HAZARDOUS WASTE Shoptalk

WASHINGTON STATE DEPARTMENT OF ECOLOGY

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Printers and Film Processors Come Into Focus

Ecology will ring in the new year by taking a close look at the printing and film processing industries.

During the course of the Automotive Shop Sweeps Campaign, representatives from the printing and film processing industries asked Ecology to work with them on our next single-industry campaign. We've taken them up on their offer! The Hazardous Waste and Toxics Reduction Program will lead a team that will work to identify and implement practical, environmentally protective options for businesses using printing and film processing technologies.

The "Snapshots" Printing and Film Processing Campaign is funded by an EPA pollution prevention grant. The multi-media approach of the project will cross Ecology program lines to include air and water quality in addition to solid and hazardous waste reduction and management. Representatives from local governments and industry trade associations will also play an important role. The goals of the project include:

✔Creating a partnership between Ecology, the printing and film processing industries and local governments so government can understand the daily reality of managing printing and film processing wastes. By participating as a project partner, the industries confirm their commitment to waste reduction and proper waste management.

✔Answering the question, "What prevents printers and film processors from meeting state waste reduction goals and complying with the regulations?"

✔Promoting economic fairness by demonstrating that minimizing pollution and properly managing wastes are profitable activities for all businesses.

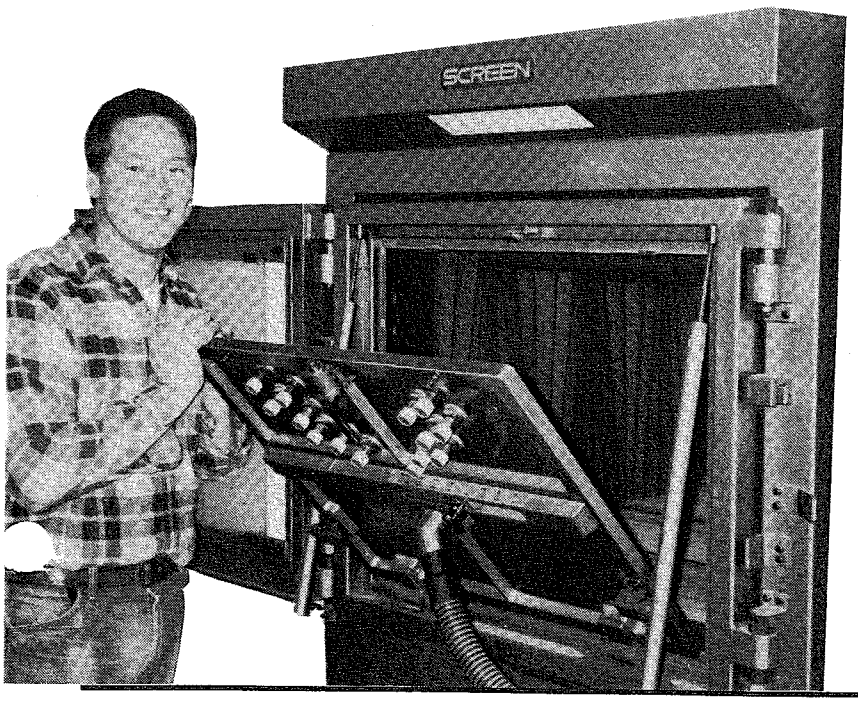
Ecology is working to make "Snapshots" a successful sequel to the Automotive Shop Sweeps Campaign. Our current plan includes:

✔ Inviting printing and film processing businesses, trade associations and local governments to help develop the scope of the campaign. This step will lead to a more realistic, practical and successful program.

✔ Educating printers and film processors about the problems associated with hazardous substance use and hazardous waste generation and management. By focusing on individual industries, Ecology and local governments work to be an information source for businesses who may lack the resources they need to prevent pollution and increase compliance.

✔ Emphasizing on-site visits to present pollution prevention and compliance assistance in a non-threatening, cooperative atmosphere. Informal on-site visits allow businesses to feel comfortable discussing their problems and concerns. This open line of communication makes it easier to find workable solutions.

A group will meet in early 1994 to set the path for this initiative. "Snapshots" visits to businesses such as lithographers, screen printers and mini labs are tentatively scheduled to begin in September of 1994. For more information, contact Darin Rice of Ecology's Hazardous Waste and Toxics Reduction Program at (206) 407-6743.



Bob Wibbels double checks his camera at Line 'n Tone LithoTrade Service in Lacey. Printers and film processing businesses will be the focus of "Snapshots" visits beginning in September, 1994.

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Protect Investments With Secondary Containment

Has a hazardous waste specialist or product vendor ever talked to you about secondary containment? These words can conjure up visions of an expensive construction project, but it doesn't have to be that way.

What Is It?
Secondary containment is simply a container for your containers, put in place to collect leaks and spills. It protects your property, pocketbook and employees from spills of hazardous waste. Secondary containment can pay for itself by saving you the clean up costs associated with even one accident. And for many generators, secondary containment is required.

Who Needs It?
If you are a large or medium quantity generator and established a hazardous waste container storage area after September 30, 1986 you must have a secondary containment system. In addition, Ecology may require you to provide containment for areas established before September 30, 1986, or at satellite accumulation areas. As with any rules, there are some special cases. If your wastes have no free liquids, and are not ignitable or reactive, you don't need to have secondary containment as long as the drums are not in contact with standing water or snow drifts.

What Kind of Containment is Right for You?
Secondary containment ranges from simple to complicated. It is most important that your secondary containment system meets your needs along with some Ecology guidelines:

✔ Build the storage area to keep out rain and snow, or build it to hold the volume of a 25-year storm.

✔ Ensure that the wastes you store will not be able to penetrate the base or floor of the system. Sealed concrete and impervious plastic work well. Asphalt does not. There should be no cracks or unsealed joints.

✔ Make sure the system can hold 10% of the volume of each container or the entire volume of the largest container, whichever is more.

✔ Prevent water, such as storm water from a parking lot, from entering the containment. Careful layout, sloping or elevating the containment area above grade usually works.

What Else Do I Need To Know?
There are other practical considerations to take into account when deciding what kind of containment system is best for you:

✔ Is it in a place that you can inspect regularly?

✔ Is the out of the way of storm drains, equipment or passers by?

✔ Does the containment system have enough capacity to handle your wastes for your planned business growth? Can it be designed smaller to account for waste reduction goals?

✔ Have you considered containment for product storage? Although not required by the Dangerous Waste Regulations, clean up costs can be the same whether the spilled material is a product or a waste.

✔ Have you checked with your local fire and building code specialists? They may have their own requirements.

Look around your business. You may find perfectly suitable places and materials that you can use for hazardous waste containment. A secondary containment system is possible, and will complement your business.

Shop Towel Review

- Submitted by Ron Stoppler and John Vande Bossche, Scott Paper Company

Paper wipers and cloth towels both have their advantages, and the Dangerous Waste Regulations address them differently. Consequently, facilities often ask how they should manage and dispose of the shop towels they use for applying and removing hazardous solvents.

Since paper wipers are not contaminated from prior use, they work well when you need to make sure the wiper is free from grit, metal shavings or oil and grease residue. Paper wipers are also safe because they will tear and release if they get caught in machinery.

Cloth wipers, damp with hazardous solvent, are currently exempt from the Dangerous Waste Regulations when handled according to Best Management Practices. Facilities using cloth shop towels hire an industrial laundry to remove the hazardous solvent from the cloth. The industrial laundry appropriately treats the hazardous material, or sends it off-site for disposal as a dangerous waste.

Ecology recommends these Best Management Practices for contaminated paper wipers and cloth towels:
✔ Wring out any extra liquid into a distillation unit or solvent disposal drum.
✔ Store solvent-contaminated shop towels in a sealed, fireproof container labeled "contaminated shop towels".

When the container is full or has reached its 90/180-day expiration date:
✔ Send the reusable contaminated cloth towels to an industrial laundry. Make sure the laundry meets the dangerous waste disposal requirements.
✔ Send used contaminated paper wipers to a permitted disposal facility.

Ecology's *Used Shop Towel Focus Sheet* will help further explain how to best manage your used shop towels. To receive a free copy, call the Bookshelf phone number listed on page 3.

Bookshelf

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

Focus: Used Shop Towels (92-116) Guidance on ways to handle shop towels that become contaminated with hazardous solvents.

Focus: Pollution Prevention Planning Requirements (92-117) An outline for Hazardous Waste Pollution Prevention Plans that includes information on who must prepare a plan, what information to submit, when plans are due, and how to get questions answered.

Focus: Industrial Storm Water General Permit (93-015) Application guidelines for Storm Water General Permits describing the permit requirements and application process,as well as contact information.

Focus: Hazardous Waste Reduction Act (91-111) An overview of the goals and programs put in place by the Hazardous Waste Reduction Act covering Hazardous Waste Pollution Prevention Plans, the Hazardous Waste Education Fee, business and industry technical assistance, and local government grants.

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

Complete Your *Shoptalk* Library

The following issues are available:

1993
Winter It's Annual Report Time
Spring A Break for those Recycling Antifreeze
Summer On-site Treatement of Wastes Encouraged
Autumn Choosing a Safety Coordinator

1992
Spring Paint: A Common Waste Stream
Summer Tracking Your Waste

1991
Autumn Sewers and Hazardous Waste Don't Mix

Pollution Prevention through Water Conservation

Your facility can make great strides toward reducing pollution by incorporating water conservation strategies into your business operations. Conserving water can add up to huge cost savings, often with little capital investment.

Conserving water through reduction, reuse or recycling has a number of advantages. Reduced utility costs, less raw material use and lower sewer discharge fees are some obvious cost savings. Less obvious benefits of water conservation include lower use of treatment chemicals and reduced sludge generation.

For example, in the original process used by a small electronic component manufacturer, components were plunged into rinse tanks after they went through the plating baths. The rinse water flowed independently to each tank, drained into a sump, and then was pumped into a combined waste water treatment system. There, caustic soda was added to neutralize and settle out any heavy metals. No flow controls existed for the system, and the initial flow rate was 33 gallons per minute. By making a few changes, the flow of waste water into the treatment system was cut to 12 gallons per minute - a reduction of 64 percent.

To conserve water and improve rinsing, employees increased the amount of time parts stayed over the plating bath. This change decreased the amount of plating material carried over into the rinse tanks. They also added a plug with a small hole drilled in it to restrict the amount of water running into the rinse tanks. After six months, the production manager noted the following results:

✔ Lower water and sewer bills.

✔ Reduced pumping, mixing and filter press operation cut electric bills.

✔ Less caustic soda was used because it took fewer chemicals to adjust the pH for the lower waste water volume. Operators could refill the caustic tank less often, reducing the health risks associated with chemical exposure.

✔ Less sludge with a higher metal content. The higher metal concentration made the sludge better suited for reclamation, potentially reducing disposal costs.

✔ Improved treatment efficiency and reduced metals in the effluent.

✔ Excess chemicals dripped back into the plating baths rather than being washed away by the rinse tanks.

The total capital investment for these changes: **less than $100**.

Your facility would likely experience the same benefits from the many advantages offered by a water conservation program. Great savings can result from optimizing your treatment system as you reduce your water use. If you don't have a pre-treatment system, your efforts will help your community sewer treatment plant.

Toxics reduction staff in the regional offices can offer you more information on how to incorporate water conservation into your business practices. Tiffany Yelton of Ecology's Water Resources Program is available to answer your questions as well. She can be reached at (206) 407-6645.

A.S.A Spokane and Ecology Sponsor Exhibition

Bring your dirty parts and equipment to the Alternative Solvents Exhibition for the Vehicle Maintenance Industry to be held at Spokane Community College on February 15 from 4:00 p.m. - 8:00 p.m. Vendors and repair shop owners will be on hand to give information on the cleaning capabilities of less toxic chemicals. For more information call (509) 456-2876.

Case Study: *Materials Planning Reduces Waste*

Heath Tecna Aerospace Company, located in Kent, manufactures aerospace composite parts, such as the overhead bins on passenger airplanes. Because the facility builds parts to stringent federal standards, it cannot use most materials after their official shelf-life has expired.

Heath Tecna's battles with high waste disposal costs, high purchasing costs, and general headaches from excess material purchases prompted employees to start a materials management team. Their goal was to find opportunities to reduce purchases and minimize waste.

The team suggested a Purchase for Demand strategy to limit overstocking. They also proposed a plan to train purchasing agents on disposal costs, Just-In-Time Purchasing, and Manufacturing Resource Planning to control short- and long-term purchasing.

Employees found they could maximize substance use without jeopardizing the quality of the components by reducing the variety of materials used in the manufacturing process. Some products were replaced by more commonly available alternatives. Others were cross-certified for multiple uses. In-house recycling in non-production operations such as maintenance, tooling and labs saved additional materials from disposal.

The team also identified businesses, vocational schools, and other local groups who did not have to meet stringent market specifications, and who were willing to purchase the remaining products or accept them as a donation.

Purchasing and inventory control are key components in the pollution prevention effort at Heath Tecna Aerospace. Roy Chandler, Safety and Environmental Manager for Heath Tecna Aerospace, sums it up this way: "Communication eliminates waste!" By improving the purchasing process, Heath Tecna Aerospace reduced costs while increasing environmental protection.

Reducing Waste Water Decreases Energy Use

A recirculating pump was proposed for a milk plant in Moses Lake which uses city water to operate the centrifuge that separates cream from whole milk. The pump reduced the amount of water discharged to the sewer by 120 gallons per hour. Although adding the pump increased energy use at the plant, the lower pumping requirements from deep city wells reduced regional electrical consumption. Water consumption and sewer charges also decreased substantially.

Many similar win-win situations for waste water and energy can be found by calling the Electric Ideas Clearinghouse at 1-800-872-3568.

Pollution Prevention Plans Compared

Many Washington businesses are reducing stormwater and hazardous waste pollution by preparing pollution prevention plans. Hazardous Waste Pollution Prevention Plans emphasize reduction of hazardous substance use, and aim to cut in half the amount of hazardous waste generated by all businesses by 1995. Storm Water Pollution Prevention Plans help industrial facilities reduce pollution from storm water run-off. The following table gives an overview of some of the requirements for both planning processes.

	Stormwater Pollution Prevention Plans	Hazardous Waste Pollution Prevention Plans
Ecology Program	Water Quality	Hazardous Waste and Toxics Reduction
Involved Businesses	* Manufacturing companies * Mining operations * Treatment, storage, and disposal facilities * Landfills * Recycling businesses * Steam power plants * Transportation companies * Sewage treatment plants	* Businesses generating more than 2640 lbs of hazardous waste per year. * All hazardous substance users subject to SARA Title III, section 313. * Treatment, storage and disposal facilities and recycling businesses excluded.
Plan Contents	Facilities identify existing and potential sources of storm water pollution and list ways to prevent and/or treat it.	Facilities develop plans to reduce toxic substance use and hazardous waste generation by giving first priority to source reduction, then recycling, and finally treatment.
Businesses Notified	December, 1992	Beginning in 1991
Plans Completed	November, 1993	Beginning in 1992
Implementation Required	Yes, by November 1994 for most facilities	Voluntary

Some of the information gathered for your Hazardous Waste Pollution Prevention Plan can be used in your Storm Water Pollution Prevention Plan. Ecology staff are available to help you make the connection. Forward questions about Storm Water Pollution Prevention Plans to Glenn Pieritz at (206) 407-6436. Regional toxics reduction staff in the Hazardous Waste and Toxics Reduction Program can answer questions about Hazardous Waste Pollution Prevention Plans.

Washington Company Wins Environmental Award

The McGregor Company's facility in southeast Washington recently received the National Environmental Respect Award sponsored by DuPont Agricultural Products.

The Environmental Respect Award Program honors agricultural chemical dealers who operate with excellence in environmental stewardship. Since the award program began in 1989, The McGregor Company has won four statewide and two regional awards in addition to the national award.

The McGregor facility was built at the site of an abandoned canning factory that had become a hazard to the nearby community of Waitsburg. The facility design includes containment to capture rinse waters, wash waters, and rainfall for reuse in making agricultural chemicals. Employees work to carry the company motto of "Every Drop Counts!" throughout the entire operation.

National recognition comes as a result of a long-term effort to instill positive attitudes toward the environment throughout the company. The McGregor Company's President, Alex McGregor, explains, "We've kept making upgrades year after year, and we devote a great deal of time to training and educating our personnel about the need to practice environmental stewardship in daily operations."

The company is a pioneer of recycling plastic pesticide containers, and offers refillable pesticide containers as well. Employees invest a lot of time talking with farmers and others on appropriate product use and proper waste management. All activities carry a strong pollution prevention message. These efforts have paid off by increasing the efficiency of facility operations, preventing costly pollution, maintaining compliance, and building respect and trust within the community.

Ecology employees from many programs offer help for these projects. Alex McGregor emphasizes, "An ongoing working relationship with Ecology . . . is important to us. The key for us is to maintain a positive commitment to environmental stewardship."

Accumulation Areas Defined

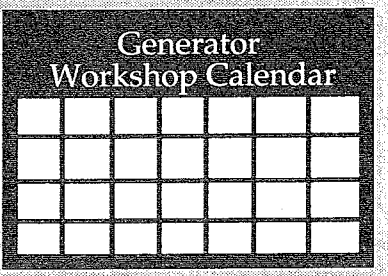
Do you know the difference between a satellite accumulation area and a 90/180-day accumulation area?

A satellite accumulation area is a location at, or near, any point of generation where hazardous waste is first collected in containers during routine operations. The area must either be supervised by the operator of the process generating the waste, or be secured at all times to prevent improper additions of waste into the satellite containers. Separate areas must be maintained for each wastestream. No more than 55 gallons of a hazardous waste or one quart of an acutely hazardous waste can be collected in a satellite accumulation area. Once these limits have been met, the waste must be dated with the accumulation start date and moved within 3 days to the 90/180 day accumulation area.

The 90/180-day accumulation area is a location where hazardous waste is collected before it is recycled or manifested to a permitted treatment, storage, or disposal facility. The area must be used only to collect waste generated by the facility. Large quantity generators may accumulate waste for up to 90 days from the time the waste was generated. Medium quantity generators may accumulate waste for up to 180 days.

A regional hazardous waste specialist can answer any further questions about the standards for hazardous waste accumulation.

Generator Workshop Calendar



Ecology regional offices have planned workshops to provide compliance information to hazardous waste generators. All workshops are free except where noted. Call the contact numbers listed below for reservations and more information.

Northwest Region - (206) 649-7014
Port Orchard, January 21, 1:00 p.m. - 5:00p.m.; **Mount Vernon**, February 1, 2:00 p.m. - 5:00 p.m.; **Kent**, February 3, 1:00 p.m. - 4:00 p.m.

Eastern Region - (509) 456-2876
Spokane, January 25, 9 a.m. - 1 p.m.; **Pasco**, January 26, 9 a.m. - 1 p.m.

Central Region - (509) 457-7142
Workshop time 6 :00 p.m. - 9:00 p.m. unless otherwise noted:
Yakima, January 27, 9:00 a.m. - 1:00 p.m.; **Goldendale**, February 2; **East Wenatchee**, February 8; **Okanogan**, February 9

Southwest Region - (206) 586-4044
Small Quantity Generators Only, 6:30 p.m. - 9:00 p.m.: **Port Angeles**, January 24; **Vancouver**, January 31; **Tacoma**, February 3; **Olympia**, February 10. ***Pre-registration is encouraged for these sessions.***
Large and Medium Quantity Generators, 7:30 a.m. - 6:00 p.m.: **Port Angeles**, January 25; **Vancouver**, February 1; **Tacoma**, February 4; **Olympia**, February 11. ***Fee: $35.00. Pre-registration is required. Number of participants is limited.***

Questions and Answers

Q The transporter I hired to remove hazardous waste from my facility will also fill out the manifest and prepare the waste for transport. Am I responsible if he makes a mistake?

A Yes. You as the generator are ultimately responsible for the proper management and disposal of your hazardous waste. You are liable for mistakes or omissions made by handlers when they act on your behalf. To avoid future complications, become informed now on your waste management and disposal responsibilities.

✔ Know the process for designating your waste.

✔ Keep all information collected to designate and ship your waste in a safe, accessible place at your facility. Make sure this information is complete and up-to-date.

✔ Double check the manifest before you sign it. Make sure it is accurate and complete.

✔ Be there when the waste is labeled, packaged and placarded in preparation for transport.

Reporting Form Update

In the Autumn, 1993 issue we told you that in January 1994, new hazardous waste reporting forms would replace the existing Forms 4 and 5. Implementation of this change has been postponed to January, 1995 to give businesses more time to change their existing tracking systems.

Facilities will submit the existing Forms 4 and 5 for calender years 1993 and 1994. In January, 1995, reporters will collect the new data required for the revised forms. Facilities will use this information on the new forms filed in March, 1996.

Questions? Call Dan Kruger at (206) 407-6728.

Amnesty for Tank Owners

Many underground storage tank owners may not know that they are required to have a permit for each tank they have in service. If you are one of these owners, you have until March 1, 1994 to purchase permits for your tanks without being subject to penalties. In March, the amnesty period will end, and Ecology will once again assess fines for tanks that do not have permits.

The permit certifies that the owner monitors the tank for leaks and has insurance for potential environmental damage. This permit is not required for heating oil tanks and hazardous waste collection tanks. Call the Underground Storage Tank Unit of the Toxics Clean Up Program at (800) 826-7716 for more information.

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

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