

Regional Roundtable 2014

Pollution Prevention Planning 101



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Pollution Prevention 101

- Washington State Pollution Prevention Program introduction
- Technical Assistance Overview
- Low Hanging Fruit Hierarchy
- Description of various levels of Technical Assistance available
- P2 Success Stories



Pollution Prevention (P2)

- Any practice which reduces the amount of hazardous substance or pollutant entering a waste stream or being released into the environment.
- Practices include:
 - Source reduction
 - Reuse
 - Recycling
 - Treatment
- P2 Plan/TurboPlan helps track facility processes and opportunities



Technical Assistance

You might be thinking...



You should be thinking...



Technical Assistance

- Create and implement effective environmental strategies that emphasize compliance, risk management, pollution prevention, and sustainable development
- Educate and Outreach
- Research
- Assure compliance with various environmental statutes and the regulations established under those statutes

Hazardous Waste and Toxics Reduction Program

- Hazardous Waste Management Requirements
- Reducing Hazardous Waste and Substances
- Reporting Requirements, Forms, and Instructions
- Hazardous Chemicals in Your Community
- Program Information
- Databases and Publications

www.ecy.wa.gov/programs/hwtr/index.html

Pollution Prevention Benefits

- Reduce liability
- Improve competitiveness
- Improve safety and working conditions
- Reduce regulatory “exposure”
 - Less paperwork
 - Less inspections



Technical Assistance-Ask for it

- Pollution Prevention ‘Planners’ get TA visits at least every three years, but we can always come out more
- If you’re not a ‘Planner,’ you just need to ask for our help

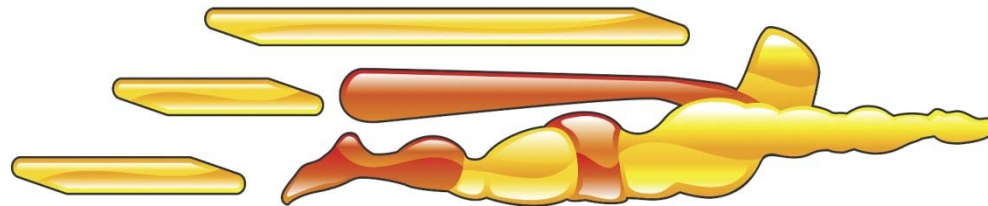


What happens on a TA visit?

- Site visit steps
 - Ask questions about the facility, production bottlenecks, etc
 - Walk around to:
 - Look for compliance issues
 - Get more familiar with your business
 - Get a better idea of what possible solutions are available
- Afterwards
 - Examine what are the better options or low hanging fruit

Low Hanging Fruit Hierarchy

- Use of Chemical Alternatives
- Waste Prevention
- Recycling
- Segregation of wastes
- Apply good management practices



**Source
Reduction**

Wash Parts,
Collect and Evaporate
Contaminated Rinse Water

Reuse

Recycle

**Treatment/
Disposal**



**Source
Reduction**

Reuse

Recycle

**Treatment/
Disposal**

Distill Spent Solvent



- Onsite distillation uses evaporation and condensation to physically treat the chemical so that it can be reused.
- Decanting, letting the solids settle and pouring off the liquid solvent, is considered reuse, as there is no physical or chemical treatment.

Source Reduction

Reuse

Recycle

Treatment/
Disposal

Switch to Non-Hazardous Solvents and Cleaning Solutions



**Source
Reduction**

Reuse

Recycle

**Treatment/
Disposal**

Extend the Life of Working Fluids In Metal Finishing

- Drip curtains
- Catch pans
- Part rack & basket design



Levels of Technical Assistance Available

- Reduce Hazardous Waste and Substances
 - Hazardous Waste Workshops
 - Pollution Prevention Program
 - Energy visits
 - Technical Resources for Engineering Efficiency (TREE)
 - Lean Events

www.ecy.wa.gov/programs/hwtr/reducewaste.html

The Cool Success Stories



IDEX:

- After a site visit, it was realized their waste may have been over designated
- Upon further testing of their waste streams, several were found not be considered dangerous waste
- Resulted in about \$2,500 savings per year in disposal costs



MicroConnex

- Had an old evaporator used to help treat wastewater, but managing of it was labor intensive
- Switched to a more efficient natural gas wastewater evaporator to save \$8,600 per year
- Also started recycling precious metals to turn waste into revenue, totaling \$22,000 per year

The Cool Success Stories

HEATH TECNA



Heath Tecna:

- Worked with Department of Ecology and Impact Washington on four Lean events
- Total savings of \$125,000/year
 - Reduced adhesive purge for \$40,000/year savings
 - Reduced core sheet scrap for \$35,000/year savings
 - Reduced dangerous waste disposal by 18,000 lbs, or ~\$25,000/year savings

Technical Assistance

So don't view us as...



Technical Assistance

View us as...



Washington's Pollution Prevention Planning Law

www.ecy.wa.gov/programs/hwtr/P2/p3.html

- ❖ Required of business that:
 - Generate $\geq 2,640$ pounds recurrent dangerous waste per year,
 - Report a release under the Toxics Release Inventory law
- ❖ Free planning help available from Regional P2 staff
- ❖ TurboPlan reporting software
- ❖ [Chapter 173-307 WAC](#)

What does the law require me to do?

- Find and report on the **products** you use that contain hazardous substances.
- Figure out what **opportunities** exist to reduce hazardous waste generation and hazardous substance use.
- Report a summary (September 1st annually) of how those opportunities went during the previous year—**how did it go?** Were there **numeric effects?**

Pollution Prevention

HWTR HOME

Pollution Prevention

Pollution Prevention & Planning

Defining Pollution Prevention

Pollution Prevention Planning Program

Start TurboPlan

Plan Help

Special Cases

Navigation

Plan Home

Processes

Products

Opportunities & Environmental Effects

Data and Graphs

Plan Videos

Pollution Prevention Tools

Pollution Prevention Successes

Pollution Prevention Resources for Schools and Labs

Events and Training

Chemical Alternatives

Pollution Prevention Staff at Ecology

Other Pollution Prevention Sites

[HWTR home](#) > [Pollution Prevention](#) > [Pollution Prevention Planning](#) > TurboPlan Gateway

TurboPlan

TurboPlan is an Internet system for Washington State pollution prevention planners to submit their plans. It is available 24 hours a day, seven days a week. It was introduced for use starting with plans and annual progress reports due September 1, 2012. Planners can use it to report progress on their efforts to reduce dangerous waste generation and hazardous substance use. It also displays charts summarizing trends over time.

New Users:

1. You must have a personal identification number (PIN) to use TurboPlan. To get a PIN:
 - a. Contact the Ecology staff person assigned to your facility. To find out who that is, call or e-mail your regional Ecology office.
 - b. By [e-mail](#).
 - c. Call Ecology at 360-407-6700.
2. Get an account on the [Secure Access Washington](#) site. The SAW Web site has instructions on how to do this or you can watch a short video.
3. Register for the TurboPlan service on the Secure Access Washington site.

Existing Users:

- [Log in](#) through the Secure Access Washington site.
- [Have you forgotten your password?](#) Secure Access Washington will e-mail it to you.


Help

<http://www.youtube.com/watch?v=GXM3NKHZRdQ>

YouTube  

TurboPlan:
Registering for Secure
Access Washington and
TurboPlan

Ecology Publication No. 12-04-011a
May 2012



DEPARTMENT OF
ECOLOGY
State of Washington

0:00 / 8:00    

TurboPlan Registering for Secure Access Washington and TurboPlan v2



EcologyWA

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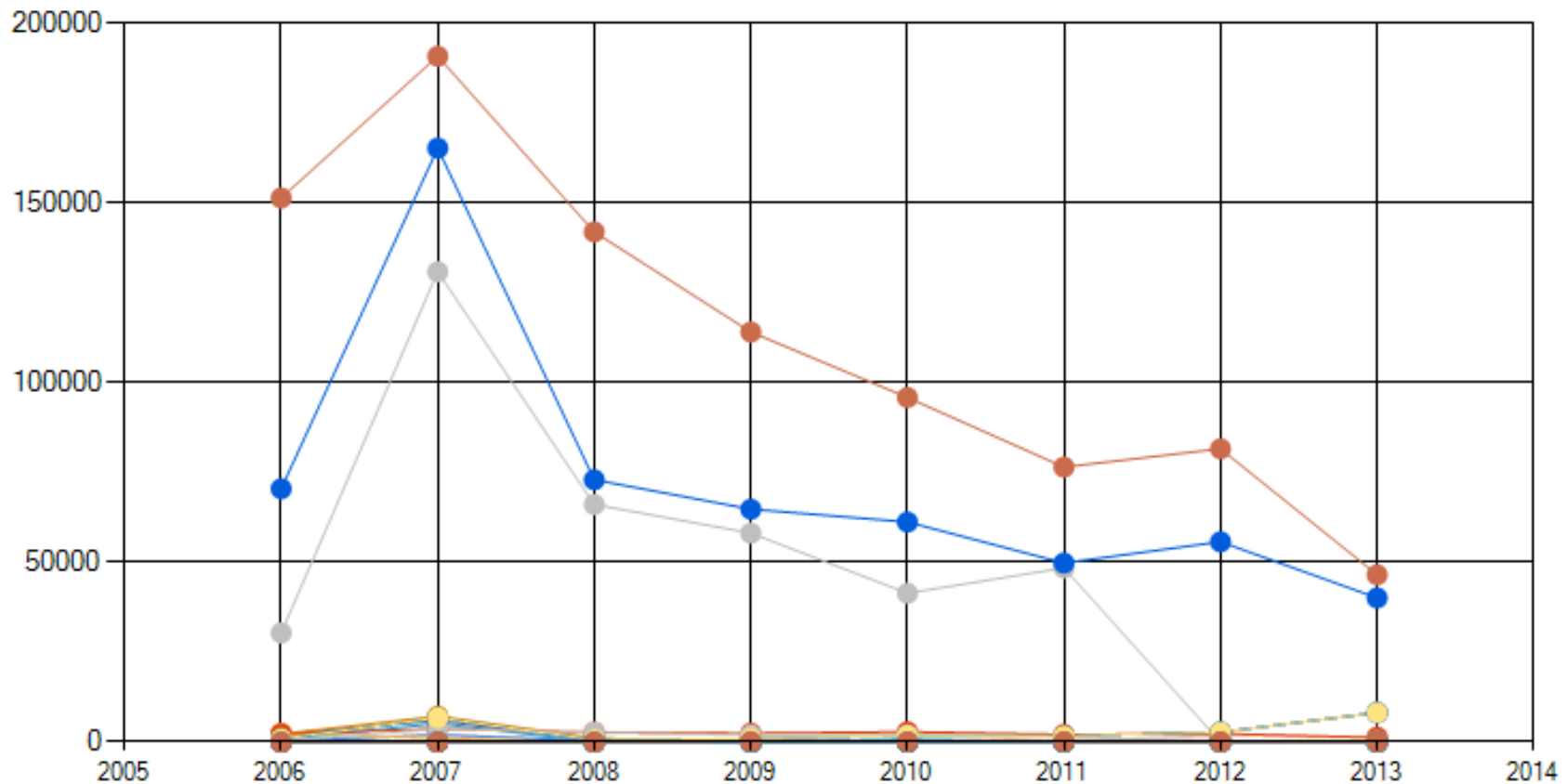
DEPARTMENT OF
ECOLOGY
State of Washington

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Let's go to TurboPlan

- <https://secureaccess.wa.gov/myAccess/saw/select.do>

Hazardous Substances Used



View	Item	[2008]	[2009]	[2010]	[2011]
<input checked="" type="checkbox"/>	ALUMINUM (FUME OR DUST) 7429-90-5	45.65	77.1	29	41.2
<input checked="" type="checkbox"/>	ALUMINUM OXIDE (FIBROUS FORMS) 1344-28-1	35.35	1.03	6.3	
<input checked="" type="checkbox"/>	AMMONIA (INCLUDES ANHYDROUS AMMONIA AND AQUEOUS AMMONIA FROM WATER DISSOCIABLE AMMONIUM SALTS AND OTHER SOURCES; 10 PERCENT OF TOTAL AQUEOUS AMMONIA IS REPORTABLE UNDER THIS LISTING) 7664-41-7	0	13.77	11.74	9
<input checked="" type="checkbox"/>	ANTIMONY 7440-36-0	1.65	0.03	0.3	
<input checked="" type="checkbox"/>	ANTIMONY COMPOUNDS N010	66,155.5	58,193.3	41,461.7	



Do I have to do everything I put in my plan?

- It's not mandatory to do all the things in your plan.
- When they don't work out—tell us why—we might know something that would make it work.
- Or mark them inactive.
- If they work out, check that they're successful.

Thank you



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