Enforcing Dangerous Waste Rules Prevents Pollution

Dangerous waste must be managed properly

Hazardous waste, or dangerous waste as it is known in Washington[1], can threaten human health and contaminate the environment. Those who generate (produce) the wastes are responsible for managing them, "from cradle to grave."

Dangerous wastes come from activities such as painting, electro-plating, soldering, cleaning, degreasing, demolition, and clearing out expired products. And they come from many sources, including manufacturers, schools, hospitals, military installations, and public utilities. Preventing these sources from contaminating the environment requires a coordinated approach to ensure that dangerous wastes are handled safely.

The state, through the Department of Ecology's Hazardous Waste and Toxics Reduction Program, regulates and inspects facilities that produce dangerous waste. Local governments, through their health and public works departments, regulate and inspect many facilities that produce smaller amounts. Government coordination ensures that businesses comply with federal and state rules and local ordinances to protect human health and the environment.

How much dangerous waste do Washington facilities generate?

Facilities that generate "regulated quantities" of dangerous waste – typically more than 220 pounds per month or 2.2 pounds per month of the most toxic wastes – must report this to Ecology. In 2011 (most current data available), 3,755 sites reported 506 million pounds of dangerous wastes generated in Washington state. Waste treatment and disposal businesses in Washington received and managed much of this waste, plus 362,000 pounds from other states or countries[2].

There are also an estimated 65,000 dangerous waste generators, such as small auto repair shops and dry cleaners, which produce less than 2,640 pounds per year. Since they are not required to report, we can only estimate their cumulative total at approximately 65 million pounds per year.

Why it Matters

Dangerous waste refers to waste material that is:

- Toxic (contains poisonous metals or chemicals)
- Corrosive (corrodes metal, burns flesh)
- Ignitable (burns easily)
- Reactive (explosive or emits poisonous gas)
- Persistent (remains in the environment)

When dangerous wastes are not properly managed, they can contaminate soil and air, and get into our rivers, lakes, and Puget Sound.

Mismanaging dangerous wastes also creates contaminated sites, which then need to be cleaned up. Cleaning up contaminated sites is expensive for businesses and taxpayers.

Often, polluted areas cannot be developed for industry or recreation without cleaning them up first.

For more Information

Visit Ecology's website at www.ecy.wa.gov/programs/hwtr/managewaste.html

Contact

If you have questions, contact a dangerous waste specialist at your local Ecology Regional Office, www.ecy.wa.gov/org.html.

Special Accommodations

If you need this in a format for the visually impaired, call 360-407-6700. Persons with hearing loss, call 711 for Washington Relay Service. Persons with a speech disability, call 877-833-6341.

[1] Washington law uses the term dangerous waste. Federal law uses the term hazardous waste. Washington's definition of dangerous waste includes some wastes that are not included in the federal definition.

[2] These numbers do not include 246 million pounds of mixed dangerous and radioactive waste from the USDOE Hanford Facility and Perma Fix Northwest, in Richland, WA.

Regular inspections prevent environmental problems

Ecology inspectors focus much of their time on the larger generators to make sure they know and practice proper handling and disposal of their hazardous wastes. The best strategy is to inspect these facilities at least every three years. The U.S. Environmental Protection Agency (EPA) studied Washington businesses and found a 20 percent increase in environmental threats when inspections are more than three years apart.

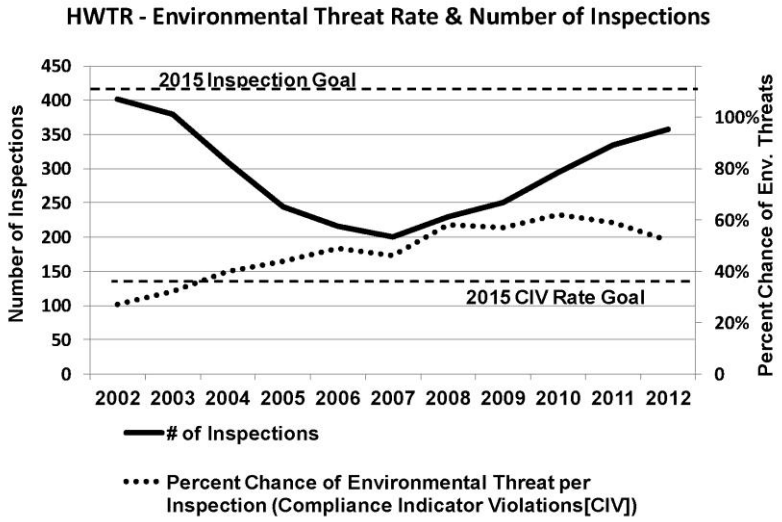
Ecology currently has only 19 inspectors to perform a full range of compliance activities including inspecting the thousands of facilities that generate large and small amounts of dangerous wastes. As a result, many businesses producing dangerous wastes have not been inspected in the last five years, or have never been inspected.

Some violations of the dangerous waste safe handling rules are considered "environmental threats." These include spills, illegal disposal, serious container problems, and not determining whether waste is dangerous. (See Attachment, Examples of Dangerous Waste Violations.)

In 2002, dangerous waste inspectors found serious environmental threats at 27 percent of the facilities they inspected. Now it is 48 percent, as shown in the graph below.

According to EPA's ranking of states for 2010, Washington is only 22nd in the percentage of businesses inspected yearly and 27th in the number of penalties and orders issued.

Ecology is striving to become more effective in order to provide more inspection coverage. The agency underwent a Lean project to make inspections more efficient. This should cut weeks from the time to complete the inspection and follow-up process



Environmental threats are defined as spills, illegal disposals, serious container problems, and not determining whether waste is hazardous.

State and local governments working together

Ecology knows it's important to also attend to facilities that produce smaller amounts of dangerous waste[3]. Even small amounts of dangerous waste can cause big problems if they are not properly managed. That's why Ecology teams up with local governments in the Local Source Control Partnership (LSC) to address those facilities.

The Legislature authorized funds for the LSC Partnership in 2008. Local governments use those funds to hire specialists who visit small generators and help them identify and eliminate pollution at the source. They provide technical assistance specifically designed to help smaller generators. Small businesses typically have limited access to expertise on safe handling and disposal of dangerous wastes. LSC Specialists have made more than 10,000 visits to businesses since the program's start.

For more information refer to *Ecology Services Add Value to Business*[4] and *Local Source Control Partnership*[5].

[3] Facilities generating less than 2,640 pounds of dangerous waste are referred to as Small Quantity Generators. "Small" refers to the amount of dangerous waste produced, not the size of the facility.
[4] https://fortress.wa.gov/ecy/publications/SummaryPages/1104023.html

Attachment

Examples of Dangerous Waste Violations

Business: Chrome plater, Walla Walla

Hazardous Waste: Large Quantity Generator of dangerous waste, such as wastewater, sludge, and corrosive solutions containing chromium, lead, and other metals.

HWTR Inspected: 2011

Previous Inspection: 2010

Inspector found:

- Open and unlabeled containers of dangerous waste.
- Dangerous waste released to the ground.
- Twelve 55-gallon drums of dangerous waste accumulated for up to three years; legal time limit is 90 days.
- Failure to comply with standards for dangerous waste tanks.

Inspection triggered by: Regular inspection

Follow-up or referral:
Ecology fined the company $74,000 and ordered them to remove the dangerous waste from the site. The company must determine whether there have been other releases. They must remedy any they find. They will get credit for up to $27,700 of the fine by improving the facility's wastewater and dangerous waste management systems beyond what the regulations require. Ecology will suspend another $16,000 if the company complies with the orders and remains in compliance for at least three years.

At 2011 inspection. Note spilled corrosive waste.

After cleanup.

[5] https://fortress.wa.gov/ecy/publications/SummaryPages/1304002.html

Business: Yacht builder, Anacortes

Hazardous Waste: Large Quantity Generator of acetone waste, contaminated rags, and other dangerous waste

HWTR Inspected: January 2012

Previous Inspections: July 2011; October 2011

Inspectors found:

- Thirteen violations of dangerous waste regulations.
- Failure to notify Ecology as dangerous waste generator.
- Failure to designate (identify and code for handling/disposal) some dangerous wastes.
- Failure to train employees – no written training program or plan, or records of employee dangerous waste training.
- Storing dangerous waste for more than the legal time limit – four drums of acetone waste and one drum of contaminated rags on-site for more than 90 days.
- Follow-up inspections showed some violations corrected, but each inspection also revealed new violations.

Inspection triggered by: Complaint response

Follow-up or referral:
Ecology inspected the facility and offered assistance three times over eight months, but the company failed to bring itself into compliance. Ecology then imposed a $48,000 fine and set specific steps the company must take to come into compliance. These include correcting the waste-handling violations, appointing and training an emergency coordinator, training other employees, and submitting a written training program and plan.

Unsafe storage of dangerous waste

Open containers of dangerous waste.

Business: Solar energy manufacturer, Vancouver

Hazardous Waste: Large Quantity Generator of waste acid solution

HWTR Inspected: March 9, 2011; follow-up inspection March 14, 2011

Inspector found:

- In 2007, a tank of waste acid solution failed and leaked at the former manufacturing plant. The acid carved a hole through the concrete containment system and 48 feet into the ground.
- Company failed to notify Ecology of the release.
- Company failed to take appropriate actions to control and offset the effects of the spill when it happened.
- As workers closed the facility, their activities released metal grit and petroleum hydrocarbons, which threatened stormwater and groundwater. Company did comply with notification and cleanup requirements on this event.

Inspection triggered by: Property owner learned of release in 2011 and notified Ecology.

Follow-up or referral:
The company agreed to pay $18,090 to settle violations related to the waste acid spill. Ecology's Toxics Cleanup Program checked the site and determined no further action was required. The company cooperated with Ecology to come into compliance. Ecology originally fined the company $27,000, but lowered that amount through the expedited settlement process. This requires the company to waive its right to appeal, saving the state, taxpayers, and the company the expenses of litigation.

Cleaning up the area of the acid spill.

Business: Hi-tech manufacturing and assembly, Wenatchee

Hazardous Waste: Large Quantity Generator of electroplating waste, chlorinated coolant, and other dangerous waste.

HWTR Inspected: January 2011

Previous Inspections: May 1999; June 2005; September 2009

Inspectors found:

- Eight violations of dangerous waste regulations in 2011.
- Failure to properly designate (identify and code for handling/disposal) waste.
- Failure to properly label containers, including failure to use labels that identify the major risks (such as "flammable," "corrosive," etc.).
- Failure to mark each container with the date waste was put in the container and/or failure to place the container so the date could be visible to the inspector.
- Failure to use proper containers in accumulation areas.
- Keeping waste in the active work area longer than allowed.
- Leaving containers of dangerous waste open.
- Keeping waste at the facility longer than allowed.
- Failure to prepare and maintain a written training plan for employees.

Inspection triggered by: Regular Inspection

Follow-up or referral:
This case could have ended in a penalty, but the generator stepped up to do the right thing. When Ecology staff inspected the facility in 2011, they found repeat violations and several new ones. Dangerous waste safe handling at the facility was on the decline and getting worse.

Before submitting the inspection report, Ecology staff spoke with the facility's upper management to explain the seriousness of what they were allowing to happen. Ecology was considering formal enforcement against them. But they listened and acted on our findings. They immediately hired a full time dangerous waste manager to help turn their situation around. Without prompting, the facility provided frequent updates on their compliance progress and contacted Ecology when they had questions about dangerous waste regulations. The October 2012 follow-up inspection did not find any violations.