State of Oregon
DEQ Department of Environmental Quality

Topic paper 2: Changes to recycling acceptance lists for pressurized cylinders and aerosol containers

RMA Rulemaking 3: Prepared for Rulemaking Advisory Committee discussion – May 27, 2026

Convenience Standards OAR 340-090-0640

Performance Standards OAR 340-090-0650

Summary of proposed revisions

DEQ is proposing to make substantive changes to Producer Responsibility Organization obligations relating to pressurized cylinders and aerosol containers, both of which are covered products under the Recycling Modernization Act. Currently, both are included in the Producer Responsibility Organization Recycling Acceptance List and are required to be collected for recycling starting Jan. 1, 2028.

The Rulemaking Advisory Committee considered a rule concept for pressurized cylinders at its Jan. 27, 2026, meeting and members recommended only minor changes to that concept. With this document, DEQ returns to the committee with a rule concept for pressurized cylinders that reflects that feedback from the committee, as well as a subcommittee of the Oregon Recycling System Advisory Council. DEQ also brings a new rule concept for the management of aerosol containers which is similar to the rule concept for pressurized cylinders.

Circular Action Alliance has recommended removing both materials from the PRO Recycling Acceptance List, citing high costs associated with meeting convenience and performance standards, which are also contained in rule. With these proposed rule revisions, DEQ is proposing to maintain both items on the PRO Recycling Acceptance List, but with different convenience standards that will reduce costs to the PRO. Because proposed revisions to the convenience standards would eliminate any operational obligations on the PRO (limiting obligations to cost-sharing or reimbursement), DEQ also proposes to remove all performance standards from applying to the management of aerosol containers and pressurized cylinders.

Background and considerations

Pressurized cylinders and aerosol containers are both packaging and both are covered products under the Recycling Modernization Act, unless exempted. The Legislature directly exempted one format of pressurized cylinder (“liquified petroleum gas containers that are designed to be refilled”) in Senate Bill 582 (2021). In 2024, the Environmental Quality Commission further exempted a few additional types of pressurized cylinders such as refillable pressurized cylinders used for pure oxygen or hydrogen, and larger cylinders for acetylene and carbon dioxide. However, many other types of pressurized cylinders remain covered products, including one-pound propane cylinders used for camping stoves, backpacking fuel cylinders, smaller carbon dioxide cylinders for at-home carbonated beverage dispensers, bicycle tire inflation cylinders, and small nitrous oxide canisters. By definition, pressurized cylinders do not include aerosol cans.

Like pressurized cylinders, aerosol containers, when sold, contain products under pressure. These products can range from cooking oil and sunscreen to bear spray and insecticide. In addition to the product, aerosol containers also typically contain a propellant, which may also be ignitable. No current exemptions exist for subsets of aerosol containers.

Providing full compensation to local governments and service providers for the costs of managing all cylinders, including full and mostly-full cylinders, could be achieved by a separate extended producer responsibility program for pressurized cylinders. However, in the absence of extended producer responsibility for pressurized cylinders and aerosols, generators, local governments, and solid waste system operators will be left to manage the material. As such, these materials (both empty and full) may end up in the garbage system. In some cases, generators may treat them inappropriately as scrap metal, either by placing them into commingled collection or separate scrap metal collection.

The high cost of managing these materials is jointly a consequence of the package and the product which it may contain. Depending on product and whether the package is delivered empty or not, evacuation of the product can add to the expense. CAA has previously stated that the cost of managing residual product (e.g., residual propane) should not be in the scope of its obligations. And yet recycling these packages requires or otherwise results in the release of content, and the intent of the law is to improve responsible management of covered products through a shared responsibility framework. The challenges posed by pressurized cylinders as well as aerosols are partially within the scope of the RMA, and the shared responsibility framework of the RMA could be extended to help address those challenges.

Challenges

Both types of covered products pose some similar challenges to recyclers.

- The packages contain contents under pressure, and rapid depressurization (for example, if accidentally punctured) can create health and safety risks.
- The contents themselves may also be hazardous, even if depressurized. If generated by businesses that are not “Very Small Quantity Generators” under the Resource Conservation and Recovery Act, the packages may be considered a hazardous waste due to their contents.
- Department of Transportation requirements also come into effect.
- Users may not consistently depressurize them before placing them into solid waste or recycling collection systems.

Opportunities

Both types of covered products also pose some opportunities to recyclers.

- The packages themselves are often steel, although aluminum is also used for some aerosols.
- There are significant environmental benefits associated with recycling these metals.
- Producing trade associations are increasingly encouraging local governments and solid waste facility operators to accept these materials, either in household hazardous waste programs, recycling programs or both.

Differences

Despite their many similarities, there are also some important differences.

- Size, shape and use. Pressurized cylinders come in a greater variety of sizes and shapes but are generally associated with a smaller number of product uses. Aerosol containers are used for a much wider variety of products but are generally of a similar size.
- Regulatory framework. Because aerosol cans are common, and because they pose little risk to human health and the environment when handled properly, EPA added hazardous waste aerosol cans to the federal universal waste program. This allows eligible discarded aerosol cans generated by non-exempt hazardous waste generators to be managed under the streamlined universal waste standards rather than the full hazardous waste generator requirements. This federal change was adopted in Oregon via rulemaking and became effective in 2022. Pressurized cylinders are not included in the universal waste program.
- Collection. Empty aerosol containers were also traditionally collected in some commingled collection programs in Oregon, whereas pressurized cylinders are generally only collected at select solid waste transfer stations, even if empty. The risk from a non-empty aerosol container incorrectly placed into the commingled recycling system is perceived to be lower than the risk from a non-empty pressurized cylinder. However, because both package formats may contain hazardous residual contents, they are commonly accepted through household hazardous waste collection programs.

Convenience standards

Producer responsibility organizations are required to provide for the collection and recycling of materials on the Producer Responsibility Organization Recycling Acceptance List (OAR 340-090-0630(3)), in accordance with convenience standards (OAR 340-090-0640) and performance standards (OAR 340-090-0650). Collection targets (OAR 340-090-0660) must also be met for many of these materials.

- In the first (2023) rulemaking for the Recycling Modernization Act, the Environmental Quality Commission included pressurized cylinders and aerosol containers in the PRO Recycling Acceptance List. The Commission also adopted convenience and performance standards for the recycling of these covered products. Responding to concerns subsequently expressed by CAA, the effective dates for those listings were changed to Jan. 1, 2028, as part of the second (2024) RMA rulemaking.
- Convenience standards for pressurized cylinders and aerosol containers are currently the same as standards for several other covered products on the PRO Recycling Acceptance List, including aluminum foil, shredded paper, and block white expanded polystyrene. Generally, the convenience standards require the PRO to contract with a wide variety of existing recycling depots or drop off centers that meet specified conditions if doing so is “possible”. In some communities, the PRO is required to provide additional collection points (sometimes called “neighborhood-based depots”) based on community population and political boundaries of local governments.

Performance standards

Collection of all materials on the PRO Recycling Acceptance List is also held to performance standards. Most performance standards are general in nature, applying to all collections. The current rules, however, identify several additional performance standards specific to pressurized cylinders and aerosol containers. These include:

- A PRO may not accept pressurized cylinders or aerosol containers from any non-residential generator unless that generator affirms in writing its status as a Very Small Quantity Generator (which makes it exempt from RCRA hazardous waste generator requirements).

- Pressurized cylinders not suitable for reuse must be processed by a regulated hazardous waste treatment facility, with processed containers then being sent to a metal recycling facility.
- Aerosol containers must be managed according to universal waste standards. Cans must be punctured and their contents safely removed, characterized and managed in accordance with applicable hazardous waste standards, prior to sending the cans to be recycled.

Onramping proposal

CAA indicated in its Program Plan an intention to propose onramping empty "non-hazardous" aerosol cans to the state's Uniform Statewide Collection List as part of its forthcoming Program Plan for 2028-2032. CAA is currently working in the Portland Metro region to evaluate a pilot project in which local curbside collection programs continue to accept empty aerosol cans, with CAA and local governments promoting and testing the effectiveness of public outreach to encourage the recycling of only empty cans. That ongoing collection of empty aerosols cans in the commingled recycling system in the Metro region is a temporary allowance provided under OAR 340-090-0630(7).

Previous discussions and local government input

There have been several months of conversation, in multiple forums, regarding how to address pressurized cylinders and aerosol containers in Oregon's recycling system. In advance of the Jan. 27, 2026, meeting of this committee, DEQ developed a draft rule concept for pressurized cylinders that did not include aerosols. The committee discussed the original rule concept and was generally supportive of it, with committee members recommending some minor modifications.

During the 2026 Legislative Session, CAA expressed interest in legislation that would have exempted pressurized cylinders from the statutory definition of "covered product", thereby making convenience and performance standards for them void. That legislation was not adopted.

During Oregon Recycling System Advisory Council subcommittee discussions in March 2026, DEQ proposed maintaining the original (January) rule concept, with revisions as suggested by this Rulemaking Advisory Committee, but also further delaying the effective date of the rule. This would provide CAA, as well as cylinder manufacturers, additional time to seek a statutory alternative:

- A full removal of pressurized cylinders from the RMA, or
- The establishment of a separate (and new) EPR requirement for pressurized cylinders, and removal from the RMA.

Two of Oregon's larger local governments also provided additional information on their collection systems associated with pressurized cylinders and aerosols. In considering the costs associated with the safe management of pressurized cylinders through established household hazardous waste programs, Metro reported that its hazardous waste disposal contractor charges $78 to accept and dispose of a 2.2 liter nitrous oxide canister that retails for $87.95. Lane County accepts one-pound propane cylinders, both empty and not, at its network of 15 solid waste transfer stations that are located throughout the county. County staff transport the cylinders, using the exemption from DOT hazardous material regulations for government operations provided at 49 CFR 171.1(d)(5), for consolidation at the County's permanent HHW facility, where they are assessed and triaged. Approximately one percent of returned cylinders are considered "full or almost full" and are recirculated for reuse. Of the remainder, approximately 60 percent are considered "empty or almost empty"

while 40 percent contain enough content to merit disposition through hazardous waste incineration. The empty/mostly empty cylinders are punctured using a special tool and marked with fluorescent paint before placing them in a drop box that goes to a local metal recycler.

In discussion with DEQ and CAA, Lane County has noted that some cost-sharing, where CAA is providing a portion of cost reimbursements for the activities noted above, would help the County continue to manage these materials. That shared responsibility approach would be consistent with the spirit of the RMA, and might provide sufficient incentive to encourage other communities, over time, to adopt a service similar to Lane County's.

Proposed rule concept: Pressurized cylinders

This revised rule concept is very similar to what DEQ proposed to the RAC in January, with the following key changes:

- Addition of household hazardous waste collection events as eligible participants.
- Inclusion of "disposal of contents (if contained)" to the list of eligible costs.
- Clarifying compensation limits to limit costs of disposing of residual content to costs "as if" it was non-hazardous solid waste (analogous to routine contamination of other covered product packaging), and limiting cost obligations to account for the sale value of scrap metal.
- Removing pressurized cylinders from the scope of the performance standard rule.

1. Maintain pressurized cylinders on the PRO Recycling Acceptance List.
2. Apply a modified set of convenience standards to the recycling of pressurized cylinders by maintaining many of the existing requirements in OAR 340-090-0640, but with some notable changes. Specifically:
    a. Require the PRO to provide for collection of pressurized cylinders only at "existing recycling depots or drop off centers", with no additional, population- or geography-based quotas for collection points.
    b. For purposes of pressurized cylinder collection, further narrow the definition of "existing recycling depot or drop off center" to only include a site that operates under a valid solid waste permit issued by the DEQ, a facility operated by or at the direction of a Tribal government, or a DEQ-approved collection event for household hazardous waste. Do not require the PRO to offer collection at other "existing recycling depots or drop off centers", such as neighborhood or community recycling centers not otherwise located at a permitted disposal site or operated by a Tribal government.
    c. Modify the standards in OAR 340-090-0640(1)(b) defining when it is "possible" for a PRO to contract with an existing recycling depot or drop off center to provide for collection of pressurized cylinders to reflect the details described in this rule concept. Consistent with existing rules and additional standards proposed below, this would effectively limit collections to sites that are willing to co-manage the pressurized cylinders.
    d. Require the producer responsibility organization to pay for costs of recycling pressurized cylinders, including:
        i. Costs of acceptance and pre-processing, which include costs associated with *receiving* all pressurized cylinders (whether ultimately recycled or not), *assessing* cylinders so as to determine their recyclability, *separating* cylinders to be recycled from cylinders not to be recycled (if any), *consolidating, storing, and transporting* cylinders prior to final delivery to a recycler, *preparing* cylinders to be recycled (including puncturing cylinders and evacuating contents), *disposing of residual contents* (if necessary to render the covered product

recyclable, and if contents are contained; also subject to additional limitations described below), and *customary administrative and overhead costs*.
    ii. Costs of final transportation to a recycler.
    iii. Cost of acceptance of the material at a responsible end market, if any.
e. Limit the producer responsibility organization's financial responsibility, described above, as follows:
    i. In the event that the recycling of pressurized cylinders involves the disposal of contents, limit the PRO's financial obligation to the cost of disposing of contents "as if" they were non-hazardous solid waste. This is directionally consistent with how the PRO already pays for disposal of other contaminants that enter the recycling system as residual contamination in packages. Those disposal costs are factored into market prices paid (or charged) by end markets; end markets receiving packages with higher levels of residual contamination incur higher costs to remove and dispose of those contaminants, and reflect those costs by lowering the prices they pay to accept the recycled covered products. For all other covered products, lower commodity prices (due to residual contamination) ultimately impact the PRO as an increase in net operating costs, either under ORS 459A.896(1) (for materials on the PRO Recycling Acceptance List) or under ORS 459A.923 (for materials on the Uniform Statewide Collection List).
    ii. Limit cost obligations to the lesser of a) actual costs to manage, less revenue from the sale of scrap metal, or, b) for costs of final transportation (ii, above) plus "costs of acceptance of the material at a responsible end market" (iii, above) the per-ton practicability threshold contained in OAR 340-090-0670(5)(c).
f. In cases where a collection system manages pressurized cylinders using more than one recycling pathway (e.g., empty cylinders are punctured on site and sent to a local metal recycler; non-empty cylinders are sent to a hazardous waste treatment facility that evacuates the contents and recycles the metal), allow the producer responsibility organization to differentiate between management pathways for the purposes of determining compensation (so that the higher per-ton rate for the more expensive pathway is only applied to containers that follow that pathway).

3. Amend the performance standard rule (OAR 340-090-0650) to replace existing performance standards (both generally and also specific to pressurized cylinders) with narrow standards that address eligibility and reimbursement conditions. Because the PRO would have no operational obligations relating to the handling of pressurized cylinders, most of the existing performance standards would no longer be relevant.

Proposed rule concept: Aerosol containers

DEQ proposes to maintain aerosol containers on the PRO Recycling Acceptance List, but to modify convenience standards (OAR 340-090-0640) and performance standards (OAR 340-090-0650) for them, in a manner consistent with the proposed rule concept for pressurized cylinders described above.

One important difference between aerosol containers and pressurized cylinders is that CAA has proposed onramping "empty, non-hazardous" aerosols onto the Uniform Statewide Collection List (commingled collection) as part of its next (2028-2032) Program Plan. That Plan draft is not expected until early 2027, and DEQ cannot predict the outcome of that onramping proposal; however, this rule concept would not be rendered moot if those events occurred. If empty, non-hazardous aerosols are added to the USCL through the defined onramping process, the PRO's obligation to depots is limited to collection only at existing recycling depots or drop off centers, and HHW collection events as described above. Additionally, "empty, non-hazardous aerosol containers" are not a discrete category in the PRO Recycling Acceptance List, so the inclusion of those

materials in the USCL would not change the PRO's obligation to meet convenience standards for all aerosols as proposed in this new rule concept.

Additional implementation considerations

The proposed rule concepts create no obligation for local governments or service providers to accept pressurized cylinders or aerosol containers for recycling. If local governments or service providers choose to do so, a PRO would provide partial financial support under a shared responsibility framework consistent with other portions of the RMA. At the January RAC meeting, several members speculated that some transfer station operators might choose to take advantage of this type of assistance, while others would not, resulting in an inconsistent service level across the state. Further, local governments or service providers could choose to accept or promote for acceptance for recycling only a subset of these materials. For example, they might choose to only accept aerosol containers from households but not businesses, or only to promote for acceptance aerosols that contain content that introduces lower inherent risk (e.g., foods, personal care products). Consistent with CAA's anticipated onramping proposal, transfer station operators might also promote acceptance of "empty" containers only.

These rule concepts do not propose to change DEQ's existing regulation of the permitted solid waste disposal sites where most collection, and likely all processing, of these materials would occur. DEQ already provides regulatory oversight of such facilities, and that both pre-dates, and operates largely outside of, the regulatory framework of the RMA. In the context of this rulemaking, these rule concepts impose no implementation or material handling obligations on the PRO.

Policy question for the committee: Effective dates

As noted above, in response to industry's stated desire to seek statutory exemption for all pressurized cylinders, DEQ is prepared to delay the current Jan. 1, 2028, effective date of the convenience standard for pressurized cylinders to Jan. 1, 2030, which would provide industry with three Legislative Session opportunities to seek statutory exclusion. CAA has not indicated a plan to seek a statutory exclusion for aerosol containers.

DEQ would like to receive feedback from committee members regarding their preference for an effective date of the proposed rule concept for aerosols:

1. Should the effective date for the revised aerosols rules be Jan. 1, 2028 (aligning with the start of the new program plan, as well as the current effective date for the much more robust convenience and performance standard), Jan. 1, 2030 (aligning with the proposed new effective date for pressurized cylinders), or some other time?

Outcomes of proposed amendments

- Operations: Less extensive recycling of pressurized cylinders and aerosol containers and less financial support for existing collection programs when compared to current rule. Compared to a pre-RMA baseline, the rule concepts will lower costs to local governments and facility operators, improve recycling of containers, and in some communities may support a viable alternative to landfill disposal or improper recycling of unpunctured cylinders.
- Fiscal and economic impacts: Will reduce costs to participating local governments and other service providers (relative to a pre-RMA baseline). Cost to the producer responsibility organization will be

significantly reduced relative to the existing rule. Per ORS 459A.884(1), the PRO should recover these costs from producers of pressurized cylinders, not the general population of producers.

- Equity impacts: Less consistent service to collect and recycle these materials between communities. Communities with greater discretionary spending on household hazardous wastes are likely to be the beneficiaries of financial support from the PRO, while communities with less robust voluntary collection systems will be less likely to engage in, and benefit from, this service.

Additional discussion questions

1. Will the proposed rule additions deliver outcomes as indicated above?
2. Do committee members support these proposals or recommend consideration of a different approach?
3. What do committee members recommend for effective dates of the revised pressurized cylinder and aerosol container convenience standards?
4. Do committee members feel the outcomes, as categorized above by DEQ, are accurate? Are there other potential outcomes for consideration not seen in this document?

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Non-discrimination statement