HAZARDOUS WASTE

WASHINGTON STATE DEPARTMENT OF ECOLOGY

Shoptalk

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Businesses Report Less Toxic Releases

Pollution prevention efforts have resulted in a decrease in releases of potentially toxic chemicals in Washington State, according to Department of Ecology Director Mary Riveland. "We are pleased to announce a 20 percent decrease in toxic chemical releases in the past two years," Riveland said.

"A major factor in this decline has been the effort by industry to find better ways to operate without producing hazardous waste," she said. "The prevention of pollution is a continuing emphasis of the Department of Ecology. We are working to find new ways to help business and industry to not produce pollution in the first place."

The decrease was reported as part of the Toxic Releases Inventory information manufacturers give Ecology and the federal Environmental Protection Agency each year. The firms reported that 24.5 million pounds of potentially toxic chemicals were released in 1993 to the air, down 6 million pounds from 1991 and 19 million pounds from 1989. Most of the releases came during manufacturing operations and were permitted under the facilities' air and/or water discharge permits.

"We still have a long way to go, but businesses in our state are to be commended for moving in the right direction," Riveland said.

Pollution prevention efforts such as changing manufacturing processes and tightening up operating practices were major contributors to the drop in chemical releases, she noted. "Boeing is a good example of such efforts," Riveland said. "They were able to reduce releases by more than 600,000 pounds since 1991 by such action as using new cleaning systems to cut solvent vapors and new technology painting systems to reduce emissions which contributed to smog formation."

Smaller businesses can also successfully use pollution prevention techniques. For example, **TC Systems**, an Everett coatings firm with less than 100 employees, was able to reduce emissions by 48,000 pounds in 1993. The firm replaced a vapor degreaser with an aqueous parts washer, switched to a water based paint primer and a citrus based cleaner, redesigned a paint stripping process and used a new waste water pre-treatment process.

Coupled with these efforts to reduce pollution is a growing trend by businesses to reuse and make products out of what used to be waste, Riveland said. A survey by the Clean Washington Center shows positive growth in end use markets for recycled materials. Almost 300 Washington companies use recycled glass, paper, yard waste, tires, plastics, oil and other used materials in their manufacturing.

Chemicals released to the air, water, and land include: ammonia, methanol, hydrochloric acid, acetone, methyl ethyl ketone, hydrogen fluoride, toluene, styrene, chloroform and xylene. Twenty manufacturing facilities in the state are responsible for nearly 70% of the total releases. Industries usually included in the list of companies causing the most releases are: pulp and paper operations, metals manufacturing such as aluminum processing facilities, chemical manufacturing such as petroleum or agricultural products, and transportation equipment manufacturing.

Ecology Director Mary Riveland confers with TC Systems Inc. General Manager Fred Owens and Environmental Manager Kim Rodman.

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New 1995 Annual Report Forms Have Arrived

New 1995 Dangerous Waste Annual Reports were sent out with 1994 reports. The new forms will ensure that Ecology collects information according to federal requirements.

If you have an active EPA/ State ID number and have not received your copies of the annual report forms, call (360) 407-6736.

Ecology thanks all who helped develop and test the forms: representatives from waste management facilities, regulated businesses and environmental groups.

✔ Read the new 1995 forms carefully. Notice the new reporting requirements and make sure to collect the right information. Refer to the checklist at right.

✔ Save your copy of the 1995 report forms. You will not automatically receive additional copies at the end of 1995.

✔ Submit your reports on the appropriate due date according to the schedule below:

Reporting Preparations Checklist

Complete the following tasks right away so that you can collect the correct information for your 1995 Dangerous Waste Annual Report.

- ☐ Read the 1995 Dangerous Waste Annual Report (Book 1: Forms and Instructions & Book 2: Guidebook and Codes)
- ☐ Verify your Generator Status (Complete Worksheet #1, Book 1, p. 7)
- ☐ Find out which forms you need to complete (Fill out Worksheet #2, Book 1, p. 10)
- ☐ Learn how to identify your "Waste Streams" (Review *Helpful Hints*, Book 1, p. 24)
- ☐ For each Waste Stream, begin tracking New Coded Information. Use Book 2:
  - Source Codes (p. 39)
  - Form Codes (pp 40-41)
  - Origin Codes (p. 42)
  - System Codes (pp 43-44)
- ☐ If you need assistance, call the Annual Reporting Helpline at 1-800-874-2022.

When to Use the New Report Forms

For reporting year **1994** (1/1/94 - 12/31/94)	Use the **Old Form** (Form 4)	Your report is due **March 1, 1995**
For reporting year **1995** (1/1/95 - 12/31/95)	Use the **New Forms** (Book 1 and Book 2)	Your report is due **March 1, 1996**

Winners Wanted

Are you winning through Pollution Prevention? If your business has demonstrated the value of pollution prevention you may be a winner of the **1995 Governors Award for Pollution Prevention**

Businesses, government facilities and organizations may apply for these prestigious competitive awards by submitting applications through **April 28, 1995**. Apply according to your category:

- ✔ Small Business
- ✔ Medium Business
- ✔ Large Business
- ✔ Government Facility

All Washington based businesses are eligible. Winners will be honored with plaques presented at a special ceremony. Ecology will promote their successes and achievements through its publications.

To receive your copy of the application instructions please contact Bert Ponton at (360) 407-6752.

Dangerous Waste Regulatory Reform Project

Throughout the past year Ecology met with an external advisory group to review some of the state-only requirements of the Dangerous Waste Regulations. The goals of the group were to:

✔ Simplify the rules while retaining environmental protection

✔ Ensure that management standards for waste are commensurate with the risk of the waste

✔ Ensure that current science is used to designate wastes

✔ Make the rules more cost effective

✔ Enhance pollution prevention where possible.

This first part of the Dangerous Waste Regulatory Reform Project was completed in November of 1994. Ecology is considering recommendations for rule changes and management changes in certain areas. The recommendations being considered would affect :

- ✔ state toxicity criteria
- ✔ state carcinogenicity criteria
- ✔ exclusions
- ✔ special waste
- ✔ solid corrosives
- ✔ the petition process
- ✔ accumulation standards

The second phase of the Regulatory Reform Project will be to develop and propose rule amendments that will accomplish the goals of the project. Draft rule language will be developed based on the recommendations. The draft will be available for public comment this spring.

Public hearings on these proposed rule amendments will be held statewide this June.

Your comments and questions will be welcome. To be put on a mailing list to receive information about this project contact Bert Ponton at (360) 407-6752.

Bookshelf

These materials are available from Ecology. To order call 1-800-633-7585 or (360) 407-6752

Washington State Hazardous Waste Plan 1994 Update, (94-143.) This report tracks progress in hazardous waste management. The update examines state plan recommendations and their implementation. It provides examples of future projects and a work schedule through 1995.

Hazardous Waste Services Directory, (91-12s). New list of businesses which can help you recycle, identify, quantify, and describe any hazardous waste generated; waste management services businesses are also included. This is a partial list, and is not meant to constitute a recommendation.

Step by Step: Fact Sheets for Hazardous Waste Generators
Glossary and ten easy to use fact sheets to answer your hazardous waste management questions.

Floor Drains and Generator Liability (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.

On-Site Distillation: A Guide for Choosing and Operating an On-Site Distillation Unit (94-31) Outlines some important points to consider when choosing and operating a distillation unit to reclaim solvent waste.

Regulation of Dangerous Wastes Being Recycled, Revised 2/94,(91-46)
Guide to help in understanding the regulations.

Reduction Opportunities and Vendors Databases

Ecology's Hazardous Waste and Toxics Reduction staff have been developing computer databases as technical assistance tools. The two new databases can help companies find and incorporate pollution prevention opportunities in their facilitiy processes. For information from these databases, contact your regional toxics reduction staff at the office listed on page 6.

Vendors

The Vendors Database was developed to help businesses find vendors to fulfill their pollution prevention needs.

This system identifies the distributors that provide various pollution prevention related products and services. The list is not an Ecology endorsement of the vendors or their services.

Reduction Opportunities

Since 1992 planning facilities have identified reduction, recycling and treatment opportunities in their pollution prevention plans. These opportunities have been compiled into a database or list of ideas and projects being considered and implemented statewide.

The database allows quick access to a list of over 400 pollution prevention opportunities. As more than 600 facilities continue to report, their experiences should be entered in the database.

When a relevant term (such as "Painting") is selected from the menu ,the program displays all data available on the process. Staff can get a computer display or printout of specific opportunities, narrowed down to processes and subprocesses.

Regional staff can use these databases to help answer your technical questions.

Spokane Waste Expo

This April 19 plan to attend the 1995 Inland Northwest Pollution Prevention and Waste Management Expo and trade fair. Businesses will share their successes in reducing waste and pollution and the Expo will showcase advances in pollution control technology.

The Expo will be held at the Spokane Ag. Trade Center. There will be exhibits and informative talks with industry-specific panels plus the introduction of the new Green Star program. The Expo is sponsored by the Associated Industries of the Inland Northwest and the Department of Ecology. For more information call Associated Industries at (509) 326-6885, or Ecology at (509) 456-6369.

Shoptalk Mailing List Change Form

Please make the following changes:

✔ Remove me from your mailing list ☐

✔ Add me to your mailing list ☐

Name:_____

Business: _____

Nine digit Revenue Code: _ _ _-_ _ _-_ _ _

Address: _____

City: ..... State: _ _ Zip: _ _ _ _ _ -_ _ _ _

Mail to address on reverse side.

Case Study: *Lamson Products Drops to Small Quantity Generator Status*

Lamson Products, Inc. is a Redmond manufacturer of fly fishing reels which has managed to reduce its hazardous waste generation by 95%. Lamson wrote a pollution prevention plan in 1993, and implemented opportunities right away. Through this work, the company eliminated enough waste to become a small quantity generator, thus avoiding the state planning and annual reporting requirements.

According to John Harder, Lamson's environmental manager, "Once I realized how much we were spending a year on waste disposal, I was determined to eliminate that expense."

Lamson reduced waste and saved an estimated $10,000 - $15,000 per year by using a new, non-chlorinated coolant product for computer numeric controlled mills and lathes. The used coolant is recycled through an outside vendor.

It was a challenge for Lamson to apply this success to the screw machines since most of the non-chlorinated cutting oils contain sulfur which is incompatible with the bronze bushings in the screw machines. Lamson found a good substitute and is pleased with the results.

John Harder believes that, "Pollution prevention is in our best interest, because demand for Lamson's product (fishing reels) depends on having and maintaining a high-quality environment." Lamson is also working to reduce solvent use and is trying to find an alternative to its solvent-based parts washing system. The company has eliminated 40,000 pounds of waste per year and want to reduce even more.

For specific information call Ecology's Christa Boedigheimer at (206) 649-7000.

Pollution Prevention Networks

A Network is a group of people from business, industry, public agencies, and the general public. They are dedicated to preventing pollution by learning and sharing information about waste reduction and resolving waste management issues. You can participate in a network, and:

- ✔ Keep informed about environmental regulations
- ✔ Meet others and share information and resources
- ✔ Learn of pollution prevention techniques & opportunities
- ✔ Help provide educational opportunities to the community

Get involved by calling the Network nearest you:

- Pollution Prevention Network:
  Yakima, Max Linden (509) 454-7207
- Southwest Pollution Prevention Network:
  Kelso/Longview/Vancouver, Patricia Jatczak (360) 407-6354
- Northwest Waste Information Network:
  Puget Sound Area, Alice Rice (206) 689-3058
- Pollution Prevention Network:
  Inland Northwest Camille Frensdorf (509) 456-6369

Dentists Surveyed in Eastern Washington

More then 50% of Eastern Washington dentists responded to a Department of Ecology survey about the type and amounts of wastes they generate. Ecology will use the results to provide dentists with technical assistance to help them meet hazardous waste and sewer discharge regulations. The Spokane Dental Association and Washington State Department of Health provided Ecology with generous assistance.

Silver, mercury and other heavy metal wastes are generated by dentists.

According to the survey 99% percent of Eastern Washington dentists develop their own x-ray film, while 85% separate film from the developer solution. The amount of x-ray fixer waste generated each month is 1-2 gallons for 40% of respondents and more than 2 gallons for 30% of the respondents.

Sixty-five percent of the Eastside dentists who responded dispose of x-ray fixer down the drain, fewer than 25% store waste fixer. Twenty-five percent of the dentists recover or recycle their silver solution. Forty-five percent of dentists who responded separate amalgams, but less then 5% could name a recycler who could take these amalgams. Similarly only about 6% of the dentists could name a silver recycler.

Ninety-five percent of the dentists have material safety data sheets for their chemicals and almost all respondents indicate they want Ecology to provide them with more information about waste management.

This survey was put together by an Eastern Washington University Marketing Intern. The dentists surveyed were very cooperative, and Ecology looks forward to working together to meet their needs.

Distillation Unit Users Need MSDSs

Since distillation is a form of recycling, Ecology encourages the proper use of on site distillation stills as a way to recycle and reduce waste. The Washington Industrial Safety and Health Administration (WISHA) requires that facilities keep a material safety data sheet (MSDS) for both the materials going into and the recycled product coming out of the still.

Lacquer, paint thinner or parts cleaning solvents can be reused after distillation. These materials are made of a mixture of different chemicals. If you are distilling a mixture-type material you must either test the recycled product to determine its make up, or prepare a MSDS for the product. To prepare a MSDS, first look at each MSDS for the original products used. Then, take a blank MSDS form and enter the ranges for the products in whatever you are distilling. The ranges usually add up to well over 100%, with an upper range of about 150%. This is acceptable to WISHA.

Things to do:

- ✔ Keep the MSDS on hand. It will identify the recycled product from your still if you keep the batch uncontaminated.
- ✔ Do not contaminate your batch. If you distill more then one mixture with the distillation unit be sure to use a new collection can for each batch of recycled product.
- ✔ Segregate the collection cans. If you change the material that goes through the still without moving the collection bucket the product must be tested and an individual MSDS provided.
- ✔ Still bottoms from the distillation process are dangerous wastes and must be managed appropriately.
- ✔ Be sure to check with your local Fire Marshal about permit requirements for using a distillation unit.

(Stills Continued:)

The Washington State Fire Chiefs Association has invited Ecology and King County/Metro to work together on a balanced approach to set still standards which meet the fire code.

A technical report entitled *Solvent Stills for Small Shops* is available to businesses in King County. You can order a free copy of the September 1994 report by calling the Local Hazardous Waste Management Program in King County at (206) 296-3976.

To order Ecology's *On-Site Distillation: A Guide for Choosing and Operating an On-Site Distillation Unit*, please see Bookshelf on p.3.

Pesticide Users

New Secondary Containment Guides are now available, to order a copy see instructions on **Bookshelf**, p.3.

Reducing and Managing Wastes from Catch Basins, (94-186.)
Identifies typical contaminated sediments that may be regulated, how to tell if the sediments are regulated, options for eliminating sump wastes, and requirements for disposal of sediments.

Spill Reporting and Cleanup in Washington State, (94-187.)
Guide for reporting and preventing pesticide spills.

Site Evaluation, (94-188.)
Conducting site evaluations to tell the suitability of a site for new containment facility construction. This may help business with: insurability, real estate transactions, bank loans and cleanup schedules.

Best Management Practices for Agricultural Chemicals, (94-189.)
Containing pesticide and fertilizer products, rinsates, and washwaters to prevent them from being spilled or released into the environment.

Hazardous Waste Generator Workshops

The Department of Ecology is hosting workshops to help hazardous waste generators learn about compliance issues. Attend to find out answers to compliance questions and to ensure that your business keeps within all guidelines and regulations..

Eastern Region:
Hazardous Waste Management - The Complete Course
Call Jan Brysden at (509) 456-2876 to preregister.

Spokane May 23, 8 am - 5 pm, Spokane Community College, 2000 N. Greene, Student Union Bldg., Big Foot and Sasquatch Rooms.

Tri Cities May 25, 8 am - 5 pm, Dept. Ecology, Hanford Project, 1319 W. 4th Ave., Kennewick Hearing Room

Southwest Region:
Compliance and Pollution Prevention Workshops
To register please call (360) 407-6257. Fee for workshops is **$35** which includes lunch.

Vancouver May 8, 8am - 5 pm 7:30 Registration; Red Lion Inn Workshop plus a **Resource Fair** where you can ask questions of representatives from agencies such as: labor and industries, water quality, environmental health, public utilities, and air pollution control.

Lacey May 16, 8 am - 5 pm, 7:30 Registration, Sawyer Hall near the Southwest Regional Office Bldg

Lacey May 18 (repeat of above)

Special Workshop May 17 (no fee) details will be provided with your registration materials for the other workshops.

Questions and Answers

Q When I reuse chicken droppings as a soil enhancer is this stuff a hazardous waste?

A No. Animal manures and agricultural crops returned to the soil as fertilizer are not regulated as hazardous wastes.

Q I have some wastes which could be valuable to someone out there. Is there anyway to let folks know they can have my waste if they come get it?

A Yes. You can list your wastes through the local Industrial Materials Exchange or The National Materials Exchange Network. The Industrial Materials Exchange (IMEX) is a free service to help businesses find markets for industrial by-products, surplus materials and wastes. IMEX matches waste generators with waste users. Catalogs of product offerings are prepared bimonthly. For more information call (206) 296-4899, or FAX (206) 296-3997.

The National Materials Exchange Network provides 24 hour information and computer links to a 10,500 item database. Call to list materials or to locate materials for use. Items offered for exchange include: waste by-products, off-spec, over-stock, obsolete, and damaged materials; used and virgin, solid and hazardous. Call Bob Smee at (509) 466-1532, for modem access dial (509) 466-1019.

Q Are Ecology publications listed on the "Bookshelf" free?

A Yes.

Inventory Reports Due March 1, 1995

Businesses that store hazardous chemicals must report annually to state and local governments under the federal Emergency Planning and Community Right-to-Know Act. Ecology mailed the Tier Two reporting forms to 3000 businesses in December. Reports for the 1994 reporting year are due on **March 1, 1995**.

Chemicals like ammonia and chlorine are classified as "Extremely hazardous chemicals" and are reportable when 500 pounds or less are stored. Chemicals like gasoline and bagged cement are reportable at 10,000 pounds. The reporting requirement applies to the maximum amount of a chemical stored at any time in 1994.

To find out if you should be reporting, for Tier Two reporting forms, or for hazardous chemical inventory report information, call 1-800-633-7585 or (360) 407-6893.

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) 649-7246
Lacey:	*(360) 407-6300*
Yakima:	(509) 454-7208
Spokane:	(509) 456-2926

The Department of Ecology is an equal opportunity agency and does not discriminate on the basis of race, creed, color, disability, age, religion, national origin, sex, marital status, disabled veteran's status, Vietnam Era veteran's status or sexual orientation.

If you have special accommodation needs or require this document in alternative format, please contact Dave DuBreuil at (360) 407-6721 (Voice) or (360) 407-6006 (TDD).

Shoptalk

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