



Oregon Department of Environmental Quality

Rule Concept: Commingled Recycling Processing Facility Permit Program

Plastic Pollution and Recycling Modernization Act (SB 582, 2021)
Rulemaking Advisory Committee Meeting 3, Rulemaking 2

Background

This memo provides background information and draft rule concepts for establishing a new commingled recycling processing facility permit program required under ORS 459A.955(1).

Commingled recycling processing facilities handling recyclables from Oregon are required by ORS 459A.955(1), on or after a date established by the Environmental Quality Commission, to obtain a disposal site permit issued by the Department of Environmental Quality.

ORS 459A.905 prohibits local governments, their service providers, or recycling reload facilities from delivering to a CRPF commingled recyclables that were collected pursuant to the uniform statewide collection list unless that facility is permitted, or if located outside of Oregon, is either certified or certifies that it meets the requirements of ORS 459A.955 or ORS 459A.956. The proposed draft rule language for permitted facilities related to performance standards would also apply to a new certification program for out-of-state CRPFs handling Oregon-generated commingled recyclables.

Rule concepts for discussion at Nov. 1, 2023 RAC meeting

I. Permit requirements – Performance standards, capture rates

A capture rate performance standard measurement will quantify how well a commingled recycling processing facility performs the core function of sorting recyclable materials into marketable commodities and shipping those materials to the correct and responsible end market.

Per ORS 459A.955(2)(a):

(2) A disposal site permit issued to a commingled recycling processing facility must require the facility to:

(a) Sort all materials collected from the public so that materials do not become contaminants in other waste streams;

To meet these requirements, DEQ will establish performance standards associated with the proper sorting of commingled Uniform Statewide Collection List material entering processing facilities. Material not listed on the Uniform Statewide Collection List would be excluded from the capture rate-based performance standards.

A. Definition of capture rate

DEQ proposes that 'Capture rate' be defined as:

“The proportion of incoming recyclable material that is shipped to a responsible end-market relative to the quantity of recyclable material that is received by the commingled recycling processing facility. The rate may be specific to a commodity or the stream as a whole.”

B. Two-phase approach

DEQ proposes a two-phase approach for capture rate-based performance standards. Because producer funding will not be available to CRPFs before July 1, 2025, DEQ is proposing an initial set of capture rates that account for the facilities’ existing capabilities.

As of Jan. 1, 2028, DEQ proposes that those facilities meet higher capture rates. This proposal provides processors 2.5 years to procure, install and operate technology in an efficient and effective manner, to meet the 2028 capture rate performance standards. Note that CRPFs can achieve these capture rates either by capturing the material at their own facility or directing the material to a facility (for secondary processing) that achieves the capture rate, or some combination of the two.

C. Proposed capture rates

Following are proposed capture rates for fiber, plastic, and metal. See Appendix 1 for definitions of specific materials.

Fiber	July 1, 2025 Rate	Jan. 1, 2028 Rate
Cardboard (includes Kraft paper)	96%	97%
Printing and writing paper (includes newspaper, packaging tissue paper, telephone directories, non-metallized giftwrap, paperboard, magazines, catalogs and similar glossy paper, paperback books and molded pulp packaging)	96%	97%
Cartons	78%	88%
Polycoated cups	78%	88%

Plastic	July 1, 2025 Rate	Jan. 1, 2028 Rate
PET bottles and containers (6 ounces to 2 gallons)	85%	93%
HDPE bottles and containers (6 ounces to 2 gallons)	88%	95%

HDPE and PP tubs & pails (2 to 5 gallons) and PP bottles and containers (6 ounces to 2 gallons)	83%	93%
HDPE and PP flower pots – 4 inches to 2 gallons	70%	89%
HDPE and PP flower pots greater than 2 gallons	85%	92%

Metal	July 1, 2025 Rate	Jan. 1, 2028 Rate
Accepted aluminum cans (beverage and food)	88%	94%
Deposit and other steel cans accepted at curb	93%	98%
Other scrap metal (ferrous, non-ferrous + mixed metal) accepted at curb	88%	98%

Materials on Uniform Statewide Collection List	July 1, 2025 Rate	Jan. 1, 2028 Rate
Materials added to the USCL after these rules are adopted	75%	TBD

Measurement for capture rates

When it comes to assessment of capture rates, facilities must keep records and use operational practices and reporting any known facility-related issues to DEQ. This could include equipment breakage or unanticipated changes in received materials, which may impact an assessment of the facility’s performance against the established standards.

The following are examples of situations that would and would not work against a facility as it attempts to meet established capture rates:

- Baled material that has been stored onsite for an extended period of time, to the point where material has begun to degrade and become unmarketable to a responsible end market, would be considered out of compliance with performance standards, the permit and the DEQ approved operations plan.
- A commingled recycling processing facility would be given discretion in handling bagged material showing up at the facility and on the sort line. However, if an assessment of the facility’s residual stream shows that bagged material contained Uniform Statewide Collection List-related material, any Uniform Statewide Collection List-related material(s) found during that assessment would go against a facility’s capture rate for that specific material(s).

- Inbound fiber-based Uniform Statewide Collection List material that is wet to the point the material is degrading and is either difficult for the processing facility to handle or will be destroyed in the process of sorting that material, would not count against the facility's capture rate for that specific material. For such material, the CRPF will be expected to explain to DEQ what the material was, why it could not be processed, disposition of material and the estimated weight of material that was disposed of.

Information about DEQ's proposed assessment approach for capture rate performance standards is included in Appendix 2.

Future changes to capture rates

Performance standards for materials added to the Uniform Statewide Collection List after the Environmental Quality Commission's original approval of these rules will be assigned an initial capture rate of 75 percent, with rates for specific materials being updated in a future rulemaking. All capture rates will be periodically reevaluated but no more frequently than once per year, with reevaluation considering data generated from performance standard assessments.

Discussion prompts:

- Do you have any questions or concerns about the definition of capture rate?
- What do you think about the phased approach for capture rates?
- Do you have thoughts about the proposed rates for any specific materials?

II. Other permit requirements

Per ORS 459A.955(2)(d) and (e):

(2) A disposal site permit issued to a commingled recycling processing facility must require the facility to:

(d) Refrain from creating a public nuisance or health hazard, consistent with rules adopted under this section;

(e) Limit air or water pollution or other adverse impacts on public health or the environment, consistent with rules adopted under this section;

To meet these requirements, commingled recycling processing facilities must adhere to performance standards, such as the requirements already existing for other permit categories in OAR-340-096, focused on environmental and human health protection.

Performance standards to protect human health and the environment

In addition to performance standards for capture and outbound contamination rates, DEQ will establish performance standards that assure a processing facility does not impact human health or the environment by its operations. Performance standards include but are not limited to ensuring all commingled recycling processing facilities must be designed, constructed, and operated in a manner that:

- Does not cause a discharge of leachate or stormwater from the facility to surface water, except when such discharge is in compliance with a discharge permit issued by DEQ.
- Does not cause a likely adverse impact to groundwater under OAR 340 Division 40. All commingled recycling processing facilities proposing to use infiltration in soil as a method for managing leachate or stormwater must comply with OAR 340-096-0120: Groundwater Protection.
- To the greatest extent practicable, consistent with proper facility design and operation, control and minimize odors that are likely to cause adverse impacts outside the boundaries of the facility.
- Control or prevent propagation, harborage, or attraction of vectors, including but not limited to rats, birds, and flies.
- Comply with all other applicable laws and regulations.

Discussion prompts:

- Do you have any specific recommendations to improve other proposed performance standards to protect human health and the environment?

III. Reporting on outbound contamination

Per ORS 459A.955(2)(g):

(2) A disposal site permit issued to a commingled recycling processing facility must require the facility to:

(g) Accurately report outbound contamination levels;

To meet these requirements, DEQ proposes that the permit require recordkeeping and reporting that verifies compliance. DEQ will review and approve operations plans that detail how the processor plans to continually evaluate outbound bale quality with respect to contamination.

Discussion prompt:

- DEQ plans to propose limited rule language related to this requirement. Are there any specific aspects of this requirement that must be included in administrative rules?

IV. Proposed Start date and regulation of new permit and certification programs

To address ORS 459A.955(1), as of July 1, 2025, no person may establish or operate a commingled recycling processing facility in Oregon unless the person obtains a DEQ Solid [Waste Disposal Site](#) permit issued by the Department of Environmental Quality under ORS 459.205.

Issuance of new Commingled Recycling Processing Facility permits will begin upon approval of the permit program by the Environmental Quality Commission. However, it is realistic that not every facility will be permitted under the new program by July 1, 2025 as permitting could take over a year to complete per facility. If DEQ has not issued the CRPF permit by July 1, 2025 but the facility is working with DEQ on the

CRPF permitting process, and if the facility has an active Disposal Site Permit, they will be considered in compliance until the new permit is issued.

DEQ is recommending that CRPFs apply for a Disposal Site Permit by February 1, 2025, to give DEQ time to issue the new CRPF permit. Processing facilities holding a valid DEQ-issued permit on July 1, 2025 would allow the CRPF to accept and process Uniform Statewide Collection List-related material as the facility works with DEQ to obtain the new CRPF permit.

The earliest regulation of a CRPF could begin is after the permit has been issued. However, because the new system and CRPF permit requirements do not take effect until July 1, 2025, staff inspections will not begin until after the July 1, 2025 implementation date.

Certain regulatory requirements associated with the certification program established by DEQ, per ORS 459A.956, to be handled by DEQ. Certification program requirements, such as in-person, on-site assessments, to be handled by a third-party certifying entity that has been approved and trained by DEQ. DEQ would establish the regulatory framework by which the certifier would operate by when conducting in-person, on-site assessments.

Appendix 1 – Definitions

For the purposes of this proposed rule concept, DEQ notes the following terms and definitions, as defined under ORS 459A.863:

(2) *“Commingled recycling” means the recycling or recovery of two or more materials that are mixed together and that generally would be separated into individual materials at a commingled recycling processing facility in order to be marketed.*

(3)(a) *“Commingled recycling processing facility” means a facility that:*

(A) Receives source separated commingled recyclable materials that are collected commingled from a collection program providing the opportunity to recycle; and

(B) Separates the recyclable materials described in subparagraph (A) of this paragraph into marketable commodities or streams of materials that are intended for use or further processing by others.

(b) *“Commingled recycling processing facility” does not include:*

(A) Scrap metal recycling facilities;

(B) Scrap automotive or appliance recycling facilities;

(C) Full-service redemption centers or dealer redemption centers, as those terms are defined in ORS 459A.700, and recycling facilities owned and operated by a distributor cooperative established under ORS 459A.718;

(D) Recycling facilities handling covered electronic devices, as defined in ORS 459A.305;

(E) Recycling processing facilities that process only noncommingled, source separated recyclable material from commercial entities;

(F) Recycling processing facilities that recover commingled recyclable material primarily from the construction and demolition debris waste stream;

(G) Recycling depots;

(H) Recycling reload facilities; or

(I) Limited sort facilities, as defined by rule by the Environmental Quality Commission.

(21) *“Processor” means a person that owns or operates a commingled recycling processing facility.*

PET – Also known as Polyethylene Terephthalate, PET products and packaging include the ASTM D7611 “#1, PET or PETE” resin identification code.

HDPE – Also known as High-Density Polyethylene, HDPE products and packaging include the ASTM D7611 “#2, HDPE” resin identification code.

PP – Also known as Polypropylene, PP products and packaging include the ASTM D7611 “#5, PP” resin identification code.

Appendix 2 – Draft assessment of capture rate and outbound contamination performance standards

The establishment of performance standards for commingled recycling processing facilities handling Oregon-generated recyclable material will require that a new level of assessment be undertaken by DEQ, or, for out-of-state facilities, a third-party certifier. Following are preliminary concepts regarding an assessment process. DEQ or a third-party certifier will:

1. Review any pertinent records to prepare for an unannounced on-site observation.
2. Perform an unannounced on-site observation of the processing facility's operation, to compare operations at the facility (e.g., manual versus automation, where manual labor will be utilized, etc.) against submitted records and on-site records the facility keeps, as documented in its DEQ-approved operations plan. The visit will include a visual assessment of incoming materials including any inbound screening procedures, the facility's material streams as they enter the baler(s), and finished bales stored onsite.
3. Potentially identify the need for a materials assessment, using manual sorting of loose or baled material to assess the processor's performance with respect to the established capture and outbound contamination rates. Either DEQ, a third-party certifier or a contractor to DEQ or a third-party certifier would conduct the unannounced conventional evaluation method assessment (e.g., manual sorting of material).

Each commingled recycling processing facility handling Oregon-generated material must undergo at least one unannounced conventional evaluation method assessment within the first 2.5-year program plan period, with that assessment sampling material from each of the established capture rate-related commodities categories. For each subsequent five-year program plan period, each processing facility would undergo at least two unannounced assessments, though data taken from a DEQ-approved alternative evaluation method assessment could be used to substitute for one of the conventional evaluation method assessments.

If a commingled recycling processing facility is utilizing an alternative evaluation method assessment for data-generation purposes (e.g., use of artificial intelligence technology), such a facility would still need to undergo at least one unannounced conventional evaluation method assessment within each five-year program plan period, for comparative data purposes.

At any point, a commingled recycling processing facility can request to DEQ that data be provided via an alternative evaluation method. However, if a facility is to use an alternative evaluation method to provide DEQ relevant data, the processor would need to demonstrate that the alternative evaluation method produces similar or better quality data than the conventional evaluation method. DEQ would have to approve the methodology of that comparison study, and the commingled recycling processing facility would be responsible for covering the costs associated with the undertaking of such a comparison study.

For all assessments undertaken, material samples to be assessed will be pulled from the material stream as it enters the commingled recycling processing facility's

baler(s), though finished bales could be sorted as well. The facility will need to make material available for on-site or off-site assessment. DEQ, a third-party certifier or a contractor to DEQ or a third-party certifier must be on-site to observe selection of material to be assessed. If baled material is to be assessed, DEQ, a third-party certifier, or a contractor to DEQ or a third-party certifier will select the bales to be assessed, not the processor.

One material sampling could be used to evaluate compliance with the performance standards. Results would also allow DEQ, a third-party certifier or a contractor to DEQ or a third-party certifier to determine a facility's average capture rate across all commodities, plus the facility's average outbound contamination rate.

4. Determine the need and schedule for any follow-up sampling assessments. Processing facilities would be required to cover costs associated with follow-up assessments, in accordance with protocols approved by DEQ. All follow-up assessments will be subject to observation by DEQ or a third-party certifier.

Translation or other formats

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