98%.
- ✓ Decreasing styrene air emissions by mixing small plastic beads into the resin, which actually increases the strength of the final laminate.

Hytec/Lasco is quickly reaching their SQG goal while saving money, improving product quality, and creating a better workplace for its employees.

Reusing Water is Good Business!

Recovering and reusing water from manufacturing processes may be your most profitable waste reduction opportunity. Minor plumbing changes can reduce utility, treatment and disposal expenses while improving product quality.

Advanced techniques like filtration, ion-exchange, reverse osmosis and electrowinning not only save water, but can also recover process materials for reuse.

If you have questions about water recovery opportunities in your process, contact Ecology's Regional Toxics Reduction staff.

Businesses Set Waste Reduction Goals

Washington businesses are finding that pollution prevention planning pays. The "first wave" of companies, required to write pollution prevention plans by Sept. 1, 1992, have submitted plans or executive summaries.

Many of the state's largest employers are discovering that by writing a pollution prevention plan, they can determine how to save money on raw materials and minimize costly treatment, storage and disposal costs. Review of the summaries or plans are very encouraging:

- ✓ 307 facilities, responsible for 64% of the total recurrent toxic waste generated statewide, prepared plans.
- ✓ 94 facilities set goals for *reducing hazardous substance use* by 48 million pounds per year by 1997.
- ✓ 150 facilities set goals to *reduce hazardous waste generation* by 75 million pounds per year by 1997.
- ✓ 30 facilities set goals to *reduce toxic emissions* by 12 million pounds per year by 1997.

Remember, if your facility is preparing a pollution prevention plan due Sept. 1, 1993, Toxics Reduction technical assistance staff are available to answer your questions. (*Ecology contacts are listed on page 6.*)

Lighting Retrofits Offer Cost Savings

Washington State Energy Office

Some businesses are missing out on the energy savings and utility rebates associated with replacing old lighting with more efficient fluorescent systems. They think the proper disposal of PCBs and mercury found in ballasts and lamps is too complicated and costly and they fear the potential liability from improper disposal.

The good news is that the reduced energy use of newer lighting systems means fewer negative environmental effects caused from power generation, such as salmon endangerment and depletion of renewable resources. The 10-80% energy cost savings from lighting retrofits far outweigh the cost of proper disposal. New recycling opportunities allow over 80% of lamps and ballast materials to be reused.

Questions about lighting equipment disposal are answered in reports on lamp and ballast disposal produced by the Electric Ideas Clearinghouse (800) 872-3568 at the Washington State Energy Office, a service of the Bonneville Power Administration serving the Northwest.

Dear Shoptalk Readers,

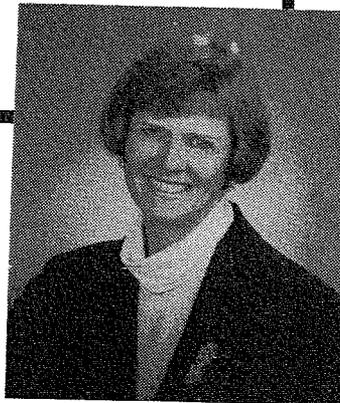
During my first weeks on the job I've had the opportunity to hear from stakeholders and staff alike. What has been most encouraging is the similarity of themes expressed. These themes are also consistent with the message we've heard from Governor Lowry. They provide a good direction for all agencies as we struggle with some tough choices in the months ahead. Simply stated, they encourage us to:

- ✓ Actively listen and respond to what we hear;
- ✓ Focus on problem solving;
- ✓ Streamline regulations without compromising environmental protection;
- ✓ Demonstrate that economic vitality and environmental protection go hand in hand.

The recent Shop Sweep campaign and the associated pilot project on used antifreeze recycling is an excellent example of doing just this. The campaign began with our agency listening and working with representatives of the automotive repair industry. Technical and economic issues were tackled. The results are a cooperative effort between the industry and Ecology to protect people and the environment from hazardous wastes.

We look forward to working in partnership with businesses to tackle the challenges of waste management and welcome your suggestions.

Mary Rowland
Director



Build Your HW Management Library

The Solid and Hazardous Waste Program has assembled current hazardous waste management regulatory guidance and technical assistance documents into one packet of information. Included are Technical Information Memoranda (TIMs), FOCUS Sheets and other related information. To obtain this package, please call (206) 438-7738. There is a \$5 fee to cover printing and postage costs.

The reformatted version of the State Dangerous Waste Regulations, Chapter 173-303 WAC, advertised in the Autumn 1992 issue of *Shoptalk*, is still available. Call the above number to order a copy. There is a \$10.79 fee (tax included). The official version is still available at no charge.

Choosing a Hazardous Waste Transporter

Once you've realized you generate hazardous waste, what steps should you take to choose your transporter? Think of your waste as fragile cargo that would be very expensive to replace. Your responsibilities and potential liabilities make it worthwhile to carefully select any contractor — transporter, laboratory or receiving facility. But how do you make the best choice? Information is the key.

Ask yourself, "What am I buying?" If your answer is, "A one-way ticket to a TSD" (treatment, storage or disposal facility), that may be all you receive. However, if the answer is, "The services of a responsible professional providing secure transport of my dangerous waste," then the following tips can help.

✓ What do I need to know? Dangerous waste transporters must: 1) have an active EPA/state identification number; 2) have all necessary permits required of a transporter in general and dangerous waste transport in particular; and 3) comply with safety, training and insurance requirements.

✓ Who can you ask for help? If you generate a unique waste, your trade association or receiving facility should know of firms serving your industry. Other sources may include competitors, listings from state or local agencies and the Yellow Pages. (Transporters can be found under "Waste Disposal - Hazardous.")

Following these tips will help you select a firm that will provide the service you need to meet your responsibilities.

Ecology publications *FOCUS: Hazardous Waste/Materials Transportation* and *Step 8: Arrange for Proper Transportation and Disposal* can help you determine how hazardous waste or materials transportation is regulated. They are listed in *Resource Center* on page 3.

Although *Shoptalk* invites questions from readers, we don't often get questions to answer. We hope this means that when you have a question, you call one of the Ecology contacts and get it answered directly. The following questions were posed by *Shoptalk* readers and we're pleased that they took the time to help make this newsletter more useful.

Q What do you do with the water in a mop bucket that is used to clean the shop floor? This water will have greases and different gases that are picked up from the shop floor. Can this water mixture be dumped down the sewer?

A Yes, since small amounts of "greases and different gases" would not be expected to designate as dangerous waste, the water may be discharged to the sewer system according to the Dangerous Waste Regulations. However, you must receive permission from your local sewer utility for your floor cleaning wastes to enter the sewer. Remember, untreated discharge of dangerous waste to a storm water drain, dry well, or septic tank is prohibited. Contact your regional hazardous waste specialist if you need more information.

Q What are the disposal requirements for fuel filters (diesel and gasoline)? Should they be crushed?

A Diesel and gasoline fuel filters should be thoroughly drained before disposal or recycling. Try to re-use the drained fuel as a product—for example, in your lawn mower. In the case of metal filters, they should be recycled as scrap metal, if possible. Crushing is not necessary unless required by the recycler.

Q We have some old creosote treated poles from a construction project. Are they hazardous waste and what can we do with them?

A The best option is to find another use for the creosote treated wood. If the wood is used in an application where creosote treated wood is commonly used — such as fence posts, landscaping, bulkheads or retaining walls, it is not considered a waste. If you must dispose of the wood, it may still be excluded from the hazardous waste requirements if it does not fail the TCLP test and it is sent to a landfill which has a liner and a leachate collection system.

Ecology Contacts

Remember, your business is liable for all hazardous wastes generated. If you are uncertain about your responsibilities as a hazardous waste generator, call your nearest Ecology regional office and ask for a hazardous waste specialist.

For information on reducing or recycling hazardous waste, ask for the Toxics Reduction Staff in the Waste Reduction, Recycling and Litter Control Program, also at the following numbers.

Bellevue: (206) 649-7000
Tumwater: (206) 753-2353
Yakima: (509) 575-2490
Spokane: (509) 456-2926

Shoptalk

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