



# ShopTalk

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 A quarterly  
 publication for  
 hazardous waste  
 generators

## Floor Drains and Waste: A Dangerous Combination

Some business operators see floor drains as an easy way to dispose of floor cleaners and other wastes. They don't realize that washing wastes down the drain may violate federal and state water pollution control laws and hazardous waste regulations.

Why is it a problem to put wastewater into floor drains? Floor drains can send contaminants directly into septic systems, dry wells, storm drains, pits or cesspools where they can leak into groundwater, streams and lakes. Even if your floor drains lead to the sanitary sewer, municipal wastewater treatment plants can treat only certain wastes. For this reason, the discharge of some substances to treatment plants is restricted or prohibited.

### What Should You Do?

Find out where your floor drains go. You can't tell just by looking at them. If your business site was built before 1970, or if it is located in a rural area, your floor drains probably don't lead to a sanitary sewer. If you get a sewer bill, then one or more of your floor drains may connect to the sanitary sewer system. Your city or county public works department or local sewer utility can help you find where your drains lead.

If your floor drains already connect to a sanitary sewer, you still need to meet local sewer discharge limits. All commercial and industrial dischargers must have written permission from the local sewer authority or Ecology's Water Quality Program to discharge a

specific waste. The waste must be treatable, and not prohibited under any pretreatment standards.

Generators who suspect or know that hazardous substances like chlorinated solvents and pesticides have entered their drains should contact a hazardous waste specialist at the nearest Ecology regional office. He or she will help determine if there is a pollution problem that needs more attention.

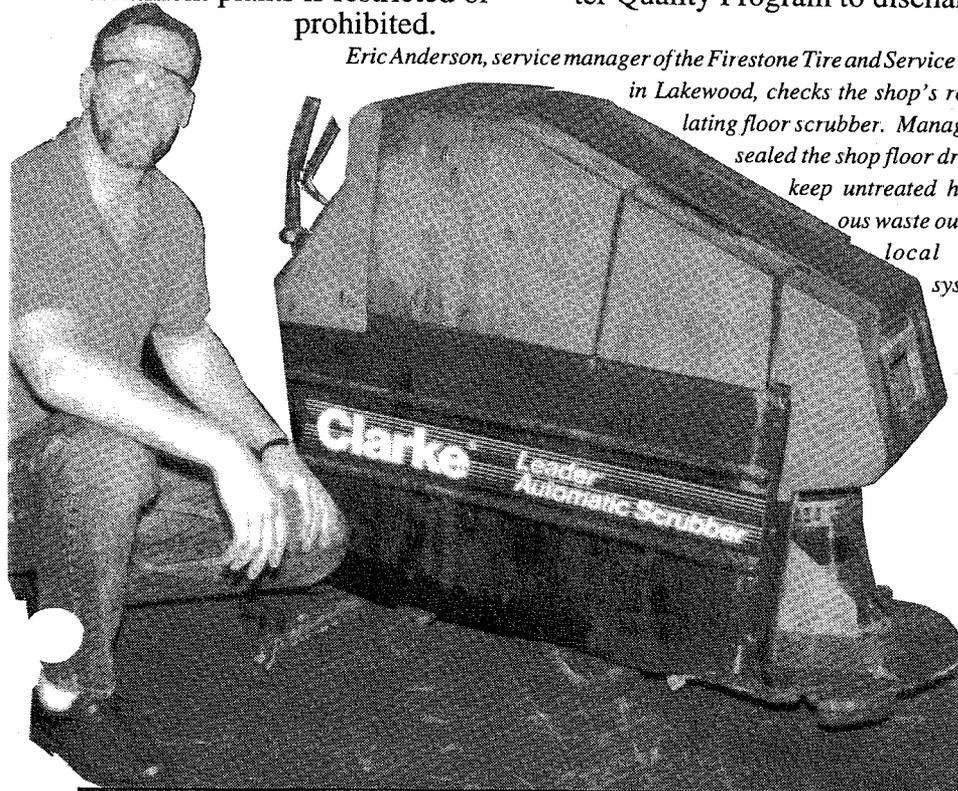
### What To Do Next?

The best option may be to seal your floor drains and switch to methods that prevent pollution. Many shops have found practical alternatives to using floor drains, like keeping floors clean to begin with, sweeping floors instead of mopping and using recirculating floor scrubbers.

When you seal off a floor drain, record how the drain was used in the past, note the date the drain was sealed, and describe the location of the drain before it was sealed. Businesses that do not seal their drains and choose to discharge to the sanitary sewer must meet the requirements listed above.

For more information, contact a hazardous waste or toxics reduction specialist at an Ecology regional office. Their phone numbers are listed on page 6.

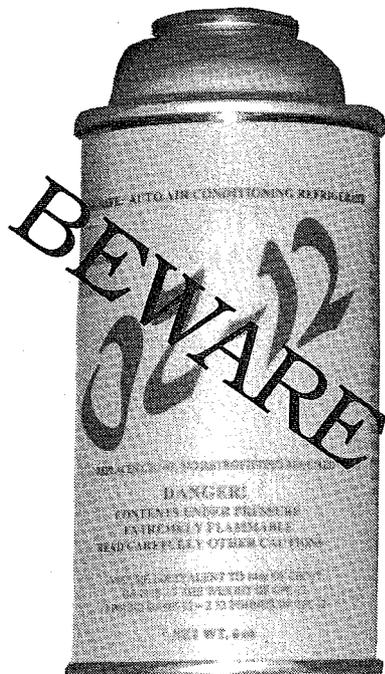
*Eric Anderson, service manager of the Firestone Tire and Service Center in Lakewood, checks the shop's recirculating floor scrubber. Management sealed the shop floor drains to keep untreated hazardous waste out of the local sewer system.*



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## Flammable Refrigerant Recalled



Last spring, Ted Hamlin, a CFC specialist in Ecology's Eastern Regional Office, found the product OZ-12 in Spokane stores. Hamlin immediately contacted the Environmental Protection Agency and the National Highway Traffic Safety Administration (NHTSA). He was concerned that OZ-12 might be flammable and could be dangerous to consumers doing their own automotive repairs. He also realized that the product's ingredients could contaminate a batch of R-12 sent for recycling.

The NHTSA investigated OZ-12 and found propane and butane listed as the primary ingredients. These substances act as cooling gases in conventional automotive air conditioning systems. Neither threaten the ozone, but both are extremely flammable. Washington law prohibits using flammable refrigerant in automotive air conditioners. OZ Technology, the product's manufacturer,

followed the NHTSA's recommendation to recall the refrigerant from all Washington distributors, and took it off the market in this state.

Auto repair shops using CFC recycling equipment should be warned that adding even a small amount of OZ-12 to a cylinder of recycled R-12 will foul the entire batch. Businesses would suffer a two-fold bite into profit. They would lose reclaimable R-12 and also be responsible for the cost of disposing the contaminated refrigerant.

Hamlin offers these suggestions to auto shops servicing air conditioning systems:

- ✓ Look for labels stuck to the air conditioning system. Canisters of OZ-12 came with labels to apply to systems charged with the product.
- ✓ Ask all customers if do-it-yourself recharging has been performed on the air conditioner.
- ✓ Be aware of a propane odor. This may be noticeable only if the system has a major leak. Technicians might notice the odor when attaching high and low pressure hoses to the air conditioning system.

Ted Hamlin is available to answer your questions. Call him at (509) 456-4053.

## Dry Cleaners Updated on New Air Quality Laws

Owners and operators of dry cleaning businesses got help with new federal laws to control toxic air pollution at training sessions held in May. The four-hour teleconference, broadcast by satellite to sites across the state, drew 100 participants, including representatives from business, and state and local government agencies.

Businesses learned how to complete new federal reporting forms; how to prevent pollution and reduce costs at their shop; and how to monitor and collect data on their air emissions and operations.

Videotapes of the four-hour training session are available for viewing. For more information, call Barb Harris at the Washington State Dry Cleaners Association, (206) 851-6327; Mike Park at the Korean Dry Cleaners Association, (206) 878-2353; or Bernard Brady at the Department of Ecology's Air Quality Program, (206) 407-6803.

### Education Grants Available

Starting August 1, trade associations and non-profit groups interested in educating others about hazardous waste reduction can apply for Ecology's Public Participation Grants. The application period ends September 30. For more information, call Dolores Mitchell at (206) 407-6057.

## Bookshelf

These materials are available from Ecology. Call 1-800-633-7585 or (206) 407-6719

**Floor Drains and Waste Don't Mix (94-117)** This short publication gives information on why floor drains should be sealed, and outlines steps to follow that will keep existing drains from polluting the environment.

**Is Water Quality Going Down The Drain In Your Garage?** An Ecology publication describing how service station operators can help prevent ground water contamination.

**List of Carcinogens (revised, June, 1994)** This memo provides the most current list of substances considered to be "carcinogenic" under the Dangerous Waste Regulations.

**On-Site Distillation: A Guide for Choosing and Operating an On-Site Distillation Unit (94-31)** This guide outlines some of the important points you should consider when choosing and operating a distillation unit used to reclaim solvent waste.

**Guidance for Reporting Progress in Pollution Prevention (93-38, Revised March, 1994)** This report gives tips that will help businesses track their effort in pollution prevention. Worksheets are included.

**Washington State Dangerous Waste Regulatory Reform Project (F-HWTR-94-143)** This FOCUS Sheet describes the background, goals and implementation strategy of a current project that will identify possible changes to the Dangerous Waste Regulations.

## Water Conservation and Waste Reduction: Saving a Precious Resource through Pollution Prevention Planning

Water conservation plays an important role in waste reduction because water is used in many processes that generate hazardous waste. It is worthwhile to look at saving water as a good way to prevent pollution while you lower the cost of your water bill.

It pays to conserve water even if your company has its own water supply.

Identifying how your company uses water starts with a simple water-use evaluation. Document the amount of water pumped into your facility and track where it goes. Following these ideas for process changes can save you water and money:

**Cooling** Change to non-contact cooling systems. Use water recycled from another source for cooling system make-up water in closed loop systems.

**Steam Generation Limit** blowdown volumes. Use an expansion tank for blowdown discharge. Return all condensate. Maintain steam traps. Use soft water only where necessary. Regenerate softeners based on product water quality.

**Rinsing** Use recirculating rinsing systems where possible. Recycle rinse water for other uses.

**Washing and Sterilization** Shut off cooling water when not needed. Maintain good steam quality. Use recirculating systems where possible.

**Laundering** Wash only full loads. Use recycling systems if possible.

**Landscape Irrigation** Water plants only when they need it.

Lawns need about an inch of water per week. Water during the cool parts of the day. Maintain irrigation equipment so sprinklers water only lawns and plants, not sidewalks. Repair broken heads promptly. Consider getting a professional irrigation audit.

**Domestic Uses** Keep all fixtures in good repair. Replace worn out fixtures with new water conserving fixtures that meet the water use requirements of the State Plumbing Code.

Ecology staff can suggest ways to save water that fit in with the needs of your business. Other sources of ideas for decreasing your water use are equipment manufacturers and your own staff. Ask them for their ideas. For example, suggestions from employees at Pederson's Poultry in Tacoma reduced water use by 22 percent over a three year period while production increased by 24 percent.

Contact a toxics reduction specialist to get more information on the ways water conservation and waste reduction can work together to enhance your pollution prevention effort.

## Do You Have A Pollution Prevention Success Story?

Let us know! If source reduction, materials reuse, or recycling activities have decreased the amount of hazardous waste generated at your facility, you could be spotlighted in the Case Study section of *Shoptalk*. Give us a call at (206) 407-6740 and share your success story with other Washington businesses.

## Case Study: *Setina Manufacturing*

Setina Manufacturing of Olympia is a small company which builds safety screens and other devices for police cars and service vehicles. Judy Setina-Ware found out some important facts about the facility's waste as she developed their pollution prevention plan.

As the business grew over the years, it was hard to monitor the cost of waste management. "We're so busy day to day, we didn't realize how these costs were adding up," observed Setina-Ware. "Writing the pollution prevention plan helps you step back and take a look at what's really going on. We found that our waste disposal costs were much higher than we had imagined."

Staff from Ecology's Southwest Regional Office helped complete her plan. Employees put on workshops to give step by step guidance on plan preparation. In some cases, Ecology even helped make the calculations for wastes and chemicals.

Another part of this assistance came in the form of a facility walk through. "They offered us a number of waste reduction suggestions to think about, and gave us the names of equipment suppliers we could contact," added Setina-Ware. Michael Johnson, an engineer in Ecology's Hazardous Waste and Toxics Reduction Program, focused on the pre-cleaning of metal parts for painting. Replacing the chemical cleaning solutions with abrasive cleaning methods could provide better surface preparation and eliminate the need for expensive hauling and disposal of hazardous spent bath solutions.

John Setina, the founder of the business, had already noted that

## Pollution Prevention: Tips from the Shop Floor

Employees who work with a process often come up with the best ideas for source reduction and waste minimization. Here are some examples:

An employee at an aerospace company in Everett suggested installing sealed, drainable tubs to collect coolant-laden metal shavings. Now, the coolant is filtered and reused, saving the company several hundred thousand dollars in disposal costs each year.

Employees at a door manufacturing company in Centralia decided to switch to powdered glue products so wash waters could be used to make up new batches of glue. This change provided a solution for wastewater disposal, which at times totalled 2500 gallons a month.

Contact a regional office toxics reduction specialist for even more ideas. The regional office phone numbers are listed on page 6.

waste reduction could save on painting costs. After the company switched to more efficient high-volume low-pressure spray guns, the cost of purchasing paints dropped 25 percent, as did air emissions. Solvent use was reduced by 75 percent.

"When you stop to think about it," says Setina-Ware, "you can find a lot you can do to reduce waste and save on materials. If all of us could reduce wastes like this, it would have a major impact on the environment. This is what I want for my children's future."

## Planners Make Progress

We thought you would like to see some encouraging trends from the 1992 Annual Progress Reports. This information is based on the pollution prevention plans from the 307 facilities which submitted plans in the first year.

These facilities generated 64 percent of the state's 376 million pounds of hazardous waste reported in 1990. They set the standard for examining production processes, identifying reduction opportunities and preparing pollution prevention plans.

✓ First-year planners noted 5100 reduction opportunities; they chose 1940 for implementation.

✓ Plan implementation reduced hazardous waste generation by 23 million pounds.

✓ Planners cut hazardous substance use by 35 million pounds.

Over 80 percent thought the planning process was useful for their business. Nearly 60 percent will continue using Ecology as a resource.

We will see even greater reductions as more businesses join the planning process. *Shoptalk* congratulates all planners for their effort to make pollution prevention a priority.

## Hazardous Waste 101: Determining Your Generator Status

Has your commitment to pollution prevention changed your generator status? Is your company now conditionally exempt from the Dangerous Waste Regulations?

Here is a list of the most basic requirements for the three categories of waste generators - "small quantity", "medium quantity", and "large quantity generator". These

guidelines do not apply if your waste is extremely or acutely hazardous and has a quantity exclusion limit of 2.2 pounds per month.

**Small Quantity Generator-SQG**  
Small quantity generators produce no more than 220 pounds of dangerous waste in a month or batch, or about one-half of a 55-gallon drum. SQGs must:

- ◆ Designate dangerous waste and keep records that show how the designation was made.
- ◆ Treat dangerous waste on-site; dispose of it according to the guidelines of an approved local moderate risk waste plan; ensure delivery to a legitimate recycler; send it to an on-site or off-site permitted treatment, storage, or disposal facility; or obtain a discharge permit, pretreatment permit or authorization letter to discharge to a delegated municipal wastewater treatment plant.
- ◆ File an Annual Report (Form 4) if they have an EPA/State Identification Number.

**Medium Quantity Generator-MQG**  
Medium quantity generators produce more than 220 pounds but less than 2200 pounds of dangerous waste in a month, and do not accumulate more than 2200 pounds of dangerous waste at any one time. MQGs must:

- ◆ Designate dangerous waste and keep records that show how the designation was made.
- ◆ Recycle, treat or dispose of dangerous waste within 180 days of the accumulation start date. In rare circumstances, Ecology may extend this period to no more than 270 days.

- ◆ Have an EPA Identification Number.
- ◆ File an Annual Report (Form 4) every year by March 1.
- ◆ Comply with all labeling, placarding and manifesting requirements.
- ◆ Enclose dangerous waste container accumulation areas in a secondary containment system.
- ◆ Inspect dangerous waste accumulation areas weekly for leaks and deterioration, and write any findings in a log book.
- ◆ Comply with applicable emergency coordination, preparedness and prevention requirements.
- ◆ Submit a Hazardous Waste Pollution Prevention Plan by September 1 if the amount of waste exceeds 2640 pounds during the year.

**Large Quantity Generator-LQG**  
Large Quantity Generators produce more than 2200 pounds of dangerous waste in a month, or accumulate more than 2200 pounds of dangerous waste at any one time. LQGs must:

- ◆ Designate dangerous waste and keep records that show how the designation was made.
- ◆ Recycle, treat or dispose of dangerous waste within 90 days of the accumulation start date. In rare circumstances, Ecology may extend this period to no more than 120 days.

- ◆ Have an EPA Identification Number.
- ◆ File an Annual Report (Form 4) every year by March 1.
- ◆ Comply with all labeling, placarding and manifesting requirements.
- ◆ Enclose dangerous waste container accumulation areas in a secondary containment system.
- ◆ Inspect dangerous waste accumulation areas weekly for leaks and deterioration, and write any findings in a log book.
- ◆ Conduct regular inspections of safety and monitoring equipment.
- ◆ Comply with applicable emergency coordination, preparedness and prevention requirements.
- ◆ Submit a Hazardous Waste Pollution Prevention Plan by September 1 if the amount of waste exceeds 2640 pounds during the year.
- ◆ Have a written contingency plan.
- ◆ Provide waste management training to employees, including contingency plan implementation.

For specific questions regarding generator requirements, contact a regional hazardous waste specialist.

*Adapted with permission from the, "The Basics of Hazardous Waste Generator Status", by Chris Hayes, University of Tennessee as published in the WRAP Sheet, Fall, 1993.*

## Q&A Correction

In the spring issue of *Shoptalk*, we printed a question about burning used oil in space heaters. We mistakenly responded that, "the flash point must stay below 100°F for used oil to be considered 'on-specification'". The correct response is that the flash point must be **at least** 100°F for used oil to be considered "on-specification".

Readers also called to ask for clarification on the 1,000 ppm and 4,000 ppm total halogens limits listed in the used oil regulations. Ecology assumes that used oil containing more than 1,000 ppm total halogens has been mixed with a dangerous waste. Oils containing less than 1,000 ppm total halogens need no further testing.

Generators with oil exceeding the 1,000 ppm total halogens limit are given the chance to prove that the halogens were picked up through use of the oil and not by mixing with dangerous waste. This is called the "rebuttal presumption". It applies only to waste oils exceeding 1,000 ppm total halogens. The 4,000 ppm total halogens limit qualifies a batch of used oil as "on-spec", once the rebuttal presumption is met.

**Q** I've heard that halon can no longer be produced in the U.S. Can I still use halon-charged fire extinguishers as part of my facility's safety plan?

**A** Yes. It is legal to continue to use your existing halon fire suppressant system.

Halon is known to be a major ozone depleter. Under the Clean Air Act, the United States banned the production and import of halons 1211, 1301, and 2402 beginning January 1, 1994.

It is legal to buy recycled halon to recharge your system. Recycled halon can be purchased from many halon and fire protection equipment distributors, or directly from owners who are decommissioning their halon systems.

We will be updating our mailing list soon. Please let us know any changes you'd like to make by calling (206) 407-6719. The autumn issue of *Shoptalk* should be mailed to you in the month of October. If you miss the issue, please let us know. We are in the process of pruning our list to reduce waste and postage costs.

## 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 office and ask for a hazardous waste specialist. For information on reducing or recycling hazardous waste, ask for the toxics reduction staff, also at the following numbers:

*Bellevue:* (206) 649-7000

*Lacey:* (206) 407-6300

*Yakima:* (509) 575-2490

*Spokane:* (509) 456-2926

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## Shoptalk

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