

Topic paper 4: Clarifications to the Responsible End Market rules RMA Rulemaking 3: Prepared for Rulemaking Advisory Committee discussion – May 27, 2026

Responsible End Markets OAR 340-090-0670 and OAR 340-096-0310

Summary of proposed amendments

At the RAC meeting on March 30, 2026, DEQ presented [rule concepts](#) that proposed several amendments to rules at OAR 340-090-0670 and OAR 340-096-0310 regarding the obligation on Producer Responsibility Organizations and on commingled recycling processing facilities and limited sort facilities, respectively, to ensure materials collected for recycling in Oregon are sent to responsible end markets.

Based on feedback received from Committee members both during and following that meeting, DEQ is returning several of those rule concepts to the Committee, some with revisions, for further discussion:

- A. Definition of “managing inputs sustainably” (responsible standard) to address water inputs and chemicals of concern.
- B. PRO obligation involving disposition reporting
- C. Scope of practicable actions
- D. Threshold for practicable actions

Background

In rulemakings 1 and 2 in 2022-2024, the Environmental Quality Commission adopted rules to implement the responsible end market obligation applied by the statute to Producer Responsibility Organizations (ORS 459A.896(2)(a)) and commingled recycling processing facilities (ORS 459A.955(2)(h)). Both of these entities must take action to ensure that materials collected for recycling in Oregon go to responsible end markets, although their obligations differ. For PROs, the obligation applies to four classes of covered products listed at ORS 459A.869(7), and for CRPFs, the obligation applies to all materials that they hold. While the PRO’s obligations are broader, statute delimits the PRO’s obligation by the “practicability” of action, recognizing that there are financial limitations to this obligation, as well as feasibility limitations with respect to what the PRO can do to fulfill the obligation for materials it does not control.

The rules adopted in 2023 and 2024 actualize the responsible end market obligation by:

1. Defining “end market” for each material-specific supply chain,
2. Defining “responsible” as compliant, transparent, environmentally-sound, and achieving adequate yield, and stipulating that the entire supply chain through to the end market and including disposal pathways needs to meet the standard in order for an end market to be considered responsible,
3. Laying out the compliance deadlines and steps by which responsible performance is to be demonstrated (1. self-attestation followed by 2. PRO verification or third-party certification),
4. Requiring auditing from the PRO including through the use of random bale tracking,
5. Defining “practicable action” by example and setting a dollar per ton threshold beyond which a PRO can make a claim of impracticability, and
6. Establishing rules for quarterly disposition reporting (what is reported, by whom, for what deadlines, and what can be excluded from reporting).

These six topics are covered, respectively, in OAR 340-090-0670(1)-(6), the rules clarifying the PRO responsible end market obligation. Rules clarifying the CRPF obligation at OAR 340-096-0310 are more abbreviated because they cross-cite OAR 340-090-0670’s foundational definitions (e.g. of “end market,” “responsible,” etc.).

The responsible end market policy develops further through the program plan, and most prominently through the plan's inclusion of a verification standard for auditing whether or not facilities meet the responsible standard. While the rules define "responsible" in summary form, the plan goes to a greater level of detail with discrete performance criteria. Portions of the program plan addressing verification of end markets against the responsible end market standards were the subject of a plan amendment proposed by CAA. After eight months of deliberation, including extensive consultation with the Oregon Recycling System Advisory Council, an extensive effort to benchmark Oregon's draft verification standard against other certification programs, and significant discussion with CAA, DEQ on May 4 of this year approved the second draft amendment to CAA's Program Plan with directed changes. The resulting changes represent significant concessions made by both producers and the State, and reflect a step-wise approach to implementing elements of this important work area.

For additional background and context, as well as the full set of rule concepts proposed by DEQ on this topic, please refer to the [rule concept document](#) shared with the Committee in advance of its March 30 meeting.

Proposed amendments flagged for additional discussion

Again, some rule changes as previously proposed by DEQ and discussed by the Committee in March are not detailed here, including some changes where Committee members provided feedback to DEQ and DEQ has considered or is still in the act of considering that feedback.

The following rule concepts from March are presented here for additional discussion:

A. Responsible Standard (OAR 340-090-0670(2)):

DEQ proposes to modify OAR 340-090-0670(2)(b)(C) to clarify that "managing inputs sustainability" includes disclosure addressing water consumption and use of chemicals of concern.

For water consumption, DEQ proposes to:

- Define a "water scarce area" as a location that is either identified as having "medium risk" or higher by the World Wildlife Fund's Water Risk Filter for Water Availability, or as having "medium-high" risk or higher by the World Resource Institute's Aqueduct Water Risk Tool for either Water Stress or Water Depletion.
- Require entities in water scarce areas to disclose to the verifier the average volume of blue water used by the facility daily.
- Require the verification body to report to the PRO, and require the PRO to report to DEQ, only the name(s) and location(s) of such entities, but not the quantity of water used.

DEQ may reach back to the entity and request average volume of blue water used by the facility daily as a requirement of "transparency" (OAR 340-090-0670(2)(b)(B)), and the entity would be allowed to designate that information as confidential in accordance with ORS 459A.962(9). Disclosure of such information would be the responsibility of, and at the discretion of, the market entity, although failure to disclose could result in the entity not obtaining "responsible end market" status.

For chemicals of concern, DEQ proposes to:

- Define "chemicals of concern" as lead, mercury, cadmium, hexavalent chromium, phthalates, and PFAS.
- Require entities to disclose to the verifier any intentional addition or use in the recycling process of chemicals of concern, as well as any chemicals required to be disclosed to regulators by permit or local regulation. Chemicals in products used for equipment maintenance would be excluded from this requirement.
- Require the verification body to report to the PRO, and require the PRO to report to DEQ on an annual basis, only the number of entities handling each of four primary material categories (paper, plastic, metals, glass) using each of the chemicals of concern, but not the identities of these entities.

Rationale

CAA has agreed to evaluate and disclose both of these sets of information (chemicals of concern and water use), along with three other sets of information (regarding air pollution, water pollution, and waste generation),

as part of directed changes to its most recent Program Plan amendment. By putting these two sets of information (water use, chemicals of concern) into rule and mandating the degree of specificity with which the information needs to be reported to DEQ, DEQ effectively proposes to prioritize these two sets of information above the other three. Having information about a facility's water use will enable DEQ to review the issue of facility responsibility considering concerns raised regarding water-intensive types of processing being located in water-scarce regions, such as plastics recycling facilities in Mexico. And having information about chemical use across facilities will enable DEQ to consider the issue of toxicity. Air and water pollution generally will already be reported to regulators (where monitoring is required); hazardous waste generation is subject to RCRA reporting, and solid waste disposition reporting is already required as part of general disposition reporting requirements.

At the March 30 Committee meeting, several Committee members suggested that applying chemicals of concern (or other responsibility standards) to entities downstream of a material reclaimer should be outside of the scope of the RMA. Existing rules (OAR 340-090-0670(1)) extend the definition (and boundaries) of "responsible end market" to include, for glass, the first entity that uses glass in lieu of a virgin material downstream of the beneficiation plant, and for plastic used to produce packaging for food or beverage applications or for production of children's products, the entity that places the plastic into a mold for the manufacture of such packaging or product. That definition applies to both mechanical and non-mechanical recycling pathways. DEQ's rationale in the first RMA rulemaking for these boundaries were informed by review of environmental and human health impacts, and consideration of where the potential for largest impacts was likely to occur. For plastics in particular, the intentional addition of chemicals listed above (e.g., hexavalent chromium, PFAS, etc.) would be cause for significant concern and potential reputational damage to recycling. Reputational damage and resulting public disillusionment with recycling is one of the core challenges that motivated the Act in the first place, and DEQ considers the limited scope of chemicals proposed above, coupled with disclosure being limited to aggregated and anonymized information, to provide significant protection to industry concerns regarding reach and confidentiality.

B. Implementation: PRO obligation to assist with disposition reporting

Previously, DEQ proposed to change OAR 340-090-0670(3) to make clear that the PRO has an obligation to ensure complete disposition reporting including for material not under the control of the PRO to the extent practicable. The PRO's obligation to ensure that materials flow to responsible end markets (where practicable) applies to four classes of covered products collected by a recycling collection service as identified in ORS 459A.869(7):

- a. Covered products collected for recycling pursuant to ORS 459A.896 (the PRO Recycling Acceptance List);
- b. Covered products identified on the Uniform Statewide Collection List and collected pursuant to a collection program providing the opportunity to recycle;
- c. Identified on the list of specifically identified materials; and
- d. Recycled in an effort to achieve the statewide plastic recycling goal established under ORS 459A.926.

It is DEQ's interpretation of statute (ORS 459A.896(2)) that "ensuring that (such) covered products collected in this state for the purposes of recovery will be delivered to responsible end markets" requires having knowledge of where disposition occurs. In order to ensure that a material is delivered to a responsible end market, one must first know where disposition occurs. In the absence of such knowledge, one cannot determine if the location of disposition meets the standard of being a REM. Put differently, the obligation to "ensure" that covered products are "delivered to responsible end markets" encompasses an obligation to first know where the materials are going.

A PRO's ability to know the disposition of materials is potentially constrained by several factors including a) its willingness and effort to pursue information about disposition, and b) its ability to obtain such information. The ability of a PRO to obtain disposition information will vary across the four classes of covered products identified in ORS 459A.869(7). For example, since the PRO controls (or contracts for) collection of materials in the PRO Recycling Acceptance List, the PRO's ability to obtain disposition information for those materials is higher.

The rule concept that DEQ proposed in March was motivated by an impasse that developed in 2025 involving disposition reporting for materials downstream of commingled recycling processing facilities (CRPFs). Essentially, CRPFs reported that in some cases, they could not track disposition of USCL material beyond the first buyer (such as a broker), despite obligations to do so under ORS 459A.955(2)(h)(A)(i). The facilities argued that brokers might be willing to share disposition information with a third party (e.g., DEQ or a PRO) but not their client (the CRPF), as doing so would undermine the value proposition of the broker-client business relationship (if brokers revealed their downstream customers, CRPFs might choose to bypass the brokers and sell to those end markets directly). CAA similarly claimed that it had even less leverage to track disposition of CRPF-held materials, as it was not party to those transactions. CAA further disputed DEQ's understanding of statute that it had an obligation to ensure disposition, where practicable, as part of its obligations under ORS 459A.896(2) and 459A.877(6) (with "materials for which the organization is responsible" identified in ORS 459A.869(7)).

In response to this conflict, DEQ stepped in to fill the disposition reporting gap in 2025 and has continued to play that role in 2026. Importantly, CRPFs and the PRO have provided some support in this effort. While DEQ's effort has disrupted other DEQ operations, the effort has also proven to be fruitful. DEQ has learned much more about disposition pathways and has identified many end markets for Oregon-sourced materials that were previously not known, significantly expanding the number of self-attested responsible end markets in the process.

At the March 2026 meeting of this Committee, DEQ proposed changes to OAR 340-090-0670(3) that would have made clear the PRO's obligation to perform that task going forward. At and during that meeting, CAA raised objections to that rule. CRPFs, both individually and represented by their trade association, the Oregon Refuse and Recycling Association, preemptively also raised objections to the task being re-assigned to them.

In consideration of those comments, as well as CAA's publication of a draft national standard for REM certification, DEQ is now proposing to revise the rule concept described under "C.1: PRO obligation to assist with disposition reporting" in the rule concept document prepared for the March 30 meeting of this Committee.

The original rule concept proposed and discussed at the March 30 meeting would have changed the Implementation rules at OAR 340-090-0670(3) to:

- Edit OAR 340-090-0670(3)(a) to indicate three rather than two implementation steps for ensuring that materials go to responsible end markets and to remove the word "successively" to add flexibility in terms of sequencing and,
- Insert OAR 340-090-0670(3)(a)(B) as the second of these three steps, and indicating there that "Next, a producer responsibility organization must ensure that the facilities indicated at OAR 340-090-0670(2)(a)(A)-(E) and that manage the four classes of obligated material listed at ORS 459A.869(7) provide quarterly disposition data that is sufficient to enable complete disposition reporting as laid out at OAR 340-090-0670(6), including for material not under the control of the PRO to the extent practicable.

DEQ now proposes to modify this concept to waive, until January 1, 2030, a PRO's obligation to ensure disposition reporting for materials in ORS 459A.869(7)(b), materials on the USCL and collected under an opportunity to recycle act collection program.

Rationale

CAA and the CRPFs have raised reasonable concerns about disposition reporting. In the revised Program Plan, CAA agreed to verify end markets against the REM standard and to assist with disposition reporting for USCL materials (see "Data Review Steps (USCL Materials)" on page 150 of the plan amendment as approved May 4, 2026). DEQ and many interested parties expressed appreciation for these commitments.

Although undertaking disposition reporting has been a large effort for DEQ, the workload is expected to decrease as facilities, brokers, and end markets become more familiar with the chain of custody process. DEQ is also gaining valuable insights by working directly with these downstream entities and continues to expand its understanding of material outcomes.

The long-term challenges with USCL disposition reporting may ease as CAA develops a national certification program for responsible end markets. A second draft of this standard, released for public comment on May 5, 2026, includes full chain of custody requirements and would require downstream entities to be certified. If

approved, this program could serve as an alternative to disposition reporting under ORS 459A.955(2)(h)(A)(ii). DEQ expects that a certification program might be considered by the EQC in 2028 or 2029.

If the EQC does not approve such a program, the proposed waiver through January 1, 2030, would provide time for CAA and Oregon CRPFs to develop another reporting approach. DEQ also expects future changes to the processor commodity risk fee so that CRPFs would not be paid to perform work taken on by CAA or another party.

Finally, the PRO has a separate duty to provide disposition reporting for materials on the PRO Recycling Acceptance List. DEQ maintains that this duty also applies to other materials used to meet statewide plastic recycling goals. To meet statutory requirements, the PRO must ensure these materials are delivered to responsible end markets when practicable, which requires disposition tracking.

C. Practicability

1. Practicable actions

DEQ proposes to amend OAR 340-090-0670(5)(b) as follows:

~~(b) If the results of a verification, certification, or audit under sections 3 and 4 of this rule show that an end market does not meet the responsible end market standards in section 2 of this rule, t~~The producer responsibility organization must carry out practicable actions to meet the responsible end market standards in section 2 of this rule **if**

(A) there are insufficient responsible end markets for a particular material, or

(B) the results of a verification, certification, or audit under sections 3 and 4 of this rule show that an end market does not meet the responsible end market standards in section 2 of this rule.

Further, DEQ proposes to clarify that “insufficient responsible end markets” means that the entity that controls the material (e.g. a CRPF) has requested help from the PRO and either:

- a) There are three or fewer REMs for a particular material for more than six months in duration, or
- b) The average tonnage of obligated material collected for recycling in Oregon in the category in question exceeds 30% of the capacity of responsible end markets for more than six consecutive months in duration.

This proposed amendment is identical to DEQ’s original (March) rule concept, except that here DEQ has revised its proposed standard of “insufficient responsible end markets” by replacing “X% of the capacity” with the specific number for “30% of the capacity”.

Rationale

This amendment is intended to resolve confusion that occurred at program launch, when too few materials had verified responsible end markets (REMs) and questions arose about the PRO’s obligations under those conditions. DEQ maintains that a PRO must help ensure the ongoing availability of responsible end markets and should act proactively rather than waiting for market failure.

If multiple markets close or reduce capacity for unrelated reasons, Oregon programs could be left without adequate outlets for collected materials, while a PRO might claim no obligation to intervene. This scenario mirrors the challenges experienced after China’s National Sword policy changes, and is precisely what the Recycling Modernization Act was intended to prevent.

After considering Committee feedback, DEQ revised the March 30 rule concept to define “insufficient responsible end markets” as having less than 30 percent of needed capacity. This threshold is intended to support discussion, and alternatives will be considered. Although many preferred a capacity based approach, DEQ proposes to keep both triggers for ease of use.

The rules allow a wide range of practicable actions a PRO may take, including demonstrating that remaining REMs are stable, securing priority access for Oregon materials, or supporting new markets in becoming REM verified. The rules do not mandate any specific action or require investment in distant or underperforming facilities.

2. Threshold for practicable actions

This topic did not receive adequate time for discussion in the March 30 Committee meeting and DEQ is returning it to the Committee in its original form for additional discussion.

DEQ proposes to clarify at OAR 340-090-0670(5)(c)(A)(i) that, for materials described under ORS 459A.869(7)(b) – pertaining to covered products identified on the Uniform Statewide Collection List and collected pursuant to a collection program providing the opportunity to recycle - and any other materials not collected by the PRO and for which the PRO has a REM obligation, the PRO shall count toward the practicability threshold only the differential cost between two scenarios: a) the current cost of delivering to and recycling materials at an irresponsible end market, and b) the anticipated costs of delivering to and recycling materials at a responsible end market.

DEQ additionally proposes to clarify at OAR 340-090-0670(5)(c)(A) that, for materials described under ORS 459A.869(7)(a) – pertaining to PRO Recycling Acceptance List materials - and any other materials collected by the PRO and for which the PRO has a REM obligation, the PRO may count toward the practicability threshold all costs of delivering to and recycling materials at a responsible end market.

At OAR 340-090-0560(5)(d)(A), DEQ proposes to clarify that, should the department accept an impracticability claim for a PRO Recycling Acceptance List material, it can only liberate the PRO from a practicable action that is not separately imposed by ORS 459A.869(1), i.e., it cannot liberate the PRO from actions necessary to meet collection targets, convenience or performance standards, and responsibly recycle the material in question. As for other materials, acceptance of an impracticability claim will result in consideration of delisting.

Rationale

This proposed rule concept is targeted toward clarifying two elements that DEQ must consider in any review of practicability studies from the PRO. Specifically, the costs to be included and excluded when considering the practicability threshold and the limits of what obligations are relieved with a substantiated claim of impracticability. DEQ believes that for materials on the PRO Recycling Acceptance List and any other materials under the direct (or potential direct) control of the PRO, all costs of delivering a material to responsible end market should count towards determining whether an action to “ensure that covered products . . . will be delivered to responsible end markets” and etc. (ORS 459A.896(2)) is practicable or not practicable. In contrast, for materials that are under the direct control of another entity, if that entity is already sending it to an end market and making a public claim of recycling, then a PRO’s obligation should be limited to any additional costs associated with moving it further (from that non-REM to a REM).

DEQ interprets the statute as limiting the concept of practicability to the PRO’s obligations under ORS 459A.896(2), where the phrase “to the extent practicable” appears, and not extending it to ORS 459A.896(1), where the language does not appear. If cost relief is needed for responsible recycling of a PRO Recycling Acceptance List material, DEQ will look rather toward changes to performance and convenience standards or to delisting as options for delivering the relief needed.

Outcomes of proposed amendments

Operations: Greater clarity for regulated parties regarding where the bar for “responsible” performance is situated and regarding the REM obligation, especially for materials where CRPFs and the PRO are jointly obligated.

Fiscal or economic impacts: Higher short-term costs to DEQ to continue tracking disposition of CRPF-sourced materials. Many of the other edits are either formalizing compromises already reached in the context of the PRO plan amendment (i.e., they do not impose a change in economic impacts) or clarifying vagueness in, or competing interpretations of, the statute.

Committee discussion questions

1. Do DEQ's proposed edits to the "responsible" standard provide greater clarity and represent the compromises struck among interested parties during the program plan amendment review process?
2. Do you consider that the proposed changes to the Implementation rules could help move forward the process of disposition reporting?
3. Do you generally approve of the proposed definition for "insufficient responsible end markets," and would you propose changing the trigger value of 30 percent? On what basis?
4. Do the other clarifications proposed on the practicability rules have a logical basis, from your perspective? Why or why not?

Informational update: No additional discussion needed

The topics below were previously discussed by the Committee at the March 30, 2026, meeting. DEQ is including them here as referenced, and does not recommend additional Committee discussion.

D. Responsible Standard: "Transparent" and "Avoiding Releases to the Environment"

At the March 2026 Committee meeting, DEQ proposed to edit OAR 340-090-0670(2)(b)(B) regarding the standard of "transparent". DEQ also proposed edits to OAR 340-090-0670(2)(b)(C) specific to releases to the environment. DEQ is not seeking additional feedback from the Committee on those concepts at this time.

E. Yield

At the March 2026 Committee meeting, DEQ proposed to edit OAR 340-090-0670(2)(c)(E) regarding yield and is not seeking additional feedback from the Committee on that concept at this time.

F. Implementation: Temporary Variance for Loose Scrap Metal

DEQ is not seeking additional feedback on the temporary variance proposed for OAR 340-090-0670(3)(f)(A) for remelters that receive loose scrap metal from shredding operations, as proposed at the March Committee meeting.

G. Disposition Reporting

DEQ is not seeking additional feedback on the other "Disposition Reporting" edits to OAR 340-090-0670(6) and OAR 340-096-0310(2) proposed at the March Committee meeting.

H. Housekeeping

DEQ is not seeking additional feedback on the "Housekeeping" edits to OAR 340-090-0670 and OAR 340-096-0310 proposed at the March Committee meeting.

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