



## Dangerous Waste & Pollution Prevention

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### Accommodation Requests:

To request ADA accommodation including materials in a format for the visually impaired, call Ecology at 360-407-6700. Persons with impaired hearing may call Washington Relay Service at 711. Persons with speech disability may call TTY at 877-833-6341.

Find a summary of links mentioned in all articles on the last pages.

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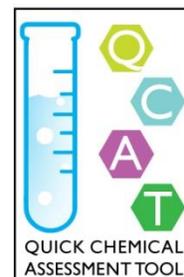
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## Announcements

### Chemical Hazard Assessment Training

This fall, [Northwest Green Chemistry](#) and Ecology are offering training to use the [Quick Chemical Assessment Tool \(QCAT\)](#). QCAT lets users with limited resources or expertise evaluate the hazards of chemical ingredients and compare potential alternatives. This tool is great for planners, small businesses, nonprofits, and educational institutions.



In this day-and-a-half workshop, Ecology's Dr. Alex Stone and other experienced instructors will provide an introduction to QCAT and hands-on activities so participants can practice using the tool. Participants will receive a certificate on completion.

*Register early to suggest a chemical of interest that may be incorporated into the workshop!*

Space is still available in workshops [October 1-2 in Vancouver, WA](#) and [November 12-13 in Moses Lake, WA](#). Visit our [events page](#) for workshop details.

### Join the Dangerous Waste Listserv

Interested in learning about dangerous waste management facilities in Washington? [Join our Dangerous Waste Facilities Listserv](#) to hear about upcoming public comment periods, public meetings, and permit changes.

### EPA Names Ecology a Safer Choice Partner of the Year

In June, the U.S. Environmental Protection Agency (EPA) presented Ecology and [Northwest Green Chemistry](#) with a Safer Choice Partner of the Year award for ongoing work to promote EPA's [Safer Choice](#) program.

[EPA recognized Ecology](#) for advancing safer chemistry and products, participating in Safer Choice-related initiatives, and promoting use of Safer Choice products through outreach and education.

Safer Choice helps consumers identify products with safer chemical ingredients. To earn the Safer Choice label, manufacturers must demonstrate that each ingredient in a product is the least harmful in its class to human health and the environment. Products must also be proven effective.

If your company is interested in having its products evaluated to earn the Safer Choice label, Ecology staff can provide technical assistance. Contact [Saskia van Bergen](#) at 360-407-6609 for more information. And be sure to check out the Safer Choice product listings to find less-toxic products for your business and home.



Ken Zarker accepts the award from EPA on behalf of the Hazardous Waste & Toxics Reduction Program. Photo by Eric Vance, EPA.

### **Assistance Finding Safer Chemical Alternatives**

In April we asked Washington businesses how we can improve our services to industry and help find and implement safer alternatives to toxics. Sixty-four percent of businesses said they are likely to work on finding safer alternatives or are already working on it. We want to help you with this process and make sure you have the tools and support you need.

Do you use:

- Solvents?
- Surfactants?
- Polymers?
- Oxidizers?
- Another chemical that may be hazardous to your employees?



You might qualify for a new program to help you match your chemical needs with a safer alternative.

Contact Tony Cooper at [tony.cooper@ecy.wa.gov](mailto:tony.cooper@ecy.wa.gov) or 360-407-6338 to learn more.

## New Video Teaches Dangerous Waste Basics: A Guide for Small Quantity Generators

By Joanne Lind

All businesses have wastes to deal with. Some wastes are considered dangerous and must be handled safely and according to local, state, and federal rules. If you have dangerous waste at your facility, you need to manage it properly to protect workers and your company's reputation. It's also smart business to minimize your liability for spills and pollution.



An estimated 75,000 Washington businesses fit the “Small Quantity Generator” or “SQG” category. If your business generates less than 220 pounds of most types of dangerous waste in a month (and accumulates less than 2,200 pounds at any one time), you're an SQG. No matter how much you generate, you still have to manage that waste properly—even small amounts of dangerous waste can cause big problems.

To help SQGs understand their requirements, Ecology created a new, 15-minute video, [Dangerous Waste Basics: A Guide for Small Quantity Generators](#).

This video follows another recent release, [Designate Your Waste: Is it Dangerous?](#), which explains how to determine whether a particular waste is subject to the dangerous waste regulations.

If watching on YouTube isn't convenient for you, both videos are also available on DVD. Email [hwtrpubs@ecy.wa.gov](mailto:hwtrpubs@ecy.wa.gov) to request a free copy. For more information about how to safely handle dangerous waste, or to find safer alternatives, [contact your regional office](#) of Ecology's Hazardous Waste and Toxics Reduction Program. We'll be happy to help.

## Credits

A huge “thank you” goes to the businesses that participated in the videos:

- [Loyal Family Vet](#) (Bellevue)
- [Kitsap Transit](#) (Bremerton)
- [Point Defiance Marina](#) (Tacoma)
- [Kay Parks Auto Rebuild](#) (Tacoma)
- [Accra-Fab](#) (Spokane)

We also want to thank [South Seattle Community College](#) and [Washington State Fleet Operations](#) for welcoming us into their shops to shoot narrated scenes, and our video production partners at [Twisted Scholar](#).

## Our Central Regional Office Moved!

By Amy Cook and Tim Hill

### We’ve Moved!

The Department of Ecology’s Central Regional office moved from downtown Yakima to a new “green” building located at **1250 West Alder Street in Union Gap**. Our phone numbers haven’t changed—you can still dial 509-575-2490 to reach reception.



New “green” features include solar panels, electric vehicle charging stations, and a water fountain that easily refills bottles.

A public open house to tour the new building will be scheduled sometime this fall.

# Trash to Treasure: Materials Exchanges Spark Innovation

By Lexie Carr and Mary Rose, NBIS

The Network for Business Innovation and Sustainability's (NBIS) [By-Product Synergy](#) program brings communities together to discover and develop opportunities for reducing solid waste. Companies that participate in synergy programs reduce waste, increase efficiency, and find new entrepreneurial opportunities. Sometimes they find that their "trash" is someone else's "treasure." These programs strengthen local economies and conserve natural resources.



Participants at the Grays Harbor Materials Exchange discuss their waste streams in small groups.

Last spring NBIS expanded its flagship By-Product Synergy NW program to two new regions: Grays Harbor County and South Puget Sound. A Public Participation Grant from the Department of Ecology helped make this expansion possible.

NBIS launched the expansion of this program with two "Innovating Waste-to-Profit" events: one for Grays Harbor and the other for Tacoma and South Puget Sound. These



Scrap glass and vinyl awaiting recycling at Milgard Windows & Doors.

events drew more than 70 business and community leaders from Grays Harbor, Pierce, and Thurston Counties. The events featured speakers representing local businesses such as [Ocean Protein](#), [Cosmo Specialty Fibers](#), [Feed Commodities](#), and [Milgard Windows & Doors](#).

These businesses successfully found ways to reduce their waste, exchange it with local partners for reuse, or source waste materials into the production of new marketable commodities. In "Fast Match" breakouts, participants discussed

waste streams they had in common (e.g., organic waste, plastics, and carbon fiber) to discover trades and solutions.

Additional roundtable breakouts provided opportunities to focus on more systemic topics, such as supporting waste-to-product entrepreneurship, aggregating waste

materials in rural areas for greater marketability, and developing robust local reuse options for reclaimed materials.

NBIS's events provided the space to discover, share, and collaborate on new ideas and opportunities. One participant promoted his idea to address the problem of local organic waste by building an anaerobic digester; another participant supported the idea by offering his company as a pilot for the project.



Participants at the South Puget Sound Materials Exchange form discussion groups based on similar waste streams.

Building on the success of these events, NBIS plans to continue convening and supporting these communities as they pursue opportunities to extract greater value from their waste streams, through additional site visits, trainings, and roundtable working groups.

### **NBIS's Upcoming Breakthrough Sustainability Seminar Series**

September 30, 2015

*Thriving in a Low Carbon Economy* — Why Bold, Low Carbon Action Makes Good Business Sense

November 12, 2015

*Creating the Paradigm Shift for Breakthrough Sustainability* — Management Insights from Social Sciences

February 10, 2016

*True Cost Analysis* — Anticipating Trends, Risks and Opportunities

April 13, 2016

*From Supply Chains to Value Chains* — Opportunities for Gaining Triple Bottom-Line Advantage

[Read more about NBIS's seminars and register online.](#)



*NBIS is the Northwest non-profit dedicated to making business a driving force of change toward a more sustainable future. Visit [www.nbis.org](http://www.nbis.org) to learn more about NBIS and their resources for sustainable business leadership. Contact Mary Rose, co-director, at 425-445-2600.*

# New State Solid and Hazardous Waste Plan: Moving Washington Beyond Waste and Toxics

By Chris Chapman

The five-year update of Washington’s State Solid and Hazardous Waste Plan is

complete! After more than a year and half of work, Washington Department of Ecology (Ecology) is ready to “Move Washington Beyond Waste and Toxics.” The plan supports our state’s waste management priorities to reduce, reuse, and recycle as much as possible, and safely dispose of any remaining wastes.

## What’s New With the State Plan?

The updated plan has a materials management focus. Materials management looks at

the full lifecycle of materials and products: design and production, use and reuse, and end-of-life management, when the material becomes waste.

Looking at the full lifecycle is essential. The adverse environmental impacts of extraction, production, and use are far greater than those associated with disposal when the product becomes a waste. Materials management supports creating better products



that have fewer toxics and are less wasteful. And it includes important end-of-life management options such as recycling, composting, and safe disposal.

### **How Will we use the Plan?**

The plan contains goals and actions for the next five years. These will direct the work of Ecology staff and provide guidance for others. There is a lot of important work to do in all parts of the sustainable materials management cycle, from end-of-life issues to looking “upstream” to address what becomes waste. This includes promoting the use of less-toxic products and working on food waste prevention.

### **Great Big Thanks!**

There were three opportunities for public comment as the plan was updated, and the state plan benefitted greatly from your ideas. We appreciate all the input we received, and we listened to what you had to say and used your suggestions. We hope you will use what’s relevant to you in the plan and help move us *Beyond Waste and Toxics*.

### **For More Information**

*The State Solid and Hazardous Waste Plan, Moving Washington Beyond Waste* is available [here](#) and also on the [state waste plan update website](#). Join the [listserv](#) to stay informed.

Or contact us:

- Chris Chapman, Hazardous Waste & Toxics Reduction Program, 360-407-7160, [chris.chapman@ecy.wa.gov](mailto:chris.chapman@ecy.wa.gov)
- Janine Bogar, Waste 2 Resources Program (solid waste), 360-407-6654, [janine.bogar@ecy.wa.gov](mailto:janine.bogar@ecy.wa.gov)

## Green Chemistry Resources

By Emily Orme

If you have concerns about the safety of the chemicals in your workplace, our [green chemistry web pages](#) have several tools and resources that can help you assess these chemicals and find safer alternatives.

Using a [hazard assessment tool](#) like our Quick Chemical Assessment Tool (QCAT) can help your business identify problem chemicals and evaluate chemicals as potential substitutes in your products and manufacturing processes.

Ecology designed [QCAT](#) to be a simpler and less-expensive version of the comprehensive chemical hazard tools used by manufacturers and large organizations.

Conducting an [alternatives assessment](#) will help you compare potential substitutes for chemicals of concern. This crucial step can help you avoid using a *regrettable substitution*, which means replacing a toxic chemical with one that has unknown—if not worse—toxic effects. One example of a regrettable substitute is bisphenol S (BPS), which quickly replaced bisphenol A (BPA) in the paper of many store receipts after concerns were raised about BPA's potential effects on child development. Scientific studies suggest that [BPS behaves similarly to BPA](#), so the replacement doesn't necessarily make the product safer.

If you need assistance conducting assessments, our staff chemists are here to help! Contact Alex Stone at [alex.stone@ecy.wa.gov](mailto:alex.stone@ecy.wa.gov) or 360-407-6758 for more information. You can also sign up for a [QCAT training](#) this fall.

### Other Resources

- Find [continuing education opportunities](#) for professionals interested in training programs or certification in green chemistry.
- Ecology and its partners also offer regular webinars and trainings in green chemistry and related subjects. Visit our [events page](#) to learn about upcoming webinars, or watch a [previously recorded webinar](#).
- Read [case studies](#) to learn how other companies have made their products safer for employees and the environment.



- Check out the tools, services, and training opportunities offered by other organizations on our [resources page](#).

## Upcoming Rule Revision for Mercury-Containing Lights

By Joanne Neugebauer-Rex

The Department of Ecology is beginning the process of revising the rules regarding the [collection and proper disposal](#) of mercury-containing lights. Known as *Mercury-Containing Lights Product Stewardship Program - Chapter 173-910 WAC*, this rule implements state laws in chapter 70.275 RCW - *Mercury-containing lights - proper disposal*. We need to update the rule to reflect changes made to the law by the 2014 Legislature.



Changes will include the requirement to fund the program through an environmental handling charge, and revised requirements for stewardship plans and annual reports, including an independent financial audit. Additional revisions will include a sunset provision, changes in definitions, other changes as directed by the Legislature, and revisions for clarification.

Ecology will send updates through a [ListServ](#) for those interested in the Mercury-Containing Lights Product Stewardship Program, and will update our related web pages. The rule process will include an informational meeting, followed by a formal public hearing.

You can learn more about this rulemaking by visiting the [Waste 2 Resources Program web page for rules under development](#), or our [web page for mercury-containing lights](#).

If you have any questions about the Mercury-Containing Lights Product Stewardship Program, contact Joanne Neugebauer-Rex at [joanne.neugebauer-rex@ecy.wa.gov](mailto:joanne.neugebauer-rex@ecy.wa.gov) or 360-407-7602.



## Links to Resources Mentioned in This Issue

### Announcements:

- Northwest Green Chemistry: [www.northwestgreenchemistry.org/](http://www.northwestgreenchemistry.org/)
- Quick Chemical Assessment Tool (QCAT):  
[www.ecy.wa.gov/greenchemistry/QCAT.html](http://www.ecy.wa.gov/greenchemistry/QCAT.html)
- Green Chemistry Events: [ecy.wa.gov/greenchemistry/events.html](http://ecy.wa.gov/greenchemistry/events.html)
- Dangerous Waste Facilities Listserv: [listserv.wa.gov/cgi-bin/wa?SUBED1=DWFACILITIES-PUBLIC-NOTICE&A=1](http://listserv.wa.gov/cgi-bin/wa?SUBED1=DWFACILITIES-PUBLIC-NOTICE&A=1)

### Small Quantity Generator Video:

- Video—*Dangerous Waste Basics: A Guide for Small Quantity Generators*:  
[www.youtube.com/watch?v=zeovPrZ8ja8](http://www.youtube.com/watch?v=zeovPrZ8ja8)
- Video—*Designate Your Waste: Is it Dangerous?*: [youtu.be/MuuQK8ILQM4](http://youtu.be/MuuQK8ILQM4)
- Ecology regional offices: [www.ecy.wa.gov/programs/hwtr/contacts.html](http://www.ecy.wa.gov/programs/hwtr/contacts.html)

### Materials Exchanges:

- By-Product Synergy program: [nbis.org/programs/by-product-synergy-nw-2/](http://nbis.org/programs/by-product-synergy-nw-2/)
- NBIS's sustainability seminars: [nbis.org/programs/breakthrough-sustainability-seminars/](http://nbis.org/programs/breakthrough-sustainability-seminars/)
- NBIS's website: [nbis.org/](http://nbis.org/)

### New State Solid & Hazardous Waste Plan:

- Waste Plan as a publication:  
[fortress.wa.gov/ecy/publications/SummaryPages/1504019.html](http://fortress.wa.gov/ecy/publications/SummaryPages/1504019.html)
- Waste Plan website: [ecy.wa.gov/wasteplan/](http://ecy.wa.gov/wasteplan/)
- Waste Plan Listserv: [listserv.wa.gov/cgi-bin/wa?A0=WA-STATE-WASTE-PLAN](http://listserv.wa.gov/cgi-bin/wa?A0=WA-STATE-WASTE-PLAN)

### Green Chemistry:

- Green Chemistry webpage: [ecy.wa.gov/GreenChemistry/makeproducts.html](http://ecy.wa.gov/GreenChemistry/makeproducts.html)
- Chemical Hazard Assessment: [ecy.wa.gov/greenchemistry/chazassess.html](http://ecy.wa.gov/greenchemistry/chazassess.html)
- Time article on BPA: [time.com/3742871/bpa-free-health/#3742871/bpa-free-health](http://time.com/3742871/bpa-free-health/#3742871/bpa-free-health)
- QCAT training: [ecy.wa.gov/greenchemistry/QCAT.html](http://ecy.wa.gov/greenchemistry/QCAT.html)
- Continuing education: [ecy.wa.gov/greenchemistry/ContinuingEd.html](http://ecy.wa.gov/greenchemistry/ContinuingEd.html)
- Green Chemistry Events: [ecy.wa.gov/greenchemistry/events.html](http://ecy.wa.gov/greenchemistry/events.html)
- Recorded webinars:  
[ecy.wa.gov/greenchemistry/Greenchem\\_resources.html#Recorded\\_Webinars](http://ecy.wa.gov/greenchemistry/Greenchem_resources.html#Recorded_Webinars)

- Case studies: [ecy.wa.gov/greenchemistry/WAcases.html](http://ecy.wa.gov/greenchemistry/WAcases.html)
- External resources: [ecy.wa.gov/greenchemistry/Greenchem\\_resources.html](http://ecy.wa.gov/greenchemistry/Greenchem_resources.html)

**Mercury Lights Rule Revision:**

- LightRecycle: [lightrecycle.org/](http://lightrecycle.org/)
- Chapter 173-910 WAC: [apps.leg.wa.gov/wac/default.aspx?cite=173-910](http://apps.leg.wa.gov/wac/default.aspx?cite=173-910)
- Listserv subscription: [listserv.wa.gov/cgi-bin/wa?SUBED1=ECOLOGY-MERCURY-CONTAINING-LIGHT&A=1](http://listserv.wa.gov/cgi-bin/wa?SUBED1=ECOLOGY-MERCURY-CONTAINING-LIGHT&A=1)
- Rule development: [ecy.wa.gov/programs/swfa/rules/ruleDev.html](http://ecy.wa.gov/programs/swfa/rules/ruleDev.html)
- Mercury-containing lights: [ecy.wa.gov/programs/swfa/mercurylights/](http://ecy.wa.gov/programs/swfa/mercurylights/)