



ShopTalk

Winter 1993
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A quarterly
publication for
hazardous waste
generators

It's Annual Report Time

Completing the Annual Dangerous Waste Report (Form 4) can seem a formidable task, especially the first time. The good news is that there is lots of help available and the reports really do provide valuable information.

Why Your Report is Important

Information from individual reports is combined to create a picture of the hazardous waste generated in Washington and how it was managed in 1992. This information is used by Ecology for planning our education, technical assistance, and compliance efforts.

Will we have enough landfills, hazardous waste disposal facilities and recycling centers to take care of the waste we create in the future?

Information from annual reports is used to help plan for Washington's future needs for waste management facilities and is included in the State Hazardous Waste Plan.

Individual generators can take advantage of reporting time to evaluate the full costs of their hazardous waste, their savings from waste reduction and recycling, and to explore further opportunities for savings. (See related article "Dollars and Sense", inside this issue.)

Who Must Report

Hazardous waste generators with an active EPA/State Identification Number are required to complete the Form 4 each year. The forms are mailed to generators in January and are due back to Ecology by March 1.

Make it Easy on Yourself

You can help yourself by keeping good records. Your report will come together much easier if you have your records already assembled. You will want last year's report (including any corrections), manifest records, on-site recycling records, and waste designation records.

Even though it seems against human nature, it's a good investment of your time to read the reporting instructions. Many times errors which cause the report to be returned for correction are a result of not reading the directions.

Ecology Will Help

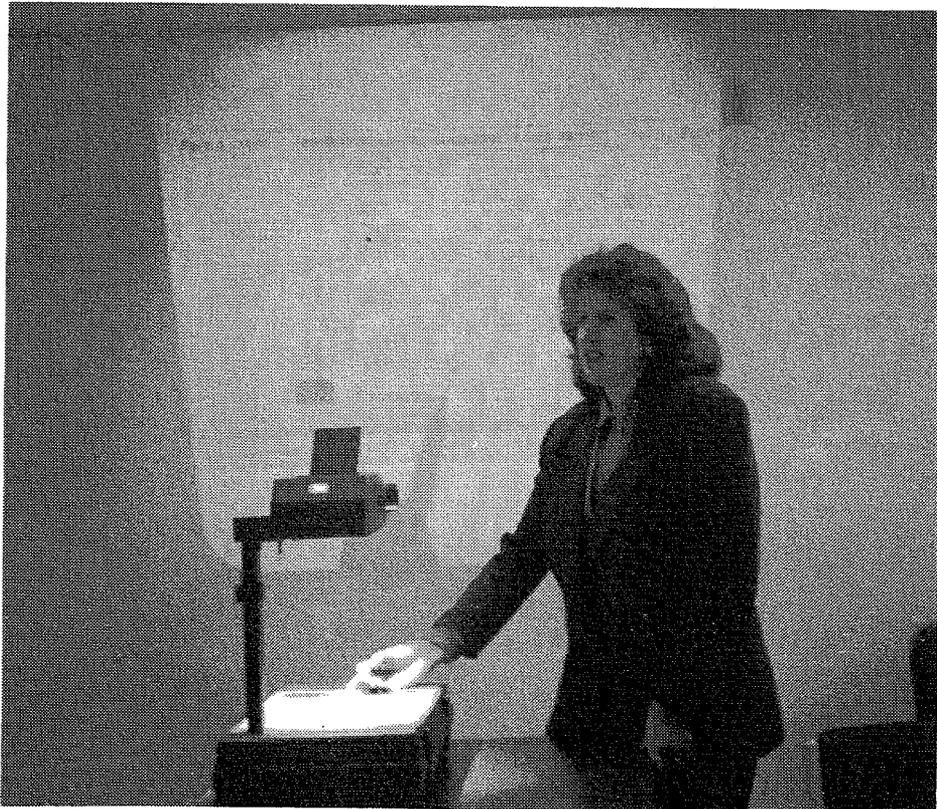
Each year we are able to make improvements in the annual report process...better instructions, clearer forms, helpful workshops. This year we eliminated the need to complete a separate form to get credit for waste recycled off-site. This information is now reported directly on the Form 4.

Ecology staff are available to answer your questions and help you through the reporting process.

- ✓ Call the Annual Reporting Hotline (1-800-874-2022) which will be staffed between January and March, or
- ✓ Attend a Generator Workshop. Workshops are held throughout the state and include help with completing annual reports. (See the Generator Workshop article inside this issue.)

Inside:

*Secondary Containment
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Questions and Answers*



Secondary Containment: *Better Safe Than Sorry*

No matter how careful a facility is, spills of hazardous wastes or materials can occur. Secondary containment can prevent accidents from becoming costly nightmares. One recent example of the benefits of secondary containment involved a wood treatment facility. Operators found that a valve had frozen and cracked during a cold snap resulting in a release of ten thousand gallons of a very toxic substance. This could have been a very costly cleanup, but the company had built a sealed concrete containment area around the tank. Not only did this make the cleanup easy, it allowed recovery of an expensive product and saved the company from a potential fine. The cost of the secondary containment more than paid for itself with that one incident.

When is Secondary Containment Required?

Secondary containment is used to protect against damage from possible spills of hazardous waste being accumulated and hazardous products being stored. While secondary containment is not always required, it is always a good idea. Hazardous waste container accumulation areas created after September 30, 1986 are required to have secondary containment. In certain cases Ecology does require secondary containment for accumulation areas created before 1986.

Important Features

In addition to being able to hold the volume of a possible spill a secondary containment system should:

- ✓ keep spilled liquids or precipitation from remaining in contact with drums by directing drainage to a collection area or sump,
- ✓ keep out run-on from any source such as surface water or wash water, and
- ✓ prevent waste from escaping by having an impermeable base free from cracks or joints.

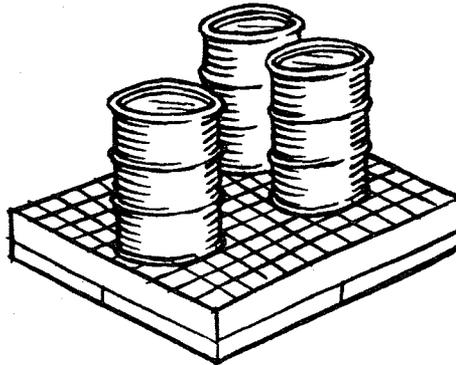


Figure 1: Hazardous substance pallet with secondary containment.

When a containment area is constructed outside you should make sure that either: (a) rain and snow are kept out (this is a must for extremely hazardous waste); or (b) there is enough containment capacity to hold the additional volume of a 25-year storm. Rainfall which has accumulated in a secondary containment area may contact hazardous substances and could be required to be tested and disposed of as hazardous waste.

You should also consider features to restrict access. A fence or locked enclosure can help keep unauthorized people out.

Secondary containment needs vary. Smaller operations may only need to store a few drums. While larger operations may build a separate facility to hold many drums. Businesses on the west side of the state are more concerned with providing cover from precipitation than those east of the mountains.

What Are The Options?

One of the simplest solutions for a few drums is to purchase welded steel or molded plastic containment pallets. They typically hold up to four drums and if kept under cover do not need extra capacity for precipitation. (Figure 1)

Another ready-made solution is to purchase a portable hazardous substance storage building that provides secondary containment, and other features. (Figure 2)

Hazardous waste accumulation areas can also be constructed using a sealed concrete base and a shed covering and include other features such as a sump and a release detection system.

Hazardous waste container accumulation areas constructed or installed after September 30, 1986, must meet the requirements in the dangerous waste rules (WAC 173-303-630(7)). If you have questions regarding the regulatory requirements for secondary containment, call your regional Ecology contact number listed on the back page and ask for a hazardous waste specialist.

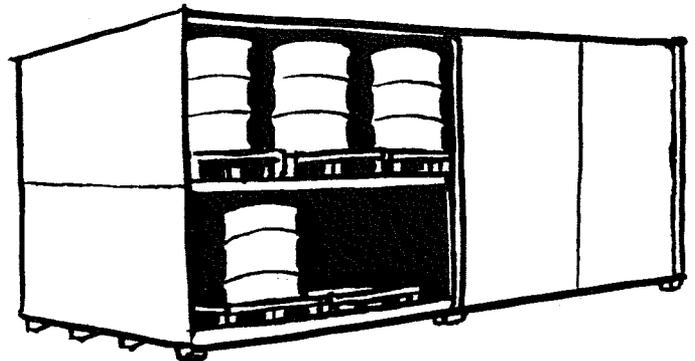


Figure 2: Portable hazardous substance storage building.

Case Study: *Innovation From the Shop Floor*

"Once you get the interest of the purchasing agents, the people in the storeroom, and the chemists, then you are able to come up with some good concepts for waste reduction." Fred Wolf, Environmental Affairs Manager

Elf Atochem, a chemical production plant in Tacoma, strives for excellence in regulatory compliance by setting goals and standards stricter than the regulations.

The basis for this success was their pollution prevention program, AWARE (Atochem Waste and Release Elimination). The program goals include:

- ✓ reduce the amount of hazardous waste generated
- ✓ eliminate waste where feasible
- ✓ improve productivity
- ✓ protect the health of the community

Key to Atochem's waste reduction success was the participation of their 125 employees. Employees from maintenance, purchasing, and the storeroom worked together to identify problems and recommend solutions. Their suggested innovations resulted in:

- ✓ elimination of halogenated solvent use in 1990
- ✓ reduction of raw materials packaging by working with a supplier to switch from paper bags to reusable drums
- ✓ no reportable spills since 1989 (a result of encouraging employees to report incidents of near releases)
- ✓ a 90% reduction of filter waste through an innovative chrome recovery system pioneered by company technicians

Ecology recognized Atochem's waste reduction success by honoring them with the 1992 *Governor's Award for Outstanding Achievement in Pollution Prevention* for medium-sized facilities.

Due Date Changed for Hazardous Waste Education Fee

The due date for the annual \$35 Hazardous Waste Education Fee, which is assessed to known and potential generators of hazardous waste, is being changed. The new due date is May 31, 1993. The change in due date allows the Department of Revenue time to review the 1992 tax collections and screen out the small businesses that qualify for an exemption from the fee. Businesses subject to the fee will receive a billing notice around the first of May.

Governor's Award . . . Call For Entries!

The Governor's Award for Outstanding Achievement in Pollution Prevention recognizes business achievement in reducing the use of toxic substances and the generation of hazardous waste. Applications for the 1993 award program will be available soon from Ecology. Call Cathy Bouge to be placed on the mailing list to receive a brochure and application. (206)438-7587

Reporting Recycling Credits Made Easier

Ecology has eliminated the "Off-Site Recycling Credit Form" to make reporting recycling credits easier. The form was originally created as a supplement to the Generator Annual Dangerous Waste Report (Form 4) for those facilities wishing to claim recycling credits for the 1991 reporting year.

Now, the Form 4 has been changed so that you can record both on-site and off-site recycling information on one form. Reporters should find this a more convenient way to claim recycling credits.

Remember, reporting recycling credits can benefit your company because you may be able to lower your annual hazardous waste planning fees and reduce the total amount of hazardous waste counted towards the pollution prevention planning threshold (2,640 lbs of hazardous waste generated per year).

Sodium Bicarbonate No Longer Designates

Sodium bicarbonate no longer designates as a toxic dangerous waste. Church and Dwight, a maker of sodium bicarbonate blast media, provided new test data indicating that sodium bicarbonate is not as toxic as recorded in the NIOSH (National Institute for Occupational Safety and Health) registry.

Sodium bicarbonate blasting systems can be a good alternative to more hazardous methods of cleaning, degreasing, and paint stripping. The little effluent generated can easily be made sewer compatible by filtering out the solids produced during the blasting process. Also, special masking is not required, which makes it less labor intensive.

Sodium bicarbonate, like other blasting media, can pick up additional contaminants, such as paint chips, dirt, heavy metals, grease and oils that may cause the waste to be hazardous. If you know the blasting waste could contain hazardous constituents, you must determine the constituents and their concentrations in the waste prior to disposal.

Upcoming Events

January '93 - February '93

Workshops for Hazardous Waste Generators.

Offered state-wide, see "Generator Workshops" in this *Shoptalk*.

April 28

Inland NW

Waste Information Expo

Spokane, WA

(509) 456-5010

Resource Center

These materials are available from the Waste Reduction, Recycling and Litter Control Program. Call 1-800-RECYCLE or (206) 459-6472.

Chlorinated Solvents: A Guide to Evaluating Alternatives for Vapor Degreasing and Cold Cleaning Operations, November 1992. A single sheet handout featuring advise on alternatives and a fold-out matrix chart comparing various cleaning systems.

Alternatives to Chlorinated Solvents for Cleaning and Degreasing, July 1992. A new manual in the EPA series titled, "Guide to Clean Technology". (Limited number available for loan)

New Waste Reduction Success Stories. Individual case studies highlighting how Washington companies have successfully implemented waste reduction programs. The studies emphasize broadly-applicable techniques. Success stories are available for: Chemical Manufacturing, Auto Body Restoration and Painting, and Retail Grocers.

"Sodium Bicarbonate Letter". September 30, 1992 letter from Ecology to Church and Dwight Co. clarifying the status of sodium bicarbonate waste.

Dollars and Sense of Pollution Prevention

Are you trying to calculate the cost of waste reduction and hazardous waste management (pollution prevention), and how much they can save you in the long run? While some projects such as training and maintenance have low up-front costs, other projects may vary in terms of investment level.

Here's one way to measure the costs and savings of pollution prevention:

Step 1 Identify environmental costs by making a list of your current compliance and disposal costs. Don't neglect any "overhead" cost items, such as employee right-to-know training, reporting and record-keeping for government agencies, and the cost of storing hazardous materials. If a pollution prevention project, such as installing an antifreeze recycling unit, will change any of these costs, decide how you'll measure them.

Step 2 Forecast what your costs will be if you don't try the pollution prevention project. Estimate for each item affected by the project being considered, and how much it will increase or decrease over the next five years. This will tell you how much can be potentially saved, and will help you consider future regula-

tory and financial problems that can be avoided by reducing waste

Step 3 Compare costs of the current practice and the pollution preventing alternative. Compare the standard costs such as capital, installation, and operations, then identify and calculate the value of any environmental compliance costs that would change if the alternative were in place. Next, compare the cash flows of both your current practice and the alternative for the next five years.

You'll see the savings from pollution prevention increase each year because of the avoided environmental costs.

Step 4 Evaluate the pollution prevention alternative to decide if the project is worthwhile. It is important to use a long-term approach, because pollution prevention can often decrease future environmental risks such as cleanup liabilities or property damage.

Keys for a successful pollution prevention cost analysis.

- ✓ Identify all potential environmental costs or labor requirements.
- ✓ Forecast, for at least five years, what the costs would be with and without pollution prevention.
- ✓ Use a long-term approach to your decision-making process.

TABLE TO EVALUATE POLLUTION PREVENTION ALTERNATIVE

Current Practice		IDENTIFY COSTS 5 Year Forecast <i>Step 2</i>	Pollution Prevention Alternative	
Cost (\$)	Labor (hr)		Cost (\$)	Labor (hr)
		Employee Training		
		Record Keeping		
		Disposal		
		Capital		
		Other Compliance Costs		
		TOTAL COSTS & HOURS		

Step 3

Step 1

Step 4

For more information call, Burton Hamner. (206) 649-7180

Industrial Storm Water General Permit

Certain businesses, including many hazardous waste generators, will need to apply for storm water general permits this winter. The Ecology Water Quality Program answers some questions about the permits below.

Why is industrial storm water a problem?

Storm water runoff from manufacturing facilities, vehicle maintenance shops and construction sites can pick up pollutants and sediments which damage streams, rivers and other surface waters.

How does requiring businesses to get a permit prevent this kind of damage?

The permit will require the facility to develop a storm water pollution prevention plan (SWPPP). The plan will need to identify existing and potential sources of storm water pollution and what the facility will do to reduce them. Depending on what the facility proposes to do, the plans will need to be implemented by November '94, or November '95.

How is a "general permit" different from other permits issued by Ecology?

Many permitting processes require each individual business seeking a permit to go through a lengthy, detailed, and sometimes costly permit process. General permits allow businesses with similar situations to use a "generic" permit. Since the requirements are not set on a case by case basis, those seeking permits and those reviewing permit applications can save time and effort.

How will I know if I am required to get a storm water permit?

Ecology Water Quality Program has contacted affected businesses by mail. Business involved in manufacturing should have received a newsletter and blank application forms called "Notices of Intent". Owners of construction sites which

will disturb five acres or more will need to submit the Notice of Intent for Construction Activity after completing State Environmental Policy Act review (SEPA) through local government.

Is there a fee?

There is no charge now, but there will be a permit fee starting July 1, 1993 to pay for the costs of running the program.

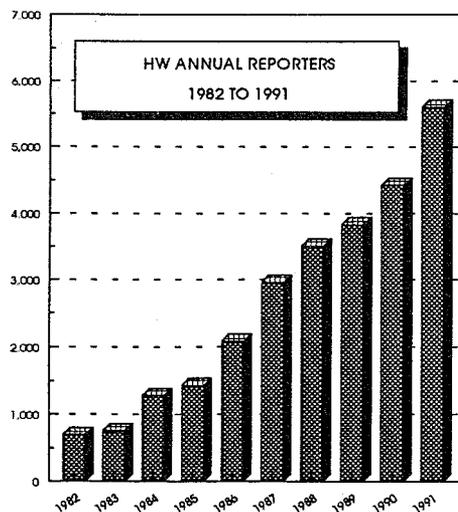
Where do I get more information?

To find out more about the storm water general permit, who it applies to, and how to apply for coverage under the permit, contact the Water Quality Program at (206) 438-7614.

Annual Reporters Increasing

There has been a dramatic increase in annual reports (Form 4s) submitted to Ecology over the past 10 years. This shows that increasing numbers of businesses in Washington are taking responsibility for their hazardous waste by participating in a system designed to assure its proper management.

In the future, we expect that some regulated generators will be able to decrease, through waste reduction efforts, the amount of hazardous waste they generate to small quantity generator levels.



Generator Workshops

Ecology regional offices have planned workshops for hazardous waste generators including help with annual reporting. All workshops are free except where noted. For more information or reservations call the contact numbers listed below.

Northwest Region

Reservations are not required. For information, call (206) 649-7014.

Mount Vernon, January 14, 6:15pm to 9:30pm. **Seattle**, January 19, 8:45am to 12:30pm.

Eastern Region

For reservations and more information, call (509) 456-6380. All times are 9:00am to 4:00pm.

Spokane, January 26, **Pasco**, January 28, **Walla Walla**, February 2, **Pullman**, February 4, **Moses Lake**, February 9.

Central Region

For reservations and more information, call (509) 457-7142.

Okanogan, January 20, 1:00pm to 5:00pm, (local number (509) 422-3350). **Wenatchee**, January 21, 9:00am to 4:00pm.

Southwest Region

Annual Reporting Help Sessions

To make reservations and check availability of sessions, call (206) 586-3400.

Lacey, February 11, (three sessions) 9am to 11am, 2pm to 4pm, and 7pm to 9pm.

HW Compliance Workshops

Reservations are required, \$20.00 fee must accompany registration. Call (206) 586-3400 for more information and registration form.

Tacoma, January 21. **Olympia**, January 27. **Port Angeles**, February 2. **Vancouver**, February 8.

Shoptalk welcomes your questions and comments. Please address them to "Shoptalk" at the return address shown below.

Q Can you tell me if used antifreeze is hazardous waste and how it should be handled?

A Used antifreeze designates as a state dangerous waste, and may designate under the federal hazardous waste system as well. The best solution for managing used antifreeze is to properly recycle it; either on-site or off-site. In order to encourage this practice, Ecology is developing a pilot program which would allow generators who recycle used antifreeze and follow specified best management practices to discontinue counting used antifreeze toward their hazardous waste totals. On the other hand, those who don't recycle used antifreeze would be required to continue to manage their antifreeze in accordance with all hazardous waste requirements, including counting. Ecology will monitor the results of this pilot program to determine whether a counting exemption leads to an increased volume of recycled antifreeze. More information on the pilot program and how to participate will be available soon.

This pilot project will *not* affect how antifreeze is counted for 1992.

Q Our business is changing. We are planning a move to a new location and with a new process, we expect to be able to reduce the amount of hazardous waste we generate to about 50 pounds a month. What do we do about our EPA/State ID Number?

A First, you will need to cancel your old location EPA/State ID Number by completing a Notification of Dangerous Waste Activities (Form 2) following the instructions for cancellation. Include the date your hazardous waste activities ceased. You are required to complete an Annual Dangerous Waste Report (Form 4) for the year your EPA/State ID Number was active at this site.

If you do not generate more than 220 pounds of waste in a month, or accumulate at any time more than this amount, you are not required to get an EPA/State ID Number (though you may want to get one as a SQG). This would mean that if you generate 50 pounds of waste a month, you will have to have your waste disposed of before you accumulate 220 pounds or more.

It's important to note that if you do generate or accumulate more than 220 pounds of waste, then you are required to get an EPA/State ID Number. PLEASE NOTE: It takes six to eight weeks to get an EPA/State ID Number, so plan ahead.

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

Shoptalk is produced by the Solid and Hazardous Waste (SHW) and Waste Reduction and Recycling (WRRLC) Programs, Washington State Department of Ecology.

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