

ShopTalk

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A quarterly
publication
of the Solid and
Hazardous Waste
Program

Sweeps Off and Running

The race is not over, but we can see the finish line. The race is to complete almost 1000 automotive shop sweep visits by the end of October. These sweeps are aimed at providing quick, basic hazardous waste management visits and useful educational materials to automotive repair shops state wide. The visits are also designed to give Ecology a better idea of what is really going on out there; the technology that is being used, the problems owners face and the mistakes they may be making.

There are many factors which make us feel that this effort has been successful, even before the final flurry of visits, analysis of checklists, and official reports.

Cooperative Project

Automotive trade associations and individual business members shared valuable knowledge about the industry and their operations, helped create and finance informational booklets, and advertised shop sweeps through their association newsletters.

Many county governments around the state, as part of their small quantity generator programs,

have conducted site visits. Seattle-Metro's hazardous waste program alone has visited over 300 auto repair shops. We find that working with the business community and local governments is a positive and effective way to reach common goals.

Shop Owners/Managers

Shop owners and managers have also helped to make the sweeps successful. They have taken time out of their busy business days to answer questions and show inspectors around the shop, even pointing out trouble spots themselves. We know this has been beneficial to both owners and inspectors.

Inspectors' Experiences

Ecology inspector Dave Saunders of the Southwest Region says he feels

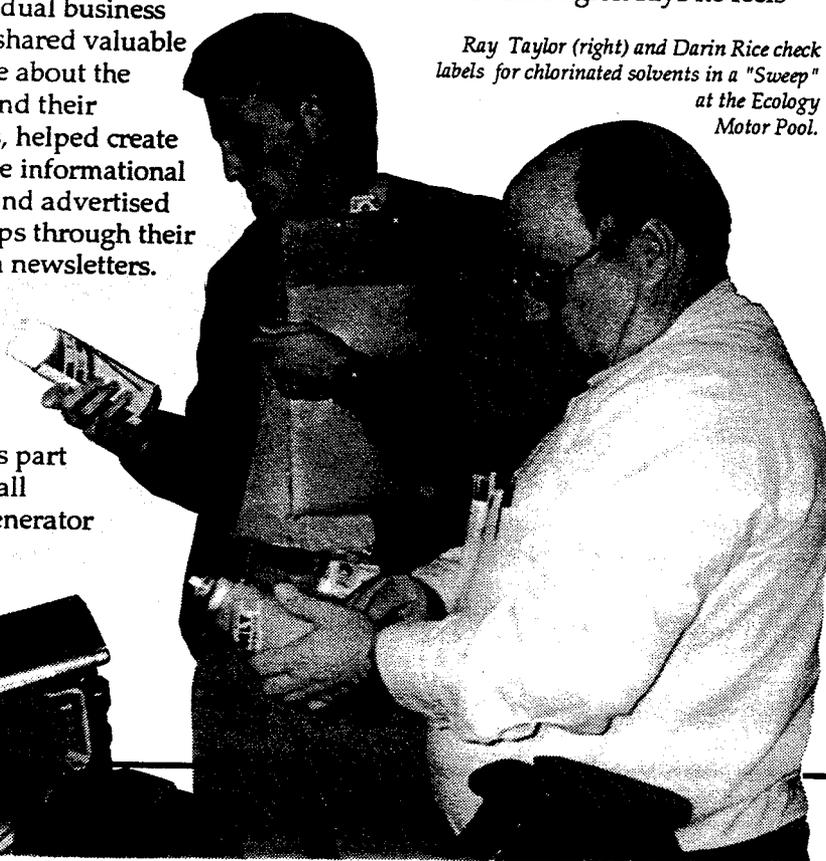
education is the most important and rewarding part of his job. The shop sweeps have allowed him to reach more business owners than his more routine inspection and office duties would allow.

Dave has found that almost everyone has problems with labeling hazardous waste containers and never fails to remind owners that besides being required, clearly labeled wastes can be a life saver for fire fighters responding to an emergency.

Central Region inspector Jerry French has found that the word is out about the sweep inspections. He reports that many shop owners have learned about the visits from the local paper, other owners or their trade association and are often ready with questions and a tour of the shop.

Jerry and other inspectors are finding that many of the shop floor drains lead to storm sewers or dry wells. This can allow wastes from the floor to contaminate ground or surface water. They recommend that the drains be closed off.

Ray Taylor (right) and Darin Rice check labels for chlorinated solvents in a "Sweep" at the Ecology Motor Pool.



Sweep visits will be conducted through October. If you would like a visit to your automotive repair shop or the informational booklet, call your regional office number on the back page.

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Recovering From Hazardous Waste Management Deficiencies: A Success Story

Robin Swanson

How does a company respond to an unfavorable regulatory inspection and a fine? Well a company like Johnson Matthey of Spokane, Washington, takes the bull by the horns and fixes the problems.

Johnson Matthey, an electronic materials and high purity metals manufacturer, found themselves with the sort of growing pains that sometimes result in self-inflicted wounds. While the company was caught up in phenomenal growth and meeting ever increasing customer requirements they found themselves struggling to keep abreast of the new and constantly changing regulatory requirements.

When the Department of Ecology found them lacking, the company set out to permanently solve the problems.

The first step was to form the Environmental Corrective Action Team (CAT) which consisted of representatives from production, personnel, maintenance, security, and the company's Environmental, Safety and Health Department, as well as outside consultants and assistance from Ecology. The team reviewed the list of deficiencies at weekly meetings and individual members took on the various tasks. Plans were written, training implemented, labeling updated, and so on. Two especially innovative and effective solutions from the CAT were systems for documentation and tracking of the hazardous waste.

One creative solution started with charting the facilities' waste streams. Using this information a system for documentation was devised which includes a "Hazardous Waste Profile Sheet" for each waste. These sheets are kept in production or satellite areas and include:

- ✓Who is responsible for assuring the waste is handled properly;
- ✓Where and how the waste is generated;
- ✓Frequency of generation and packing requirements;
- ✓Special handling procedures for the waste; and
- ✓A copy of a completed hazardous waste label.

Another solution is a system which tracks the movement of all wastes once they leave the satellite areas and enter the 90 day accumulation area. A personal computer is located in the accumulation area, as containers of waste arrive they are entered into a waste tracking program. Weekly print outs give their environmental department a chronological summary of which wastes are nearing the 90 day limit and will soon need to be shipped off-site.

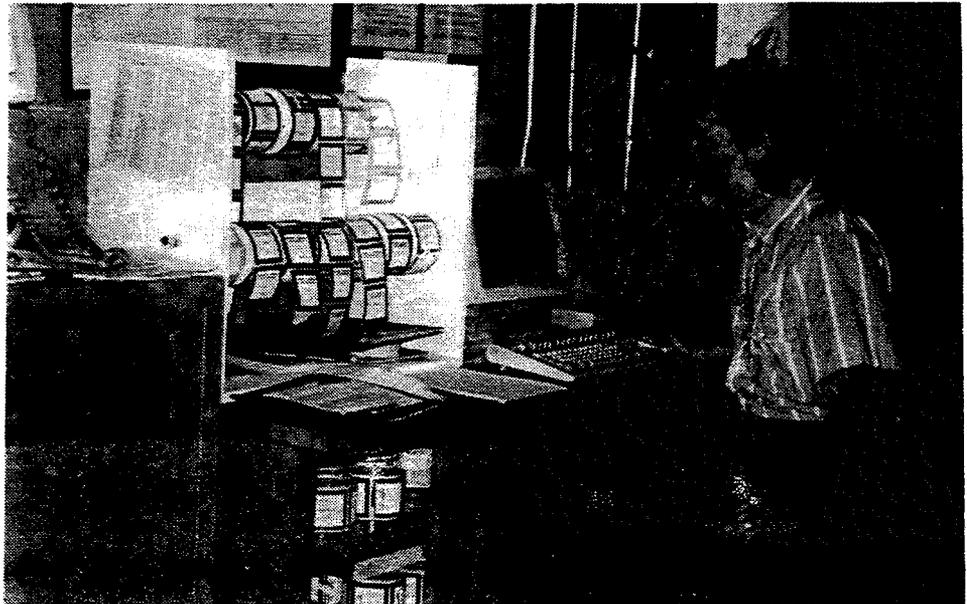
Johnson Matthey is proud of the progress they have made to date. They credit a change in company philosophy and overwhelming commitment on the part of production management for the development and maintenance of the programs required to properly manage the hazardous wastes.

Enforcement and Technical Assistance

Enforcement and assistance seem like opposite ends of the pole when you think about a regulatory agency like Ecology. Yet, often these two hats are worn by one person when they work with a business which has come up short in compliance with hazardous waste regulations.

Ecology inspectors cannot act as "consultants" to business or industry, but they routinely devote over half their time to assistance. Our staff are interested in answering questions and providing potential solutions to hazardous waste problems. Inspectors would rather help businesses prevent problems than tell someone they have been misinformed and are handling hazardous waste in an unsafe or illegal manner.

Ecology has 19 full time hazardous waste inspectors located across the state. Between July, 1992 and June, 1992 they inspected 300 generators and treatment storage and disposal facilities (TSDs). (These inspections are in addition to the 330 new notifier visits completed in the same period.) Numerous violations were found, but in all but 18 cases they were resolved without a penalty.



Ecology inspector Lynn Maser admires Johnson Matthey's new hazardous waste tracking station.

Ecology's Commitment to New Notifiers: An Update

In the Summer '91 Issue of Shoptalk, Ecology announced its "New Notifier Assistance Program" designed to help businesses learn about the complex web of state & federal hazardous waste requirements. Four hazardous waste inspectors were reassigned to provide education and assistance to newly regulated businesses. By July 1992, over 330 businesses had received on-site assistance. Hundreds of other businesses were reached through workshops, by telephone or targeted mailings.

Solid & Hazardous Waste Program Manager, Tom Eaton, announced in July, 1992 that the "New Notifier" positions would be Technical Assistance Officers under a bill passed by the Washington State Legislature (HB 2768). In announcing these positions, Eaton said "We accomplish our mission of preventing future superfund (cleanup) sites through the careful use of education, technical assistance, and enforcement. Your mission is to help businesses comply with the Dangerous Waste Regulations through voluntary means."

If your business received an ID number within the last several months, a Technical Assistance Officer will contact you to give you straight talk on how to manage hazardous wastes. Right now you may contact an assistance officer with questions or to schedule a site visit (contact numbers on back page):

- ✓ Dave Misko, Bellevue
- ✓ Dave Saunders, Tumwater
- ✓ Brian Dick, Yakima
- ✓ Jan Brzoska, Spokane

In a related development, Ecology recently received an EPA grant to expand its New Notifier Program. This will allow an additional new notifier inspector in the Northwest Region. Special attention will be given to providing assistance on waste reduction and recycling.

Reformatted Regulations

The State Dangerous Waste Regulations, Chapter 173-303 WAC are now available in a new format. The reformatted regulations contain the same text and requirements as the official version from the Code Revisor, but are designed to be easier to read. They also contain a table of contents, index and subheadings. You can obtain a copy of the regulations in the new format by calling (206) 438-7738. There is a \$10.00 fee. The official version is still available at no charge.



Waste Expo '92

The fourth annual Northwest Waste Information EXPO is scheduled for November 17 and 18 at the Seattle Center Exhibition Hall. Partially funded by Ecology, it is the largest business and environmental event in the Northwest. Over 1,500 business and government professionals are expected to attend this year. The EXPO has information for managing and reducing solid and hazardous wastes at one location.

Save time and money by quickly learning which regulations apply to you and what to do about them. Special features of the EXPO include:

- ✓ 47 seminars for many industries and special topics
- ✓ HazWaste "Basics" program
- ✓ 100 exhibit booths

The cost is only \$25 to preregister or \$35 at the door with reduced cost for additional people from the same firm. For an event brochure or for more information call (206) 728-5149.

Sweep, Site Visit, or Inspection?

This issue refers to three types of visits or inspections by Ecology hazardous waste staff: the informal, informational "sweep" visits of our automotive campaign, new notifier site visits, and regulatory compliance inspections. We want you to know how, through these activities, the Solid and Hazardous Waste Program provides education and technical assistance to generators.

Providing this assistance to hazardous waste generators is a vital part of the Solid and Hazardous Waste Program's strategy to achieve voluntary compliance with hazardous waste regulations.

We are pleased with the increasing role of education and technical assistance in the Solid and Hazardous Waste Program and want you to know that your tax dollars and waste fees are being used in this way.

Spill Reporting Rule Change

The spills notification portion of the Dangerous Waste Regulations (WAC 173-303-145) has been amended to return to the spill reporting requirements in effect before April 1991. Now, only spills which pose a threat to human health and the environment must be reported. However, cleanup of any spill or discharge is required. The rule applies to any person responsible for a spill or discharge of a dangerous waste or hazardous substance.

For guidance on the reporting requirements, request *FOCUS: Spills Notification Rule Amended* or contact a hazardous waste specialist at your regional Ecology office. The numbers are on the back page.

To report spills call your nearest Ecology regional office. To report an environmental EMERGENCY call the 24 Hour Spill Number, 1-800-258-5990.

Upcoming Events

November 4

December 16

Pollution Prevention Network - Southwest Wa. Meets every six weeks. Patricia Jatzak (206) 753-2996

November 17 & 18

Waste Information Expo (206) 728-5149

January '93

Workshops for help with annual dangerous waste reports. Look for info in Form 4/5 packets in December.

Resource Center

These materials are available from the Waste Reduction, Recycling and Litter Control Program Resource Center (206) 438-7585:

Practical Approaches to Laboratory Waste Management, May 1992. A teleconference by the American Chemical Society on the proper management of laboratory wastes (based on EPA requirements); video or speaker's notes.

Managing Hazardous Waste, June 1992. Booklets available for: automotive repair, body, machine, transmission, and radiator shops; auto and tire dealers; and service stations.

Considerations in Selecting a Still for On-Site Recycling. A fact sheet.

Solvent Savings Worksheet. A worksheet to help analyze the cost of using a still.

Still Manufacturer Vendor List. The list is continually updated.

Counting Spent Solvents and the Closed-loop Exclusion. Technical Information Memorandum #89-1.

Solvent Distillation Can Save Money

Industrial processes generate "dirty" solvent from various operations including parts cleaning, fiberglass manufacturing, painting, and screen printing. Disposing of used solvent is expensive and may increase your long-term liability.

The used solvent can often be reused after removing the impurities. Distillation units (stills) are commercially available for recycling the various solvents on-site. In addition, most hazardous waste management companies offer off-site distillation services.

How Does Distillation Work?

Distillation is the evaporation and condensation of used solvent. Solvents are placed in an enclosed heating chamber where the temperature is raised to the solvent's boiling point. The evaporating solvent in the heating chamber pushes the air, filled with solvent vapor, into a condenser. The solvent vapors condense into liquid on water or air-cooled tubes. The clean solvent is then collected and available for re-use.

The impurities from the used solvent are collected in the heating chamber as "still bottoms". After completing the distillation process, the still bottoms need to be disposed of properly. Still bottoms typically designate as a hazardous waste and require proper disposal through a hazardous waste management company. The contaminants in the dirty solvent will help you determine the proper designation for the still bottoms. Generally, if the solvent was a hazardous waste before distillation, the still bottoms will designate as a hazardous waste.

What Can Be Distilled?

Many solvents and solvent substitutes can be reclaimed in a still. The type of equipment determines which solvents can be distilled. Most still manufacturers recommend that you keep different types of solvent

separate. Some solvents (including solvent substitutes) have different boiling points and a vacuum may be required to allow them to boil at lower temperatures.

Before choosing a still for on-site reclamation you may want to consider:

- ✓ available solvent substitutes,
- ✓ switching to water based cleaners,
- ✓ use of reclaimed solvent,
- ✓ solvent break-down during use/reclamation,
- ✓ still bottom disposal,
- ✓ building and fire codes,
- ✓ current and future operating costs, and
- ✓ operator safety training.

Will It Be Economical?

On-site solvent distillation may be economically feasible after you compare the costs with off-site reclamation or disposal. If properly managed, on-site stills can greatly reduce the amount of hazardous waste generated at a facility; decrease the quantity of virgin solvent purchased; and reduce your long-term liability associated with off-site transportation, treatment, and disposal.

Example of Payback

By using a still to reclaim spent lacquer thinner on-site, KD Auto reduced the amount of spent solvent waste shipped off-site from 25 to five drums per year. (See article on page 5.)

Capital Cost:	\$3,500
Operating Cost:	\$2,080/yr*
Disposal Cost Savings:	\$550/yr
Reduced Solvent Costs:	\$6,380/yr
PAYBACK	9 months

*utility costs were unavailable

Remember: The best solution, economically and environmentally, is to explore ways to eliminate the use of solvents.

Waste Reduction Award

Winner: KD Auto Body Inc.

KD Auto Body, Inc., a collision repair shop in Puyallup, was recently presented with the 1992 *Governors Award for Outstanding Achievement in Pollution Prevention* for small business. Owner, Roger Squire was recognized for his exceptional initiative in reducing and recycling hazardous waste and other pollution prevention measures.

Squire's waste reduction program was prompted by his commitment to:

- ✓ reduce the company's liability;
 - ✓ improve worker health and safety; and
 - ✓ stay ahead of the regulations.
- Here is an overview of his efforts.

Solvents. Purchasing a still allowed for the reclamation of spent lacquer thinner (solvent) on-site. This reduced the volume of solvent being sent off-site as dangerous waste by 70%. Estimated annual savings of \$4,850.

Air Emissions. Volatile organic compound (VOC) releases were reduced by switching to high-volume, low-pressure (HVL) spray guns. Squire tried many spray guns before choosing the one which worked best for his operation.

Paint. Substituted yellow based sealers with grey based sealers which are lower in heavy metals, computerized the paint mixing system to minimize paint waste, and reduced the number of discarded paint cans by using and reusing freezer jars for mixing paint.

Squire also reduced solid waste by recycling cardboard, metal auto body parts, plastic bumpers, and using liquid spray mask (to reduce masking paper waste).

Roger Squire knows his company's efforts resulted in reduced liability, a higher quality product, improved efficiency, and a better working environment for his employees.

Is Your Plan Due?

Pollution Prevention Plan Due Dates

- ✓ September 1, 1992, hazardous substance users and hazardous waste generators (greater than 50,000 lbs)
- ✓ September 1, 1993, hazardous waste generators (7,000 - 50,000 lbs)
- ✓ September 1, 1994, hazardous waste generators (2,640 - 7,000 lbs)
- ✓ New users and generators are required to file the year following the year they become a hazardous substance user or generator.

Help in Preparing Plans

WRRLC staff offers technical assistance to facilities preparing pollution prevention plans. (See "Ecology Contacts" on back page.)

Industries Notified

The second "wave" of facilities were recently notified by Ecology of their obligation to prepare Pollution Prevention Plans under the Hazardous Waste Reduction Act of 1990. This "second wave" affects facilities that annually generate between 7,000 and 50,000 lbs. of hazardous waste, and/or their first reporting year for toxic releases under SARA Title III, Section 313, was 1991. Plans must be submitted by September 1, 1993.

Nearly 350 facilities are currently included in the second wave of planners. Recent changes in industrial processes can reduce the amount of hazardous waste generated and recycling credits can reduce the amount counted for planning purposes. If these types of changes cause your facility to fall below the "second wave" planning threshold the result may be either a delay in the plan due date or an exemption from the planning requirement.

If you have questions or need information about the planning requirement, contact the Ecology regional office and ask for the Toxics Reduction Section. (Contact numbers are on the back page.)

Capital Investment Dollars Available

Washington State Energy Office

The Bonneville Power Administration and local electric utilities pay businesses to invest in energy efficiency. Many utilities offer rebates on energy-efficient motors and lighting, as well as financial incentives for other capital projects. (Contact your local electric utility for details.)

Many businesses are finding that financial incentives, along with the money saved in energy bills, provide a quick return on their investment. You can reap additional benefits if you also consider energy efficiency when you buy new equipment to reduce the use of hazardous products or pollutant emissions.

The Pacific NW has just enough electricity to serve our existing needs. Power generation is expensive and has negative environmental impacts such as air pollution from coal generation and impacts on salmon runs from hydro-power. To provide for business and economic growth, investments in energy efficiency are critical.

For free information on ways for your business to become more energy efficient contact: Electric Ideas Clearinghouse, 1-800-872-3568.

Questions and Answers

QI am using a still to recycle my waste solvents. What advantage does this give me with the regulations?

AFor pollution planning, you can take advantage of the "recycling credit". By subtracting the amount of hazardous wastes recycled from the total hazardous waste generated, you may reduce the total to less than the planning threshold (2,640 pounds per year). If this is the case, you could become exempt from the planning requirement. If your total is still above 2,640 pounds, the recycling credit may reduce your total enough to allow you to delay the plan due date (see related articles on page 5).

For hazardous waste management your advantages result from reducing the amount of hazardous waste generated. Besides reducing the health and safety hazards at your shop and the burden of liability that waste carries, your regulatory requirements may be reduced. Waste solvent that is recycled more than once per month only needs to be counted once. This could cause you to become a conditionally exempt small quantity generator, or change from a large quantity generator to a medium quantity generator. (Ask for TIM 89-1 from your regional office

QI have a satellite accumulation area which is a covered 55 gallon drum in my tear down area. When am I required to transfer this waste to my hazardous waste accumulation area?

AVolume is the deciding factor. You may accumulate up to 55 gallons of a hazardous waste (or 1 quart of acutely hazardous waste) in the satellite accumulation area. When you reach the 55 gallon limit you should immediately move the waste to the accumulation area. If you start another container, the full one must be moved immediately.

The container, while it is being used to accumulate waste in the satellite area, should be labeled with:

✓the words "HAZARDOUS WASTE";

✓the name of the hazardous substance, or if it is a mixture, the largest component (example: naphtha solvent still bottoms); and

✓the hazard class (flammable, toxic, corrosive, etc.).

Before moving the drum to the accumulation area, add the date it became full.

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.

Belleuve: (206) 649-7000

Tumwater: (206) 753-2353

Yakima: (509) 575-2490

Spokane: (509) 456-2926

Shoptalk

Shoptalk welcomes your questions and comments. Please address them to the address below:

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