

Interim Policy for Prepreg Waste

Policy starts:

December 31, 2018

Policy ends:

December 31, 2025

New interim policy for prepreg waste

The Washington State Department of Ecology (Ecology) now has an interim policy for facilities to manage preimpregnated composite fiber material (prepreg) wastes, provided the prepreg waste is:

- Oven-cured.
- Doesn't designate as federal hazardous waste under 40 CFR part 261.

Facilities that meet the criteria for this policy can choose to manage their prepreg waste under this policy rather than the Dangerous Waste Regulations (Chapter 173-303 WAC).¹

This Interim Policy went into effect December 31, 2018, with an original end date of December 31, 2021. It was extended to end December 31, 2023 and again December 31, 2025 because it's still in use by the composite industry and is an environmentally protective means of managing this waste stream.

What is prepreg?

Prepreg refers to fiber materials—often carbon, graphite, or glass fiber—that come "pre-impregnated" with resins or epoxies and a curing agent. Once cured, this resin or epoxy and fiber mixture reinforces the final product's strength. Prepreg is used in the composite industry, such as aerospace, automotive, and recreation industries.

To keep prepreg from curing prematurely, the fabric must be stored in a refrigerator or freezer. This keeps the resin and curing agent from hardening the product prematurely.

Why do we need this policy?

This policy allows for a conditional management and disposal option for prepreg waste which sometimes designates as a Washington state-only dangerous waste. This interim policy gives Ecology time to further evaluate how persistence criteria should apply to prepreg and other similar polymerized wastes with halogenated organic compounds. It also provides facilities temporary relief from full regulation during that evaluation process.

When does prepreg become waste?

Prepreg can become waste in several ways. Examples include:

- Expired, uncured product.
- Prepreg removed from refrigeration and not used in time.
- Scraps of uncured product.
- Shavings or cuttings from cured product.

ADA Accessibility

To request an ADA accommodation, contact Ecology by phone at 360-407-6700 or email at hwtrpubs@ecy.wa.gov, or visit ecology.wa.gov/accessibility. For Relay Service or TTY call 711 or 877-833-6341.

¹ http://apps.leg.wa.gov/WAC/default.aspx?cite=173-303



What are the benefits of this policy?

You may choose to manage some or all of your prepreg waste under the Dangerous Waste Regulations **or** this interim policy. If you manage prepreg under this policy, you can:

Avoid:

- State-only designation.
- Counting your prepreg waste toward your generator status.
- Reporting your prepreg waste on the Dangerous Waste Annual Report.
- Counting your prepreg waste toward pollution prevention planning and fees.²

Take advantage of:

- A 180-day accumulation period for cured prepreg (instead of 90 days) for large quantity generators. The accumulation period starts once the quantity of cured prepreg exceeds 2,200 pounds.
- Disposal at solid waste landfills that meet Chapter 173-351 WAC requirements.
- Uniform Hazardous Waste Manifest not required.

Refer to our <u>dangerous waste guidance of pre-impregnated resin composites publication</u>³ for detailed information about managing and designating prepreg waste.

What conditions must facilities meet to comply with this policy?

To manage prepreg under this policy, your facility must meet the requirements listed in the following areas.

General

• Comply with WAC 173-303-050, -060(1)-(4), -145 and -960.

Designation

• Comply with WAC 173-303-070(3)(a)(i-iii). Your prepreg must not designate as a RCRA hazardous waste under 40 CFR Part 261.

Curing Dangerous Waste Prepreg

You may only manage prepreg that is fully cured or intended for heat-curing under this policy. The intention for curing is to reduce the physical hazards of pressure and fire if the waste is stored in a sealed container.

Uncured prepreg waste must be:

- Cured within 30 days of generation.
- Kept in a container labeled as "Waste Prepreg for Curing."

Prepreg that is heat-cured according to manufacturer specifications is considered fully cured for the purposes of this policy. The oven used to cure the prepreg waste must:

- 1. Be the same oven used to cure the prepreg product on site.
- 2. Be operated at the same temperature, pressure, and relative time scale as the prepreg product.
- 3. Not be used to incinerate, destroy, or burn for energy recovery.⁴

² Chapter 173-307 and 305 WAC, respectively.

³ https://apps.ecology.wa.gov/publications/SummaryPages/1804028

⁴ While being cured in the oven, the lid can be off of the waste container.



4. Comply with all applicable air quality regulations, including all required permits from the local air authority or Ecology's Air Program for prepreg materials.

Accumulation and storage

- Accumulate cured prepreg no more than 180 days from the date when the quantity exceeds 2,200 pounds.
- Keep a written record showing the dates when waste accumulation began.
- Store waste prepreg in a way that prevents releases to the environment. Use compatible containers on impermeable surfaces, in secondary containment structures, or in other appropriate ways.

Transportation

- Prepreg waste that is also a hazardous material under 49 CFR Parts 171-180 must be properly prepared for transport along with applicable U.S. Department of Transportation shipping papers.
- A transportation document⁵ must accompany the waste during transit that identifies the:
 - Type of waste.
 - Amount of waste.
 - Origin of waste.
 - Identity of the generator.
 - Disposal facility where the waste is going.
- Copies of transportation documents must be retained on-site for 5 years.

Disposal

- Choose a disposal facility that is one of the following:
 - A municipal solid waste landfill permitted under Chapter 173-351 WAC, with an engineered liner and leachate collection system meeting the requirements of WAC 173-351-300.
 - A treatment, storage, or disposal (TSD) Facility permitted under WAC 173-303-800 through WAC 173-303-840.
- If managing the waste out of state, choose a disposal facility that is one of the following:
 - A municipal solid waste landfill that meets the requirements of 40 CFR Part 258.
 - A permitted TSD that meets the requirements of 40 CFR Part 270.
- The disposal facility can not currently be undergoing remedial or corrective action under WAC 173-351-440(7), 40 CFR 258.56, or a similar requirement in state regulations approved by the United States EPA pursuant to 42 U.S.C 6945(c)(1)(B).

To benefit from this policy, you must comply with all listed conditions. Facilities that don't comply with all of this policy's listed conditions will be subject to all applicable provisions of the Dangerous Waste Regulations, Chapter 173-303 WAC, including, but not limited to, waste designation, accumulation, transportation, and disposal requirements.

⁵ This doesn't need to be a Uniform Hazardous Waste Manifest.