Shoptalk

FALL 2021

EXPOSURE TO **BANNED TOXIC CHEMICALS** STILL PREVALENT VIA OLD BUILDINGS.

HOW TO **SAFELY** DISPOSE OF **VACCINE WASTE.**

DEPARTMENT OF ECOLOGY
State of Washington

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Contents

About Shoptalk

Publication information

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Accommodation requests

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A note to our readers

For the past year and a half, we've learned to approach our work in new ways. Thank you for asking questions and working with us to keep everyone as safe as possible while continuing to protect the environment and human health.

In-person inspections and visits

We still conduct some limited, in-person activities. If we plan an in-person inspection, visit, or meeting with you, please:

- Tell us if you have any confirmed COVID-19 cases at your facility.
- Ensure staff follow proper masking and social distancing practices.

For more information, check out:

- Page 6 of this issue to learn about disposing of vaccine syringes.
- Pages 3 and 4 of the Spring 2020[1] issue about compliance and cleaning methods.
- Pages 5 and 8 in the Fall 2020[2] issue about remote inspections and hand sanitizer.
- Page 9 of the Spring 2021[3] issue on how to keep your workplace safe.

Contact us anytime

We're always available if you have questions. Call us at 360-407-6700.

WHAT'S **NEW** WITH **DANGEROUS WASTE** TODAY?

Stick with safe practices when it comes to vaccine waste

LAUREN SMITH, LISA PERLE, & KATHERINE GAUTHIER

Flu season is here, and we're still in the midst of the COVID-19 pandemic. As facilities continue to administer COVID-19 and flu vaccines, we're getting more questions about how to properly dispose of the waste.

If you work at a health care facility, you should know about these types of wastes.

Empty vaccine syringes or vials

Syringes: If the vaccine was fully administered and the plunger is fully depressed, the syringe is considered empty and may be disposed of as **solid waste**.

Vials: If the contents of a vial are completely removed, the vial is considered empty and may be disposed of as **solid waste**.

Check with your solid waste vendor to verify if there are further restrictions.

Expired prefilled syringes or expired vials

Designate[4] to determine if the vaccine waste is a dangerous waste. If it is a dangerous waste, see our Dangerous Waste Pharmaceuticals Guide[5] and How do I manage my dangerous waste pharmaceuticals?[6] flow chart for additional guidance.

If you have more questions about proper pharmaceutical waste disposal, please contact Tom Cusack at Thomas.Cusack@ecy.wa.gov.

For questions about biomedical waste disposal, contact your local health department. ◆

Thirty-six new safer chemicals added to EPA's list

LAUREN TAMBOER

Have you heard? EPA just added 36 new chemicals to the Safer Chemical Ingredients List[7] (SCIL)! This ever-growing list can help you protect your employees, customers, and the environment from exposure to toxic chemicals by reducing or eliminating them.

What is SCIL?

EPA relies on different resources to assess the hazards of chemicals and to learn how chemicals move through the environment. Based on that assessment, EPA gathers a list of chemicals that are safer to use in products and at your business.

How can businesses use SCIL?

SCIL means you don't have to invest in assessing certain chemicals yourself. Instead, you can search for safer solvents, surfactants, and many other ingredients on SCIL. It takes the guesswork out of choosing safer chemicals.

What about safer products?

When looking for a specific safer cleaning product (rather than a chemical ingredient), use EPA's Safer Choice search tool.[8] You can filter by the type of product you need, or you can look for the Safer Choice label in stores.

Need help finding options for safer products? Reach out to our safer chemicals team. ◆

To find out more, contact:

Safer Chemicals Team
Safer.Chem@ecy.wa.gov

What's on SCIL?

- Antimicrobial actives
- Chelating agents
- Colorants
- Defoamers
- Emollients
- Enzymes and enzyme stabilizers
- Fragrances
- Oxidants and oxidant stabilizers
- Polymers
- Preservatives and antioxidants
- Processing aids and additives
- Skin conditioning agents
- Solvents
- Specialized industrial chemicals
- Surfactants

Exposure to toxic PCBs still prevalent via historical building materials

MYLES PERKINS

Polychlorinated biphenyls (PCBs) are in some building materials in Washington. Even though the U.S. banned the manufacture of PCBs in 1979, they're still in buildings built or renovated before that time.

PCBs are considered a probable carcinogen to humans[9] by the EPA. Building materials that contain these toxic PCBs can affect human health when they contaminate stormwater, water bodies, soils, sediments, and indoor air. They can be released into the environment—particularly when building materials are disturbed—during precipitation, pressure washing, and demolition or renovation activities.

Types of building materials used between 1929 and 1979 that may contain PCBs include:

- Door and window caulking
- Paint
- Galbestos roofing and siding
- Fluorescent light ballasts
- Various forms of concrete joint material

We have a team working to address the issue of PCBs in building materials, and they're acting based on recommendations from Washington's PCB Chemical Action Plan.[10]

Our team plans to publish guidance by December 2022, intended to help property owners, contractors, and consultants:

- Identify and characterize PCBs in building materials.
- Remove and properly dispose of PCB sources safely when demolishing and renovating.
- Understand the potential costs associated with these activities.
- Understand the Toxic Substances Control Act (TSCA) and Washington state regulatory requirements.

For more information on the issue, existing regulations, and tips to best manage these materials, check out our focus sheet[11] and webpage.[12]

COMMON BUILDING MATERIALS **CONTAINING PCBs**

Galbestos roofing/siding

Paint

Light ballasts

Door/window caulk

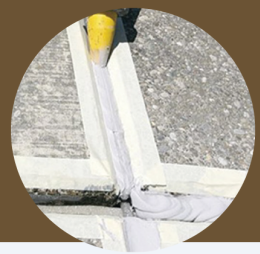
Joint material

LIGHT BALLASTS

GALBESTOS ROOFING/SIDING

PAINT

DOOR/WINDOW CAULK



JOINT MATERIAL

SMALL CHANGES, **BIG** RESULTS: DANGEROUS WASTE **SUCCESS STORIES**

Auto shops get creative to find a safer degreasing process

THATCHER MONTGOMERY

Two Oregon auto shops recently switched to a safer degreasing process. Some common switches for auto shops include things like:

- Drop-in replacements for solvent-based degreasers.
- Aqueous parts washers.

However, these two shops tried something a little less conventional. They now use ultrasonic cleaning systems with water-based, EPA Safer Choice certified products. This change reduces risks for employees and the environment and saves the businesses money.

Before

"The time-intensive cleaning process involved donning filtered masks, heavy gloves, safety goggles, then manually removing debris and oil, running the parts washer, and removing the solvent from the cleaned parts. Periodic replacement of the dirty solvent also caused exposure and took time to properly contain and manage the spent solvent for hazardous waste disposal."

After

"Now, they simply place a part inside the pre-heated ultrasonic cleaner, set the timer, and go back to work. When parts are too large to fully fit in the unit, they are flipped and run for another cycle. [One of the shops shared that] this has allowed their shop to be more efficient and focus on more important tasks. Disposal of the spent solution is much easier."

— Ultrasonic Aqueous Parts Cleaning in Auto Repair[13]

Want to try this at your shop?

These auto shops switched to ultrasonic cleaning systems with the help of the Pollution Prevention Resource Center. You can learn more about it in their blog post, "Less toxic auto repair: degrease with aqueous."[14]

Washington auto shops can make this switch too. Whether you're already looking into alternatives or you'd just like to move away from solvent-based degreasers, we have resources to help you. Our Product Replacement Program[15] is offering up to $10,000 to auto shops that switch to a safer degreaser.

How to switch and get reimbursed

Here's how to switch to safer degreasers:

1. Visit our website[16] and submit an application.
2. Wait to receive a voucher from Ecology and your local Pollution Prevention Partner.
3. Work with your supplier and Ecology to find a safer alternative that works for you.
4. Submit your voucher and receive reimbursement.

To find out more, contact Thatcher Montgomery. ◆

Thatcher Montgomery
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Swap your metalworking fluids to produce less dangerous waste

ROLFE PARSLOE

Do you use metalworking fluids?

Machine shops use metalworking fluids (MWF) to keep their machines cool and lubricated and to prevent premature tool burnout. Depending on the type of MWF used, the fluids may designate as dangerous waste when discarded.

When we let machine shops know they need to manage MWF as dangerous waste, they often ask us to recommend alternatives that won't become dangerous waste. The good news is we can now suggest some MWF alternatives that may not designate as DW if best management practices are adhered to. Find the full list of alternatives in Metalworking Fluid Selection by Score.[17] Check out a small part of the list to the right.

Metalworking Fluid Name	Unused Product Disposal Status	% Toxic Substances	% Unknown Substances	% Preferred Substances
Blaser Synergy 735	Not used oil, not DW	0	0.6	99.4
Goodson SGC-10 (SDS: FG-550)	Used oil	0	1.3	98.7
Blaser Blasocut 4000 STRONG	DW WP01, WP02	0	1.5	98.5
Blaser Vasco 7000	Not used oil, not DW	0	2.0	98.0
Qualichem Xtreme Cut 250C	Used oil	0	2.3	97.7
Blaser Blasocut 935 SW	Not used oil, not DW	0	3.2	96.8
Qualichem Q-Cool 355D	Used oil	0	3.2	96.8
Buckeye Lubricants #324-24NC	Used oil	0	5.0	95.0
Hangsterfers-500CF German MWF	Not used oil, not DW	0	5.0	95.0
Hangsterfers Semi Synthetic S-787	Not used oil, not DW	0	5.0	95.0

How should I use this list?

Pick an MWF that you think will work well in your application, with a disposal status of "Used Oil," and is as high up the list as possible. The list shows the least toxic products at the top and the most toxic products at the bottom. Also, try to pick an MWF with fewer unknown substances—unknowns could be toxic. Remember to read the directions at the beginning of the list to help you prevent turning your used MWF into dangerous waste.

Do your own alternatives assessment

Conducting an alternatives assessment on a small scale at your shop is the best way to determine which MWF alternative will work best for you. Try a few MWF alternatives and rate characteristics like cooling, lubricating, cost, expected life, odor, and the ability to be recycled. Our resource lists only metalworking fluids currently used in Washington. If it's on this list, it's likely working well at other machine shops.

You can also review the product's technical specification sheets or talk to the product manufacturer for help with this.

The products you use matter

Your business must properly store and dispose of dangerous waste—this might include spent MWF. Determining if your spent MWF is dangerous waste can be difficult, because product labels and Safety Data Sheets often don't offer enough information about the chemical contents. Switching to a safer alternative that will designate as used oil (when properly managed) will save you time and money in the future. You will also reduce exposure to toxic chemicals for yourself, your employees, and your customers.

Ecology will continue to evaluate MWF's and add them to this list. If you have questions about how we scored the MWFs or want help determining your metalworking fluid's disposal status, contact Rolfe Parsloe at Rolfe.Parsloe@ecy.wa.gov. ◆

Rolfe Parsloe
Rolfe.Parsloe@ecy.wa.gov

Big industry players do green chemistry, and you can too!

RUTH FROESE & SASKIA VAN BERGEN

Professionals from Costco, Target, EPA, the outdoor apparel industry, and many other organizations gained industry-leading sustainability experience through a University of Washington certificate program.[18] But you don't have to be a big organization to reap the benefits of this green chemistry program.[19]

Complete the three self-paced, online courses to receive a program certificate. You can register for all three courses at once, or you can sign up one at a time—the choice is yours.

With more market and regulatory pressure to use greener manufacturing processes and products, this training can provide innovative solutions and sustainable substitutes. You can incorporate green chemistry to keep your business at its most competitive!

Check out this video to hear about one Costco employee's experience. ◆

NEW OR UPDATED **RESOURCES** FOR DANGEROUS WASTE GENERATORS

Guides

Does my Business Generate Dangerous Waste? A Guide for Small Quantity Generators (in English[20] and Spanish[21])
Quick Guide to Dangerous Waste Labeling[22]
2021 Pollution Prevention (P2) Plan and Hazardous Waste Planning Fee Guide[23]
Polychlorinated Biphenyl Dangerous Waste Guide[24]

Reports

Toxics Evolution Metalworking Fluids Project Report[25]

Forms

Automotive Degreaser Replacement Application (in English[26] and Spanish[27])

Focus sheets

Focus on: Dangerous Waste Guidance for Gas Stations[28]
Focus on: PCBs in Building Materials[29]
Focus on: Flame Retardants[30]

Posters

Managing Dangerous Laboratory Waste—Poster[31]
Labeling Dangerous Laboratory Waste—Poster[32]

Other

Dangerous Waste Regulations
Self-Audit Checklist[33]

IMAGE CREDITS

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4. Cleaning machine by Macrovector.
5. Button press vector by Freepik.
6. Building construction by Pch.Vector.
7. Book stack vector created by Pch.Vector.

ENDNOTES

1 https://apps.ecology.wa.gov/publications/documents/2004002.pdf
2 https://apps.ecology.wa.gov/publications/documents/2004003.pdf
3 https://apps.ecology.wa.gov/publications/documents/2104002.pdf
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