

Environmental, Health and Safety Compliance
and System EHSMS Audit in Response to:

Washington State Preferred Performance
Measures for Direct Processors

WAC 173-900-650

Facility Audited: Universal Recycling Technologies
Clackamas, Oregon

Auditor: Bob Delich
Date: July 24, 2025

Scope of Audit

This audit was designed to meet the specific requirements of the State of Washington's "Environmentally Sound Management Performance Measures for Direct Processors – Preferred Status" qualification requirements. The WA State Standards, WAC 173-900-650. These were interpreted, and a facility checklist was prepared to meet the standards requirements that related directly to the operations. The audit consisted of confirming the nexus between the two documents and the operations.

The ISO system manages non-conformances with the CAPA process. All of the issues that have been identified will be managed appropriately to resolution and to prevent recurrence.

The facility audited:

Universal Recycling Technologies (URT) facility located at -10151 SE Jennifer St. Clackamas, OR, 97015. The audit was performed July 24, 2025.

The facility is well run and operating efficiently. Employees demonstrated proficiency in their job duties and the management system in general. The URT staff demonstrated strong commitment to the management systems and the overall QEHS performance of the company.

Audit Summary

The following is a summary of a comprehensive review for compliance of operations in response to the Washington State Department of Ecology Preferred Performance Standards for Direct Processors of Electronics Processors - WAC 173-9000.

1. Responsible Management Priorities – *Facility Maintains Compliance with Standards*

Inherent in the ISO 9001, ISO 14001, ISO 45001, R2v3, NAID AAA and e-Stewards v4.1 Standards, which is what this company utilizes as an EHSMS, is the continuous improvement of operations from management to operational evaluations.

2. Legal Requirements – *Facility Maintains Compliance with Standards*

URT, OR utilizes a subscription service that identifies local, state, federal and international regulations. An external audit of compliance is completed every year by a third party. Internal audits are completed annually, and the Certification Bodies do an annual surveillance audit as well.

At the OR facility material is managed under Fed UW regulations as required by the state of Oregon. The company agrees to be completely transparent with the WA DOE in regard to non-compliant events. This is added this to the Legal and Other Requirements register at the OR facility and corporate office.

3. Environmental, Health, and Safety Management System EHSMS - Facility Maintains Compliance with Standards

In Oregon, Universal Recycling Technologies is certified to ISO 9001, ISO 14001, ISO 45001, R2v3, NAID and e-Stewards v4.1. These are internationally recognized standards of excellence in Environmental, Health and Safety Management Systems for electronics recycling companies. The company wide EHSMS is audited and updated as new procedures are implemented or as new materials are accepted. The QEHSMS contains a diligent "Plan, Do, Check" component which manages change and issues through constant management review. The system is 3rd party reviewed annually during surveillance audits required by these certifications.

4. Recordkeeping – Facility Maintains Compliance with Standards

Records are managed well as noted during the audit and all material downstream dispositions to final destinations were confirmed through the e-Steward and R2v3 audit certification processes, which also meet the WA DOE requirements.

Responsible Management of Electronic Equipment

- Reviewed 8.4.1.1-P Plan for Responsible Management of EE and FMMP, rev 1.1, includes accepted and not accepted material, chain of custody, classification of EE, waste management hierarchy and FMMP.

Control of Transboundary Movement

- Material is managed through a broker, [REDACTED] (Korea), and directly to [REDACTED] (Japan) which categorizes controlled circuit boards as green control waste and does not require a Prior Informed Consent (PIC) for export. Circuit boards sent to [REDACTED] (South Korea) require a PIC which is on file with an expiration of 12-31-25.
- Plastic is shipped to [REDACTED] (Korea) which requires an import permit which was on file and reviewed during the audit.
- Processed single polymer plastic is exported through Hong Kong to Malaysia for further processing which is not required to be tracked by the Basel Amendment (Y48 categorized material is not a hazardous waste).

Downstream Accountability

- [REDACTED] – The facility sends mixed batteries (no lead acid) to [REDACTED]. The R2v3 certification is on file, and an onsite audit was completed 5-23-24. Noted BOL #0066512 shipped to [REDACTED] for 35,779 lbs. of mixed batteries on 4-11-25 and BOL #0066512 shipped to [REDACTED] for 37,343 lbs. of mixed batteries on 07-07-25.
- [REDACTED] - Ink and toner refurbishment and [REDACTED] is used for waste to energy for those that cannot be reused.
- [REDACTED] (broker) – Circuit boards and batteries are sent through [REDACTED] which are then sent to [REDACTED] (S Korea) and [REDACTED] for batteries, which is an EOL facility. [REDACTED] brokers plastic to [REDACTED], CA, plastic processing to single polymer occurs here. The single polymer plastic (no longer a Basel HW at this point) is sent to Indonesia for manufacturing. [REDACTED] is R2v3 certified, [REDACTED] is R2v3 certified. Desks audits are on file. Reviewed BOL #0066872 dated 5-13-25 for 18,581 lbs. of shredded low-grade boards and BOL #0067635 dated 07-23-25 for 30,103 lbs. of shredded low-grade boards and wire.

- [REDACTED] – Circuit boards are sent directly for smelting to [REDACTED] Japan, an audit packet provided by [REDACTED] is on file.
- [REDACTED] – Laptops, circuit boards. Reviewed BOL GWO03960 dated 04-24-25 shipped to [REDACTED] which included Laptops with lithium-Ion batteries, and circuit boards. From [REDACTED] circuit boards are sent to [REDACTED], Japan smelter and batteries to [REDACTED].
- [REDACTED] – Shredded hard drives. Reviewed BOL 0067007 dated 05-23-25 shipped to [REDACTED], for 33,239 lbs. of shredded hard drives.
- [REDACTED] – Lamps. Reviewed BOL 0067514 dated 07-15-25 shipped to [REDACTED], for 4,975 lbs. of straight lamps.
- [REDACTED] – Ink and Toner cartridges, Reviewed BOL 0066172 dated 03-10-25 shipped to [REDACTED] 06108, for 33,216 lbs. of ink and toner cartridges.
- [REDACTED] – Plastic, Reviewed BOL 0067631 dated 07-22-25 shipped to [REDACTED] 92705, for 39,380 lbs. of shredded mixed plastic.
- [REDACTED] – CRTs. Reviewed BOL 007498 dated 07-11-25 shipped to [REDACTED] 53546, for 42,806 lbs. of CRT Tubes.

The facility's tracking database enables auditors to verify material movement for all commodities to final destinations.

5. On-site requirements - Facility Maintains Compliance with Standards

Universal Recycling Technologies, LLC accepts all types of electronic waste. Material is received through one of their eight receiving docks, tagged with a personalized tracking slip, and sorted. CRTs are sent to the glass processing line.

Data bearing devices are brought into a secure data room for logical data sanitization. Material and components that have the capabilities for refurbishment are tested onsite. If components are tested and need to undergo refurbishment or repair activities, it is done onsite. If components do not meet the technical cutline they are sent for further processing. All non-reusable flat screens, computers (removed batteries, ram and wire removed in processor), peripherals are shredded on-site.

Printers, circuit boards, peripherals and all whole flat panel display devices are shredded in the e-waste shredder separation system which uses a proprietary shredding system with a HEPA and carbon air filter system. In operation since July 2017 this shredder has a proprietary mercury recovery capture system. The Oregon DEQ Air Quality Division has placed no limitations on what the facility can shred.

This facility is dismantling CRT devices down to the tube. The CRT tubes are shipped to the URT WI site where they're pulverized using a proprietary system, producing "Frit" sold as product in tile manufacturing.

A very small amount of municipal waste is generated that includes office waste that goes into the landfill and plastic film from the LCD teardown line.

URT has a formal Health and Safety Policy. Monthly employee advisory meetings are conducted with open topics for entire warehouse. The facility also conducts two safety talks every week, and safety committee meetings are conducted monthly.

All employees are trained in proper PPE use, mercury spill kits, and emergency procedures. Mercury Hygiene Policy/Procedures and Employee Exposure Programs including class topics such as Decontamination of Hands, Decontamination of Clothing/PPE, Food and Drink Restrictions, Decontamination of Surfaces, Air Monitoring, Necessary PPE for Locations, and Employee Biological Monitoring (as necessary). Equipment is inspected and tested monthly. Evacuation routes and hazard signs are posted. Auditor reviewed Competence, Training, and Awareness Procedure, and Employee Training Records.

Universal Recycling Technologies, LLC (URT) retained Insight IH Consulting, LLC (Insight) to conduct full-shift time-weighted average (TWA) personal breathing zone sampling for total dust and metals at its Clackamas, Oregon facility located at 10151 S.E. Jennifer Street. Additionally, noise dosimetry assessments and surface sampling for cadmium, lead, and mercury particulate were performed. The monitoring was conducted on November 11th, 2021, December 19th, 2023, and December 16th, 2024.

URT has implemented a medical surveillance program for all employees who are or may be exposed at or above the action level for cadmium or lead for more than 30 days per year. This includes the CRT D-Man and Shredder Processing employees. Based on the results of the noise monitoring, employees working in Big TV D-Man, CRT D-Man, and Shredder Processing have been included in the Hearing Conservation Program.

The facility has an Air Contaminant Discharge Permit #03-9511-SI-01, that expired on 01-02-2022. The ODEQ has notified URT's renewal application had been received prior to the expiration date, so the current permit will remain valid until the new version of the ACDP #: 03-9511-SI-01 can be re-issued. Reviewed Air Permit extension email dated 11-08-23 and Air Permit renewal application dated 08-31-21.

URT now has one dust collection system for the LCD's and small electronics shred system which has a mercury capturing filter using a carbon bed. This facility no longer is processing CRT tubes and are removing the CRT glass room and dust collection system for that process.

Air-testing results for particulate matter, opacity, and green loading were well below required limits in 2015, which satisfied the air permit, and does not require additional testing. The facility's renewed discharge air emissions permit doesn't require air emissions testing moving forward.

6. Materials of Concern - Facility Maintains Compliance with Standards

The auditor observed Materials of Concern (MOC) being handled in accordance with standards. A MOC flow chart is attached. The auditor verified that all downstream vendors for MOC's handle material per the WA State DOE Standards. URT agrees to notify the WA State DOE of vendor changes for all MOC's and has built this into their EHSMS.

7. Recycling - Facility Maintains Compliance with Standards

Materials managed to ANSI and OSHA standards - observed during the site visit. The auditor observed dismantling and separation to the highest marketable levels.

8. Reuse - Facility Maintains Compliance with Standards

Any material or components received that have the capability for reuse are tested for functionality according to e-Stewards and R2 requirements onsite. This includes hard drives (that will be sanitized), RAM, monitors, processors, video cards, power supplies, etc. Failed devices are shredded or sent downstream for processing.

9. Disposal of Residuals - Facility Maintains Compliance with Standards

Facility waste management follows state and federal guidelines. No Materials of Concern go to non-HW landfills or incineration. Site waste is managed and separated to minimize material going to landfill and nothing from the recycling process goes to the landfill.

10. Refurbishment - Facility Maintains Compliance with Standards

The facility conducts functionality testing and conducts repair, refurbishment as needed on components. The facility is certified to R2v3 and holds Appendix C scope for testing and repair. No outsourced repair/refurbishment is conducted; all refurbishment is conducted onsite.

11. Transport – Facility Maintains Compliance with Standards

URT accepts deliveries directly from customers. One box truck and one tractor trailer are leased for local deliveries inbound customer pickups and outbound to [REDACTED] and [REDACTED]. The facility requires third party transporters for all other outbound deliveries. The facility had appropriate documentation for third party transporters including insurance, W-9s, and applicable permits.

Reviewed the UCR Registration Confirmation #000-0529-6198 for (Motor Private Carrier US DOT# 1526663) expires 12-31-25 (Att 01 – page 38).

12. Prison Labor – Facility Maintains Compliance with Standards

URT does not use prison labor.

13. Facility Access – Facility Maintains Compliance with Standards

URT allows WA State DOE full record and site access – auditor discussed with management team.

14. Notification of Penalties and Violations – Facility Maintains Compliance with Standards

URT agrees to notify the WA DOE within 30 days if they receive a Notice of Violation at the facility. The facility has listed this requirement in the Legal and Other requirements to manage.

15. Due Diligence Downstream - Facility Maintains Compliance with Standards

As part of the audit process the auditor reviewed URT's comprehensive audit criteria for downstream vendor audits and sampled some of their annually updated audit packages which include permits, Bills of Ladings, Export Permissions, confirmation that the material processing meets the e-Steward, R2v3 and WMMFA requirements and worker health and safety protections. Processing technologies and material dispositions are listed in the MOC chart

attached to this report. While onsite the auditor reviewed Bills of Lading for Material of Concern against audit folders and the list of approved downstream vendors for accuracy. All current vendors have been audited, and the CB auditor will review these documents with the next onsite e-Stewards and R2v3 surveillance audit.

16. Exporting – Facility Maintains Partial Compliance with Standards

As confirmed during the e-Steward and R2v3 certification audits, URT is following WA DOE and FED EPA standards. Circuit Boards are sent to smelters in Japan, and S. Korea either directly or through downstream vendors. Single-polymer plastic is processed domestically and exported to Indonesia, which due to the single-polymer nature meets the Basel Amendment requirements as a legal export from the U.S. The facility has audits of these facilities on file which include required export requirements. These are reviewed by auditors during the annual certification audits.

17. Insurance - Facility Maintains Compliance with Standards

URT maintains insurance to cover employees, operations, and pollution liability. The facility holds the following insurances valid through 7/06/2026:

General Liability: \$1,000,000 per occurrence / \$2,000,000 aggregate
Automobile Liability: \$1,000,000 Combined Single Limit
Umbrella Liability: \$5,000,000 per occurrence / \$5,000,000 aggregate
Workers Compensation: \$1,000,000 each/ \$1,000,000 disease
Cyber Liability: \$10,000,000
Pollution Liability: \$15,000,000

18. Closure EHSMS and Financial Responsibility - Facility Maintains Compliance with Standards

The Closure Plan maintains a Surety Bond to cover the estimated costs of calculated closure liabilities. Estimated cost of closure is \$296,903.89. URT is principal and it will be executed by Westchester Fire Insurance Company of the Surety Bond that has a value of \$296,904.

19. Facility Security - Facility Maintains Compliance with Standards

Facility is NAID certified. Reviewed NAID Certificate issued by NAID, expires 10-31-25.

Facility stores all data devices indoors and employees must complete a background check and drug testing before hire. There is a 24/7 intrusion detection system to monitor the doors, motion, and electrical failure. Badge access is needed from outside. Any door left open longer than 60 seconds trips an alarm and ADT monitors access control. There are 24 cameras with recordings stored for up to 6 months (currently over 1 year of recordings). The facility has a weekly camera checks as well monthly security checklist including checking motion detectors, camera functions, door contacts, keypads, battery back-ups, monitoring services, visitor in/out logs, visitor badges, lighting, and locks

Findings

- Three extinguishers were blocked and were corrected.
- Means of egress narrow in the universal waste sorting and storage area. Auditor was sent a photo of the correction.

Auditor Qualifications

The auditor is certified by the State of WA DOE to perform this audit. Bob Delich is the Co-Owner/Managing Director of Greeneye Partners, LLC.