

April 29, 2025

Nicole Portley
PRO Plan Lead
Recycling Modernization Act
Oregon Department of Environmental Quality
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Dear Nicole;

Subject: Collection Plan – Recycling Modernization Act

As requested, the Lubricants Packaging Management Association powered by Interchange 360 (LPMA) is pleased to submit this Collection Plan to the Oregon Department of Environmental Quality (DEQ).

Pursuant to Oregon Revised Statute 459A.869(13), packaging producers obligated under the *Recycling Modernization Act (RMA)* have the opportunity to demonstrate to the DEQ that their material is eligible for exemption in cases where the material is recycled responsibly outside of the comingled common recycling system operated by the state's approved Producer Responsibility Organization (PRO).

In our experience, wherever there is a successful Extended Producer Responsibility (EPR) program for packaging, there is a separate collection and material management system for petroleum and petroleum-related packaging. Separate collection and management for these packaging types provides for the collection of materials that are otherwise destined for landfill or are contaminants in the curbside recycling system.

LPMA will act on behalf of its Producer Members for the separate collection and recycling of petroleum and petroleum-related packaging in Oregon. Accordingly, LPMA offers the following details of its planned program to collect and responsibly recycle petroleum packaging such as that for oil-based lubricants, grease, antifreeze, engine additives and other fluids typically used in transportation and mechanical applications (Automotive Containers), as defined further in section 4 of this letter.

1. Producer Members

LPMA was founded by five leading petroleum companies—BP Lubricants USA, Inc. (Castrol), Chevron U.S.A. Inc., ExxonMobil Oil Corporation, Pennzoil-Quaker State d/b/a SOPUS Products

(Shell) and VGP Holdings LLC (Valvoline)—in response to the passage of EPR laws in several states.

The purpose of LPMA is to provide EPR compliance services and circular material management support to its obligated Producer Members. A current list of the LPMA Producer Members can be found on the [Oregon page](#) on our website. LPMA is actively working to add all of Oregon's obligated producers of LPMA-managed packaging to its membership and will update the posted Member list accordingly.

LPMA commits to sharing its member registrations with Circular Action Alliance (CAA). (See other LPMA/CAA coordination areas in [section 7](#).)

2. Public Collection Sites (RCFs)

LPMA intends to work with the existing used motor oil collection companies in Oregon to add packaging collection to their services. In connecting with a few of the companies that currently provide oil collection, there are several that would be suitable for packaging collection. In our experience, working with the used oil collectors is the most effective and efficient means to achieve optimal collection performance. We will register these companies and their collection sites in Q2 2025 and provide this information to the DEQ.

Following is the methodology planned by LPMA to determine the service approach for each Oregon community. Along with sales information from Producer Members, it will assist in estimating the potential materials available for collection based on the populations of each service area.

This methodology is already successfully applied by Oregon's PaintCare program and, as LPMA intends to ultimately offer a comparable number of drop-off centers in similar locations, it will be well-placed to deliver an effective program for Oregon's Automotive Containers as well.

Distribution Criterion. Provide 95% of the state's residents access to a permanent (e.g., year-round) drop-off site within 15 miles.

Population Criterion. Provide one permanent drop-off site per every 30,000 residents in the state.

Underserved Areas Criterion. Where the population is not within 15 miles of a permanent drop-off site, support the areas with LPMA collection events (discussed in [section 6](#)) or other customized services.

3. Schedule for Collection Point Establishment

It is estimated that there are over 4,000 existing used oil pickup sites in Oregon. LPMA will be using used oil collection companies that have an existing network where they are providing service for used oil and can easily add packaging collection to their existing customers.

LPMA will begin to establish approximately 150 registered public collection sites in May 2025, many of which may already be collecting used oil from the public. LPMA's ongoing assessment of site locations will include consideration to the PaintCare model to determine if the quantity and distribution of sites in Oregon could be a basis for determining the ideal sites for Automotive Containers. LPMA will provide the DEQ with an updated list of public collection sites on a quarterly basis in 2025 (June 30, September 30, December 31), and then annually.

4. Projected 2025 Collections by CAA Reporting Category and Producer Member

Addendum 1 to this letter identifies the full LPMA Product List. The CAA reporting categories associated with the materials used to package the applicable products are identified below. LPMA commits to sharing the CAA reporting categories (where they apply) in the consolidated sales and collection data reported to the DEQ.

“Plastic – Other Plastic: Plastic containers for motor oil, antifreeze, or other automotive fluids, pesticides or herbicides, or other hazardous materials (flammable, corrosive, reactive, toxic) – see Note

“Plastic-Flexible: HDPE (#2)/LDPE (#4) (Pallet Wrap) non-consumer”

“Paper/Fiber: Corrugated Cardboard (Tertiary/transport)”

“Paper/Fiber: Corrugated Cardboard”

Note: Other applicable automotive product packaging materials classified as “hazardous” are not included in the CAA reporting categories. These include aerosol, metal cans/drums and plastic liners from bag-in-box.

LPMA is working with its Producer Members to gather sales data for the state, by product type, as the basis for estimating the used Automotive Containers available to collect and allocating the collected materials to the producers responsible for them. The estimated total amount of HDPE rigid packaging on the LPMA product list that is supplied annually into Oregon is 3.44 M lbs.

5. Rationale for Projected Collection

The estimated annual amount of HDPE rigid collected material at a 15% collection rate is 516,000 lbs. The rationale for the amount of material estimated to be supplied is based on Oregon member reports received to date (Jan/Feb 2025), member reports received in Colorado (July-December 2024, January/February 2025) and British Columbia, Canada data (since 2003). Population comparisons to Colorado and BC and extrapolations from individual member supplied amounts were used to predict the full Oregon supply estimate.

6. Material Handling System – Collection / Processing

a) Collection

To prevent contamination and environmental risks, Automotive Containers should not be collected along with other consumer goods packaging in a curbside/comingled collection system. LPMA's program offers an alternative approach utilizing a state-wide depot-based collection system that will maximize diversion of Automotive Containers and reduce contamination and other environmental risks.

Automotive Container collection facilities, collectors and processors will be required to register with LPMA before they are eligible to participate in the program. All registrants must manage materials in accordance with the law and meet LPMA program plan and contractual requirements. LPMA will pay the cost of material collection and management by providing financial support or incentives to the marketplace to drive the desired results and targets, and will demonstrate independently verified, responsible end markets associated with the incentives it pays under the program.

Return Collection Facilities

Public Return Collection Facilities (RCFs) will be available for Automotive Container drop-offs by do-it-yourself (**DIY**) **Consumers**. Consumers who change their own oil or antifreeze generally represent a lower percentage of the overall generation of used Automotive Containers than the commercial, industrial and institutional generators.

Some **Small Commercial Generators** with low quantities of containers may also use RCFs, should they prefer this option over the Commercial Collection system (discussed next in this section). Usage of RCFs by these small Commercial Generators will, however, be subject to the capacity of individual RCFs, which should be confirmed in advance of the drop-offs. Small Commercial Generators may include businesses such as service stations, mechanic shops, quick lube shops, and auto dealerships.

Prospective RCFs must submit a LPMA Registration Form for review and approval. RCFs can be privately operated multi-material depots (bottle depots), local government operated recycling and landfill sites, eco depots, retail sites or other businesses. Oregon's existing service providers, HHW facilities, and solid waste facilities that accept a variety of products for recycling will be actively encouraged by LPMA to request RCF registration with the program.

Once the RCF locations are finalized, the [LPMA website](#) will include a search tool for consumers to locate their nearest free drop-off facility. Each RCF will be required to accept all formats and sizes of the included Automotive Containers. Materials dropped at RCFs will be picked up regularly by **Registered Collectors** based on agreements between the two parties.

RCFs will provide dedicated storage areas for Automotive Containers (stored by material type) to reduce the risk of contamination from or to other materials that may be collected at the site. The containers may be sorted (e.g., oil, antifreeze, others) and transported directly to Registered Processors, depending on the logistical requirements of the chosen transport provider.

As with other LPMA/Interchange programs, an instruction manual for RCF staff will be provided to all Oregon RCF operators. The manual will include the mechanism for reporting to LPMA on any contamination events requiring follow-up by LPMA. The RCF training will also include monitoring for and segregating containers where significant residual product remains. Any residual oils received would be collected and redirected for recycling.

Commercial Collection

Commercial Generators are non program-registered businesses that regularly handle Automotive Containers (and other used oil products) as part of their commercial or industrial operations, or from the maintenance of vehicles and equipment. As public RCFs have limited storage capacity, they are not intended for drop-offs by any Commercial Generators with quantities markedly higher than a DIY consumer. Instead, these generators will be directed to choose the Registered Collector(s) with which they want to make direct pick-up service arrangements. The resulting collection agreements between the two parties ensure ongoing material access and diversion, often outlining the collection frequency, collection requirements, storage requirements and any payments or charges. While these agreements are between the generator and the collector and do not involve LPMA, the Registered Collectors making the pick-ups and the Registered

Processors receiving the materials are compensated by LPMA based on the generator's location and the collected volumes.

The commercial collection system provides the cleanest material and leads to the best environmental outcome for that material. In a commercial setting, the Automotive Containers can be stored and kept clean and free of contaminants, which significantly improves recyclability. As with the public RCFs, the containers at Commercial Generator sites may be pre-sorted and then transported directly to Registered Processors.

Registered Collectors are required to ship the Automotive Containers collected from both RCFs and Commercial Generators to a **Registered Processor** (see [Processing](#) below) for an LPMA-approved end use, based on supply agreements between the parties.

Prospective collectors and processors must submit a Registration Form for review and approval by LPMA. Specific documents must be submitted with the registration application, including an initial Letter of Regulatory Compliance (discussed below), scale calibration certificates and, specific to any producers of plastic shredded flake, an end-fate confirmation letter.

As Automotive Containers often contain a certain amount of used oil or antifreeze, measures are required to ensure that proper equipment and vehicles are used for their transport. As a result, it is important that any Registered Collectors and Processors handling this packaging are doing so in compliance with the required environmental standards. LPMA requires that, as a condition of registration and every two years thereafter, each collector and processor engage an independent third-party qualified professional to conduct an environmental audit of their operations and state in a Letter of Regulatory Compliance that the operation is in substantial compliance with all applicable state and federal environmental legislation and regulations. In addition, upon registration and every two years thereafter, they must submit to LPMA their Oregon Certificate of Existence (Certificate of Good Standing) for the business. LPMA will not approve/retain the registration of a collector or processor unless both conditions are met.

Other Collection

LPMA will assist with other Oregon initiatives that advance Automotive Container collection and/or program awareness.

Community Collection Events

LPMA will provide financial support for community collection events operated by local governments, tribal nations and community groups. These are often multi-material events

that are supported by other recycling programs and provide residents with an opportunity to recycle a variety of products at the same location.

The funding for these collection events will represent 100% of LPMA's estimated share of the costs for its material types (including the transport and processing incentives paid to the collector/processor), as calculated on an event-by-event basis and negotiated with the event organizer. Organizations will be invited to apply for the grant, which is offered with the goal to help increase the number of free collection services available to residents across Oregon.

These events are geared to communities that are interested in having an event in place of a facility, or as a consumer awareness initiative in communities that already meet LPMA's Service Standard, discussed in [section 2](#) above.

Working with the Curbside System

LPMA will work with other programs to ensure collection and management of any Automotive Containers inappropriately discarded by consumers at residential premises into the curbside system. However, the preference will be that consumers are directed to bring this packaging to a RCF or Community Collection Event to reduce contamination risks.

b) Processing

LPMA Registered Processors must complete the DEQ self-attestation form for Responsible End Markets. To date, the DEQ has advised that Merlin Plastics has provided an self-attestation form and can be used as a processing market for LPMA containers. Merlin receives shredded and centrifuged plastics from collection companies and processes the material into resin pellets for plastics manufacturing. Additional processor markets may be established over time and will be required to meet the self-attestation responsible end market obligations.

LPMA requires Registered Collectors to ship Automotive Containers to Registered Processors that are an LPMA-approved responsible end market. LPMA processors provide recycling of the materials, which differs from material recovery facilities (MRFs) that focus on advance sorting of comingled recycling materials.

Registered Processors must ensure that materials are managed in a way that benefits the environment, minimizes risks to public health and worker health and safety, and is in compliance with environmental requirements. To that end, every two years, LPMA requires that these registrants engage an independent third-party qualified professional to conduct an overall [environmental audit](#) of their operations. LPMA anticipates that its end markets will be

the same as CAA, and as such, their self-attestation forms will already have been submitted. LPMA will work with any end market to complete a self-attestation form before they are registered into the program.

All processed containers will be sold as raw material commodities to manufacturers of new plastic and metal products. At the program onset, these containers may be shipped out of state or country, as close to the generation source as possible, until other market options are developed to serve Oregon and the surrounding states.

For bag-in-box packaging, the box will be directed for fiber recycling and the lightweight bladder bag will be sent to molecular recycling or landfill. As these bags contain nylon, there is currently not a feasible mechanical recycling option at end of use.

Reporting on the end markets of all Automotive Containers collected will be provided in LPMA's Annual Reports and on its website. LPMA's reporting reflects that Registered Processors receiving compensation from the program are required to demonstrate independently verified, responsible end markets which are subject to LPMA desk, field and compliance reviews.

7. Additional Information: Coordination with CAA

It is critical to the success of both the LPMA and CAA collection programs that LPMA material is separately managed and accurately reported. LPMA intends to develop a coordination agreement with CAA for Oregon (based on the Colorado agreement) that outlines coordination in key areas including Product Scope (detailed product definitions), Producer Registration and Reporting, Collection, Public Communication, and Post Collection Reconciliation and Reporting.

- With respect to Registration, LPMA intends to provide CAA with regularly updated membership information so CAA can assess membership completeness in the state.
- With respect to collected material Reconciliation and Reporting, LPMA will work with CAA to help prevent LPMA materials from entering the CAA program, and to reconcile any materials that do.

For reference, [Addendum 2](#) provides details of LPMA's coordination with CAA in Colorado in the key areas identified above.

The Oregon coordination agreement will also address oversight compensation to the DEQ. LPMA's share of the DEQ oversight costs covering program administration, implementation and enforcement will be paid to the department by LPMA.

8. Additional Information: Eco-Modulation

LPMA's program will be funded by producer responsibility fees payable to LPMA by its Producer Members on the sale or commercial use of new materials in Oregon.

In 2026, following input from subject matter experts, LPMA intends to eco-modulate its dues by providing an incentive (bonus) or disincentive (malus) based on producer performance in certain areas. These areas may include:

- a) *High levels of Post-Consumer Recycled (PCR) content use*
 - o Good candidate for LPMA bonus for using high levels of PCR materials as this factor is verifiable, measurable and applicable
 - o PCR requirements would vary depending on the material
 - o Would be specific to producer packaging and product design choices within a material category
 - o Factor potentially based a threshold percentage of PCR content (see below)

To establish baselines, LPMA will gather data on PCR content usage by its Producer Members in the first two years of program delivery, and commits to the following targets.

Material Type	PCR by 2030	PCR by 2035
Plastic – Rigid*	23.5%	30%
Plastic – Flexible	Baseline + 1%	Additional 1%
Metal	Baseline + 2%	Additional 5%
Cardboard/Fiber	Baseline + 5%	Additional 5%

**Plastic – Rigid*

LPMA's targets are adapted from recommendations for Colorado made by the Packaging Design Working Group of the National Lubricant Container Recycling Coalition (NLCRC), comprising industry producers and value chain members. After thorough review, the group determined that incorporating PCR is the most effective strategy to achieve eco-modulation in packaging. For Colorado, the NLCRC recommended a phased approach to PCR targets for the transportation and industrial applications lubricant industry, ensuring a gradual increase in recycled content while allowing time for industry adaptation, testing, and supply chain development. Given the technical challenges and required investments associated with using higher PCR levels in HDPE containers, their proposed targets are designed to drive progress while remaining achievable within the industry.

While some states have enacted legislation mandating up to 50% recycled content by the mid-2030s, these targets are primarily achievable for PET materials. HDPE, predominantly used in packaging for petroleum-based and related products as well as cleaning products, presents unique challenges at higher recycled content levels due to product compatibility and the type of PCR used (natural or mixed color). Industry experience has shown that 25% recycled content is achievable at scale. However, as collection of HDPE containers is expanded through EPR programs, more time is needed to scale collection and processing capabilities. Although recycling these containers into new ones is feasible, further testing and broader implementation are required.

PCR Verification

The PCR content reported by Producer Members must be based on a generally accepted chain of custody methodology, and be independently verified by an [Association of Plastic Recyclers](#) (APR) accredited body.

b) Reduction in amount of packaging materials

- Potential candidate for LPMA bonus for reductions in the amount of packaging materials used for products
- Would be specific to producer packaging and product design choices within a material category
 - Incentive would be granted following a verification process in which eligible producers submit additional data to substantiate their claims on the stated performance of their selected packaging, and to ensure risks and fraudulent claims are minimized
- Factor potentially based on number of components, or product/package ratio, or average unit weight

c) High recycling and refill rates

- Potential candidate for LPMA bonus for high recycling rates
- Would be applied at the material reporting category as an adjustment to base dues
- Would decrease dues for all producers supplying like packaging
- Factor potentially based on \$/weight or as a percentage of the payable base dues

d) Designs/practices that increase recycling costs

- Potential candidate for LPMA malus for designs and practices that increase the costs of recycling or reusing the materials
- Would be applied at the material reporting category as an adjustment to base dues

- Factor potentially based on \$/weight or as a percentage of the payable base dues

e) *Designs for reuse and refill*

- Potential future candidate for eco-modulation

In 2026, LPMA will begin to track Producer Member efforts and progress on reusable and refillable packaging for target-setting purposes. As automotive oils, windshield wiper fluids and cleaners are hazardous products, they require additional safety measures to store, refill and reuse and can present challenges not associated with most products. A comparable example is propane tanks, which cannot be refilled in-store. Some oil producers have, however, begun to investigate packaging and marketing options to accommodate reuse/refill, and LPMA will maintain a global watch on emerging innovation to support and advance the efforts of its Producer Members.

In 2026, LPMA will also begin to collect reuse/refill data from Producer Members for purposes of progress-reporting in its Annual Report. Once a baseline is established, LPMA will set specific targets that demonstrate ongoing performance improvement. At that time, LPMA's system to promote increased reuse/refill will also be implemented, potentially through eco-modulated PRDs and/or other incentives.

Other eco-modulation factors under consideration are *innovations/practices to enhance recyclability or commodity value*, and *designs/practices that disrupt recycling of other materials*.

LPMA recognizes that incentivizing one variable may inadvertently impact another, e.g., a reduction in packaging could lead to less recyclable packaging, which makes a well-established plan important. As such, LPMA will engage subject matter experts to assess the eco-modulation factors identified for Automotive Containers, recommend on the material categories, and advise on bonus and malus thresholds. Industry design guidelines will also be taken into consideration.

Through its ongoing communication with Producer Members on obligation and compliance matters, LPMA will ensure that members interested in working to achieve the minimum PCR content targets are aware of the Registered Processors from which PCR material feedstock can be purchased at market prices, as well as resources such as the [APR Buyers & Sellers Directory](#). In addition to eco-modulation, LPMA is assessing additional approaches to promote PCR use by its members.



Thank you for the opportunity to submit this exemption request. If you have any questions or if any aspects of our response require further clarification, please do not hesitate to contact me.

Regards,



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Addendum 1. Applicable Products List



LPMA Applicable Products List

The LPMA will manage all petroleum and petroleum related products and packaging up to and including 15 gallons, including oil-based lubricants, grease, antifreeze, engine additives, and other fluids typically used in transportation and mechanical applications and where these containers are often comingled with oil and antifreeze containers at generator sites.

Some common types of petroleum and petroleum related containers and packaging include rigid bottles (e.g., quart, gallon, etc.), pails (e.g., five-gallon buckets), multi-layer tubes and cartridges, and bag-in-box (e.g., 3- or 5-quart fluid-filled bags inside of a cardboard box) and aerosols. Materials used in packaging contain a range of materials including, but not limited to high-density polyethylene (HDPE), polypropylene (PP), polyethylene (PE), metal, cardboard, paper, and other constituents.

Included Products

- 2-cycle engine oil
- 3 in 1 oil for household / garage
- aerosol propelled lubricant
- agricultural spray oil
- anti-seize lubricant
- brake fluid
- chain oil
- circulating oil
- cleaning flushing fluids for motors/equipment
- compressor oil
- conveyor lube
- crankcase oil
- dedusting oil
- diesel exhaust fluid (DEF)
- diesel fuel treatment
- drawing, stamping, and shaping oil
- dripless lube
- electrical insulating oil
- emulsified oil
- engine conditioners
- engine degreaser
- engine oil
- engine sealers
- ethylene glycol engine coolant
- ethylene glycol heat transfer fluid
- food grade white mineral oil
- form release oil
- fuel boosters
- fuel system cleaners
- fuel/oil stabilizers
- fuel-line de-icing fluid
- gasoline/2 cycle engine oil mixes
- gear oil
- glycol-based heat transfer fluid
- grease
- gun oil
- hydraulic fluid
- hydraulic jack oil
- hydraulic oil dye

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- lock de-icing fluid
- lubricants
- machine tool and slideway lubricant
- marine cylinder oil
- marine engine oil for vessels operating domestically
- metal working oil
- mineral heat transfer fluid
- natural gas compressor oil consumed in use
- natural gas compressor oil not consumed in use
- oil additive
- oil treatment
- paper machine oil
- parts degreaser
- penetrating oil
- petroleum crankcase oil
- phosphate ester hydraulic fluid
- pneumatic system oil
- polyglycol synthetic compressor oil
- polyolester fluids
- power steering fluid
- process oil
- propylene glycol engine coolant
- propylene glycol heat transfer fluid
- quenching oil
- refrigeration system oil
- re-refined oil
- rock drill oil
- rustproof oil
- saw guide oil
- sewing machine oil
- silicone heat transfer fluid
- silicone lubricant
- solvents
- synthetic aromatic hydrocarbon heat transfer fluid
- synthetic crankcase oil
- textile oil
- transmission fluid
- turbine oil
- vacuum pump oil
- vegetable oil for lubrication
- water glycol hydraulic fluid
- windshield washer fluid
- winter start fluid
- wire pulling lubricant

Addendum 2. CAA Coordination Areas (Colorado Example)

	LPMA / Interchange 360	CAA
1. Product Scope	Petroleum and petroleum related packaging (<i>Appendix A: LPMA Colorado Product List</i>)	All product packaging except for LPMA managed packaging or packaging managed by another state approved PRO or IPP.
2. Producer Registration and Reporting	Separate Registration - Producers of LPMA managed products would register with and report to LPMA, and Producers of non-LPMA managed products would be referred to CAA or another state approved PRO or IPP.	Separate Registration - Producers of non-LPMA managed products would register with and report to CAA or another state approved PRO or IPP. Producers of LPMA managed products would be referred to LPMA
4. Collection	Separate collection of LPMA managed products at HHW depots, HHW events and automotive retailers and service stations	Separate Collection of non-LPMA managed products – curbside focused
4. Public Communication	Separate material-specific direct to consumer and stakeholder communication. Coordinate public messages with CAA to increase consumer awareness of all recycling options including where/how to recycle LPMA and CAA managed products.	Separate material-specific direct to consumer and stakeholder communication. Coordinate public messages with LPMA to increase consumer awareness of all recycling options including where/how to recycle CAA and LPMA managed products.
5. Post Collection Reconciliation and Reporting	Separate processing - Coordinate post collection material audit/verification to ensure reporting accuracy	Separate processing - Coordinate post collection material audit/verification to ensure reporting accuracy