



A quarterly publication for hazardous waste generators

The Complexities of Good Pollution Prevention

Many businesses have benefited by using pollution prevention techniques (see related article on page 2). However, deciding which options to use can sometimes be difficult because of the wide array of alternatives to consider.

Let's look at parts washing as an example. It used to be that you rented a solvent parts washer from a solvent service company and the company provided service on a regular, scheduled basis. Now there are numerous alternatives to degreasing with a traditional solvents parts washer. Some examples are: high flash point

solvent tanks (with or without filters), high flash point solvent tanks with distillation, aqueous (water based)

parts washers, aqueous parts washers with microbes, aqueous parts washers with filters, automated spray cabinet aqueous parts washers, etc. Each of these options has its strong points and drawbacks, depending on the specific cleaning application.

Consider this scenario... you test a new water-based parts washer in your shop, with the goal of eliminating the hazardous waste stream that is generated from your solvent parts washers. After using the unit for a couple of months, the employees testing it declare it a success. You have four solvents parts washers in your shop so you replace them with four new aqueous ones. Soon after, an unforeseen issue arises with two of the units: the spent aqueous solution designates as a hazardous waste. It turns out that the employees who use these units are also using spray cans with hazardous solvents to help clean

the parts. These hazardous solvents contaminated the aqueous solution and caused it to designate as a hazardous waste.

This example points out the importance of conducting thorough research before making a process change and providing adequate follow-up and training. In this case, you might have found that only two of the units should have been replaced and that employee training was needed for the new equipment.

Look closely at the work area, the people, the process involved, and the types of work needed before adopting any changes. Do not assume that test results will apply across the board. This may seem like a lot of extra work, but the more work you do up front, the more likely that the change will be successful.

For assistance in seeking some possible pollution prevention changes in your business, contact your regional office (listed on the back page) and ask to speak to a Toxics Reduction specialist.



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Raul Veliz examines the inside of a spray cabinet washer used to eliminate the use of solvents for degreasing at Wickham & Sons in Auburn, Washington.

Pollution Prevention Planning Reaps Benefits

The 1997 Pollution Prevention Annual Progress Reports are in. The results show that 275 facilities implemented 900 individual pollution prevention projects. These projects resulted in 1,820 separate beneficial effects that are reported within the six categories listed below. Pollution Prevention projects often result in benefits in more than one category.

For example, when a facility eliminates a toxic substance from an industrial process, the results may be recorded as hazardous substance use reduction, hazardous waste generation reduction, and cost savings. In 1997, implementation of Pollution Prevention Plans produced the following benefits for Washington's environment and economy:

Beneficial Effects from Implementing 900 Projects	Number of Occurrences
Reducing hazardous substances used	460
Reducing hazardous waste generated	554
Increased recycling of waste	199
Increased treatment of waste	67
Reduced air/water emissions	218
Cost savings	322
Total	1,820

For more information about pollution prevention planning, contact your Ecology Regional office (listed on the back page) and speak with a Hazardous Waste Reduction Specialist.

Industrial Technical Assistance Providers

Have you ever thought that technical assistance programs for businesses should be better coordinated? If your answer is yes, you are not alone. That is why Industrial Technical Assistance Providers (ITAP) was created with Bonneville Power Administration's help with start-up costs. ITAP is an association of over 30 technical, financial, education and commercial service providers, including the Washington State Department of Ecology.

ITAP responds to a fundamental need. The overwhelming number of programs providing services to businesses exceeds the ability of people to learn about them. This means that businesses are missing opportunities, and service provid-

ers are not being as effective as they would like to be.

A prime objective of ITAP is to provide businesses with an opportunity for one-stop shopping. Here is how it works: Call (800) 872-3568 to be referred to someone in a participating ITAP organization who will assess your situation. It's up to that person to draw on other ITAP participants, either singly or collectively, to propose a response.

Services available through ITAP include pollution prevention, energy services, production improvements and employee training. In short, ITAP intends to help businesses be competitive by providing comprehensive and coordinated service delivery.

Online Permit Assistance System

If you have access to the Internet, you can find out what environmental permits are needed for a project simply by sitting down at a computer.

The Department of Ecology's Online Permit Assistance System offers a quick way to gather information on federal, and state environmental permit requirements.

The online service builds on the work of the Washington State Permit Assistance Center, created in 1995 to help citizens, businesses and public agencies comply with environmental laws and permitting requirements.

You can get a complete list of permit requirements and download several permit applications by going to the following Internet site, <http://www.wa.gov/ecology/sea/pac/index.html>, and answering a series of questions about a proposed project. In addition to the list of required permits, you'll find the names and phone numbers of the agencies you might need to contact. The site features links to important information provided by the Washington State Departments of Ecology, Fish & Wildlife, Health, and Natural Resources, as well as state air authorities and the U. S. Army Corps of Engineers.

The site is already popular, having responded to more than 3,000 inquiries each month. Users can get a list of permits they will need, and can access links from each item to a summary of that permit and the regulations governing it.

The Online Permit Assistance System helps the public, environmental consultants, engineers, contractors and government agencies get started on projects quickly. The site is updated frequently, providing users the most current information. The Permit Assistance center can be reached at (360) 407-7037.

The 1999 Governor's Award Program is underway. If you did not receive an application for this distinguished award last year but would like to get one this year, call Joanne Phillipson at (360) 407-6740 or e-mail her at joph461@ecy.wa.gov to get on the mailing list.

1998 Governor's Award Winner: Cablecraft Tacoma

In 1987, Cablecraft generated nearly 33,000 pounds of hazardous waste in their manufacturing process. Within ten years, Cablecraft eliminated hazardous waste generation and has not generated any since. In recognition of this outstanding accomplishment, Ecology Director Tom Fitzsimmons presented the company with a plaque at the 1998 Governor's Award for Outstanding Achievement in Pollution Prevention ceremony in Olympia, last November.

Cablecraft employs 150 people who use a variety of metals and plastics to produce assemblies used in the aerospace, automotive and farm-equipment industries.

Eliminating all hazardous waste was not a simple process. It took commitment and environmental consciousness from all the employees - from President Keith Clarno to the workers on the shop floor.

Major changes involved switching from oil-based coolants to water-based coolants, and eliminating the use of 1,1,1-trichloroethane by replacing a chemical degreasing system with a state-of-the-art aqueous degreasing system.

Cablecraft also has an excellent solid waste reduction/recycling program. They eliminate products that are not recyclable and replace them with products that are reuseable.

Cablecraft's environmental commitment extends to the property surrounding their building as well. Maintaining as much of the natural vegetation as possible, they planted numerous new trees and shrubs to replace those that were destroyed in a recent construction process.

Nate Anderson, Production Controller at Cablecraft, said, "We have enjoyed cost savings through our pollution prevention programs. We have seen gains in waste reduction, while lowering our overall health and safety problems through these advancements."

If you would like to try to win the 1999 Governor's Award see the color insert in column 3 of page 2

Metal Fabrication Sector Project

Metal Fabricators are the focus of the Department of Ecology's newest Industry Sector project. Ecology plans to work with the industry to achieve reductions in the amount of hazardous materials used and the amount of hazardous wastes produced. This industry was selected because many of the businesses are hazardous waste generators and Toxics Release Inventory (TRI) reporters.

Ecology (in cooperation with the King County Local Hazardous Waste Program) plans to take the following steps for this sector project:

- ✓ Gather and review pertinent environmental information
- ✓ Evaluate current industry practices
- ✓ Examine pollution prevention (P2) issues and opportunities
- ✓ Share results with the industry

To find out more about this project, call James DeMay at (360) 407-6338.

Dangerous Waste Regulation Amendments

The Dangerous Waste Regulations (Chapter 173-303 WAC) will be updated in early 2000. Ecology will seek comments from the public on draft rule changes beginning in the summer of 1999.

The main purpose of the amendments is to catch up with EPA's hazardous waste program, including new Land Disposal Restriction standards. Changes will also be made based upon recommendations from Ecology's Fertilizer Report and a recent project on transportation of hazardous wastes in Washington.

If you would like to be on the **mailing list** to receive information about the status of the regulation changes, call Dave Zink at (360) 407-6752 or e-mail him at dzin461@ecy.wa.gov. If you have **questions about the regulation changes**, call Chipper Hervieux at (360) 407-6756.

Snake Oil - or the Real Thing?

Every business gets them at their door: the enthusiastic salesperson who has "just the right product" to solve all environmental woes. It might be worthwhile to examine new products that could be less toxic, easier to manage, and less expensive to dispose, but how can you tell if the product or service is worth spending your money on?

First, use your common sense and ask questions. How long has the company been in business? Is this new product from a new company or a well-established company? Ask for references in your area. If you have Internet access, look up their website (if they have one). However, remember that a fancy website can be a false front for shabby goods and services. You can contact your business association to see if they have information about the product, or check with the local Better Business Bureau to see if any complaints have been filed.

Can you trust the salesperson's claims? Learn to find the facts about a product instead of accepting the "come-ons." Be sure to get a Material Safety Data Sheet (MSDS) from the manufacturer to evaluate whether the product has hazardous properties.

Are you required to sign a service contract? Read all the fine print, and if you don't understand all the "legalese," find someone who can explain it. Do you have the right to terminate this agreement? Can you have a trial period with no further obligations? Can you return the product to the manufacturers if you choose not to use it? It never hurts to check.

Don't be sold by the salesperson's claims. Before you commit to anything new, ask questions and learn the facts. Also, remember that using a non-hazardous product does not guarantee that waste generated in your process is non-hazardous. Always determine whether a new waste stream designates as a dangerous waste. If you need assistance, call your regional office and speak with a hazardous waste reduction specialist.

Questions and Answers:

Q Under what circumstances do I need to count waste that I recycle on-site toward my generator status?

A Under the counting exclusions found in WAC 173-303-070(7)(c), generators need to count their waste before they recycle it if they manage their waste in one of the following ways prior to the waste being recycled;

1. Wastes are stored in a permitted on-site storage area, or
2. Wastes are accumulated in their 90/180 day accumulation areas, or
3. Wastes are accumulated in satellite accumulation areas.

Remember to always count regulated dangerous wastes that are shipped off-site for recycling.

Q Do I need to count waste that I treat on-site, following Treatment by Generator (TBG) guidance?

A Yes, with one exception. Dangerous Waste (DW) intended for treatment under the TBG allowance is always counted before it is treated. If the waste remains DW after treatment, it is also counted unless it is discharged directly from the TBG unit into a Publicly Owned Treatment Works in compliance with the domestic sewage exclusion (WAC 173-303-071(3)(a)). The advantage to generators treating their own waste under the TBG provisions is the ability to do so without obtaining a RCRA permit for treatment, storage and disposal.

Q Does wastewater treated in my on-site Permit by Rule (PBR) treatment system count toward my generator status?

A If wastes are stored, treated, or accumulated prior to entering the PBR unit, those wastes need to be counted. In contrast, wastes managed in an on-site PBR unit immediately upon generation are not counted. "Immediately" means as soon as the waste is generated.

Free Information

- ☉ *Solvent Substitution Options*, pub. #96-420
- ☉ *Waste Reduction For Small Parts Washers*, pub. #96-421
- ☉ *Questions Concerning Solvent and Cleaner Disposal*, pub. #96-422
- ☉ *Optimizing Your Parts Cleaning System*, pub. #96-423
- ☉ *Evaluation of Solvent Substitutes*, pub. #96-424
- ☉ *Switching to Aqueous Parts Cleaning*, pub. #96-425

Help Save Trees

Are you interested in receiving *Shoptalk* electronically? If so, please send your e-mail address along with your name and mailing address to sohu461@ecy.wa.gov



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: (425) 649-7000
Lacey: (360) 407-6300
Yakima: (509) 575-2490
Spokane: (509) 456-2926

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