



Oregon Department of Environmental Quality

# Oregon E-Cycles Modernization: Rule Concepts

Rulemaking Advisory Committee Meeting 2

May 9, 2024

## Background

In the modernized Oregon E-Cycles system, producers of covered electronic devices will participate in an Oregon E-Cycles program by joining an electronics producer responsibility organization. The electronics producer responsibility organization will operate the program on the producers' behalf, in accordance with a program plan approved by DEQ. If DEQ approves multiple plans, producers may choose between multiple electronics producer responsibility organizations to join. The electronics producer responsibility program, or programs, will offer convenient collection for electronics recycling throughout the state. DEQ will monitor program operations and producer participation for compliance with the Oregon Electronics Recycling Law.

More information about Oregon E-Cycles modernization can be found in materials provided in the Rulemaking Advisory Committee Meeting 1 held on March 7, 2024. These materials are available on DEQ's [E-Cycles 2024 Rulemaking webpage](#).

## Topics for discussion at the May 9, 2024 committee meeting

DEQ is seeking feedback on rule concepts related to program plan and annual report submissions and to key elements of an electronics producer responsibility program. DEQ has organized the rule concepts around the following topics:

1. Program plans and annual reports;
2. Coordination requirements if multiple plans are approved;
3. Fair financial compensation; and
4. Environmentally sound management practices.

While DEQ organized the rule concepts under four topics for today's discussion, when DEQ prepares draft rule language, the rule language may be organized differently. For instance, several rule concepts clarify information DEQ may require in a plan or annual report under different topics. In proposed rule language, DEQ may combine all plan requirements into one provision and all reporting requirements into a separate provision.

## Topic 1: Program plans and annual reports

### Introduction

The rule concepts under this topic clarify requirements for program plan and annual report submission and plan and report content. DEQ also intends to develop a plan guide and other administrative tools to help an electronics producer responsibility organization submit its program plans and annual report.

Program plans and reports are critical tools for DEQ to evaluate whether an electronics producer responsibility program meets regulatory requirements. Oregon E-Cycles runs on a calendar-year-to-calendar-year basis.

### Translation or other formats

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Before each program year begins, an electronics producer responsibility organization must submit to DEQ a plan that describes how the electronics producer responsibility organization will implement its proposed electronics producer responsibility program. DEQ reviews the plan to see if the proposed program meets regulatory requirements. As set forth in the Oregon Electronics Recycling Law, these requirements include:

- Providing convenient and equitable service throughout the state;
- Coordinating with other electronics producer responsibility programs through a designated coordinating body;
- Providing fair financial compensation to collection sites calculated to cover the costs of collecting, storing, managing and transporting covered electronic devices; and
- Providing for environmentally sound management practices to collect, transport and recycle covered electronic devices.

If DEQ approves a plan, the electronics producer responsibility organization must implement its program in accordance with that plan. If DEQ approves multiple plans for a program year, a process will begin to designate a coordinating body that will coordinate the activities of the electronics producer responsibility organizations.

After a program year ends, an electronics producer responsibility organization must submit a report to DEQ describing program implementation. DEQ reviews the report to evaluate program results and determine whether the electronics producer responsibility organization implemented its program according to its approved plan and the Oregon Electronics Recycling Law.

## Rule Concepts

**Letter of intent.** To help DEQ identify prospective electronics producer responsibility organizations and prepare resources for plan review, DEQ proposes to allow DEQ to require a prospective electronics producer responsibility organization to submit a letter of intent regarding plan submissions:

1. *DEQ may require a prospective electronics producer responsibility organization to submit a letter of intent to DEQ declaring the electronics producer responsibility organization's intention to submit a program plan. DEQ may set a deadline for such a letter of intent.*

**Schedule.** The statute requires plans for the modernized Oregon E-Cycles system's first program year (2026) to be submitted by July 1, 2025, but does not specify deadlines for subsequent annual plans and reports. In the current Oregon E-Cycles system, plans are due July 1 in a given year for a program being implemented in the following year, while reports are due March 1 in a given year for a program implemented in the preceding year. DEQ proposes to maintain generally the same schedule:

2. *Unless directed otherwise by DEQ, an electronics producer responsibility organization must submit a program plan by July 1 in a given year for the implementation of an electronics producer responsibility program in the following calendar year. Unless directed otherwise by DEQ, an electronics producer responsibility organization must submit an annual report on the activities of its electronics producer responsibility program in a given calendar year by March 1 of the following year.*

**Content.** DEQ proposes rule concepts to clarify what DEQ may require in a plan and annual report.

3. *Program plan. DEQ may require an electronics producer responsibility organization to provide, in its program plan, information sufficient to describe how the electronics producer responsibility organization will implement an electronics producer responsibility program that complies with ORS 459A.305 to 459A.355. Such information can include information on coordination if multiple program plans are approved, public awareness, program financing, environmentally sound management practices, fair*

*financial compensation to collection sites, and measurement and achievement of goals. Examples of information that DEQ can require in a program plan include:*<sup>1</sup>

- *A contact for the electronics producer responsibility organization who is located in Oregon;*
  - *The names of any electronics producer responsibility organizations that the prospective electronics producer responsibility organization will share collection sites with;*
  - *How the electronics producer responsibility organization will measure public awareness across the state and in minority, lower-income, rural and other historically underserved communities, such as through surveys;*
  - *Milestones, timelines, and deliverables on implementation; and*
  - *Any changes to the program an electronics producer responsibility organization will take to ensure that it consistently meets its program goals; and*
  - *Any changes to the program an electronics producer responsibility organization will take to ensure that it offers convenient and equitable service throughout Oregon through collection sites.*
4. *Annual report. DEQ may require an electronics producer responsibility organization to provide in its annual report information sufficient to evaluate whether the electronics producer responsibility organization implemented its program in accordance with its approved program plan and with ORS 459A.305 to 459A.355, including information on coordination if multiple program plans are approved, public awareness, program financing, environmentally sound management practices, fair financial compensation to collection sites, and measurement and achievement of goals. Examples of information that DEQ can require in an annual report include:*<sup>2</sup>
- *The reporting of the total weight of each type of covered electronic device, including peripherals, collected from covered entities, by product categories;*
  - *Whether the electronics producer responsibility organization achieved its program goals and possible reasons for why the electronics producer responsibility organization fell short of a goal.*

## **Topic 2: Coordination**

### **Introduction**

If DEQ approves multiple plans for a program year, a coordinating body will be designated to coordinate activities of the electronics producer responsibility organizations. Under statute, these activities include:

- *Annually reconciling the financial obligations between all electronics producer responsibility organizations based on the manufacturer obligations of each electronics producer responsibility organization's participating manufacturers;*
- *Conducting any other coordination between electronics producer responsibility organizations required by the Oregon Electronics Recycling Law, such as coordination on the programs' educational and outreach activities; and*

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<sup>1</sup> Additional examples of information that DEQ may require in a program plan on coordination, fair financial compensation, and environmentally sound management practices are included in the relevant topics below.

<sup>2</sup> Additional examples of information that DEQ may require in an annual report are included in the subsequent topics below.

- Conducting any other coordination between electronics producer responsibility organizations as directed by DEQ.

## Rule concepts

DEQ proposes the following rule concepts to support the administrative process for designating a coordinating body, if needed, and to provide examples of what DEQ may direct coordination on.

1. *Letter of intent.* DEQ may require a prospective coordinating body to submit a letter of intent and additional information to DEQ regarding the prospective coordinating body's ability to serve as a coordinating body. DEQ may set a deadline for such a letter of intent or additional information.
2. *Coordinating body.* DEQ may require an electronics producer responsibility organization to provide, in its program plan, information sufficient to describe how the electronics producer responsibility organization will implement an electronics producer responsibility program that complies with ORS 459A.305 to 459A.355. Examples of information that DEQ can require in a program plan include:
  - The name of the entity that the electronics producer responsibility organization would designate as a coordinating body if multiple plans are approved.
3. *Coordination tasks.* DEQ may direct a coordinating body to conduct any coordination between electronics producer responsibility organizations for the implementation of electronics producer responsibility programs pursuant to ORS 459A.305 to 459A.355, including coordination related to:
  - Public education and outreach activities to advertise and promote, on a regular basis, recycling of covered electronic devices and collection opportunities statewide;
  - Program goals, including collection goals and public awareness goals; and
  - The conducting of surveys or other measurements of public awareness about the electronics producer responsibility programs and electronics recycling opportunities.

## Topic 3: Fair Financial Compensation

### Introduction

DEQ proposes rule concepts to clarify the statutory requirement that an electronics producer responsibility organization must provide fair financial compensation to collection sites calculated to cover the costs of collecting, storing, managing, and transporting covered electronic devices. DEQ understands that electronics producer responsibility programs in the U.S. typically compensate collection sites on a collection-weight, or "price-per-pound" basis. The rule concepts below provide examples of how an electronics producer responsibility organization may address the fair financial compensation requirement and how this requirement works with the additional statutory requirement that an electronics producer responsibility organization work with all willing transfer stations, landfills and material recovery facilities under a DEQ solid waste permit to collect covered electronic devices. DEQ also proposes a rule concept that collector compensation be evaluated in 2028 and 2031, with additional evaluations to be conducted at DEQ's request.

### Rule concepts

1. *Rates.* DEQ may require an electronics producer responsibility organization to provide, in its program plan, information sufficient to describe how the electronics producer responsibility organization will implement an electronics producer responsibility program that complies with ORS 459A.305 to 459A.355. Examples of information that DEQ can require in a program plan include:

- *How the electronics producer responsibility organization will provide fair financial compensation to collection sites calculated to cover the costs of collecting, storing, managing and transporting covered electronic devices, by offering, for example:*
    - *Compensation rates necessary to ensure that a collection site can operate in areas where a collection site is required to meet convenient service under statute, with consideration for how the collection site can support the area being served and provide environmentally sound management practices; and*
    - *Comparable compensation rates for collection sites with similar operating characteristics or that operate in similar geographic areas. A collector's operating characteristics include whether the collector is a non-profit organization or operated by a local government; the other types of services that the collector provides to the community and that are not related to Oregon E-Cycles; and the collector's infrastructure to collect covered electronic devices.*
2. *Costs. As part of calculating fair financial compensation to collection sites, an electronics producer responsibility organization may review the costs of collecting, storing, managing and transporting covered electronic devices across a range of collection sites or may use reasonable estimates of costs of collecting, storing, managing and transporting covered electronic devices.*
  3. *Permitted sites. An electronics producer responsibility organization must offer any willing transfer station, landfill and material recovery facility, that are covered under a solid waste disposal permit issued by the department, compensation rates to collect covered electronic devices that are comparable to collection sites with similar operating characteristics.*
  4. *Third-party evaluation. In the annual reports for the calendar years 2028 and 2031, and, in subsequent annual reports, upon DEQ's request, but not more frequently than once every two years, an electronics producer responsibility organization must include an evaluation on whether compensation to collection sites is fair financial compensation calculated to cover the costs of collecting, storing, managing and transporting covered electronic devices. The evaluation must be conducted by a qualified, independent third party hired by the electronics producer responsibility organization at the electronics producer responsibility organization's expense, or by the coordinating body at the expense of all electronics producer responsibility organizations. The evaluation must review, for the applicable calendar year:*
    - *The real costs of collection sites in urban and in rural areas in collecting, storing, managing and transporting covered electronic devices, including labor, packing, storage, and security costs;*
    - *Trends in collection costs and collection compensation in Oregon;*
    - *Alternatives to compensation on a price-per-pound basis, such as a baseline fee for participation as a collection site, with price-per-pound compensation for pounds collected above a minimum threshold, or a flat rate per pick-up;*
    - *Whether compensation offered by an electronics producer responsibility organization was comparable among collection sites in similar geographic areas or with similar operating characteristics.*

*An electronics producer responsibility organization or coordinating body must cooperate with, and provide any information requested by DEQ or the third party to conduct its compensation evaluation. This includes a list of prospective collectors solicited and rates offered to prospective collectors.*

## **Discussion prompts**

1. Are there concerns with including in plans or reports the proposed information on compensation?

2. For the third-party evaluation, are there other types of compensation that should be studied?

## Topic 4: Environmentally sound management practices

### Introduction

DEQ expects that collectors, transporters, and processors will work together to prepare collected covered electronic devices for reuse, refurbishment, or recycling in a way that protects human health and safety and the environment. Statute requires an electronics producer responsibility organization to provide for environmentally sound management practices to ensure this. As defined by statute, such practices include practices that comply with all applicable laws, including adequate record keeping, tracking the fate of recycled materials, performance audits and inspections, provisions for reuse and refurbishment, compliance with worker health and safety requirements, maintaining liability insurance and financial assurances, and practices that the Environmental Quality Commission may adopt by rule. The statute additionally allows the Commission to set standards for environmentally sound management practices through rules.

The rule concepts below specify standards and practices that an electronics producer responsibility organization must incorporate through environmentally sound management practices. DEQ expects an electronics producer responsibility organization to provide more detail in its plan on specific environmentally sound management practices that the electronics producer responsibility organization will require for its program. In developing these rule concepts, DEQ reviewed the [Environmentally Sound Management Practices](#) that DEQ developed for the current E-Cycles program. DEQ may update these Practices to provide additional guidance for electronics producer responsibility organizations under the modernized Oregon E-Cycles system.

### Rule concepts

1. *Definitions*. DEQ proposes to include the following definitions through rules to inform rule concepts related to environmentally sound management practices:
  - a. *"Collection" means receiving, sorting, screening and preparing for transportation covered electronic devices from covered entities. Collection does not include recycling, reuse, or refurbishment activities.*
  - b. *"Covered electronic device materials" means a covered electronic device, a component of a covered electronic device, or a material from a covered electronic device.*
  - c. *"Final disposition" means the point beyond which no further processing takes place and covered electronic device materials have been sold as whole units of covered electronic devices for reuse; disposed of; or processed into recycled materials for a market.*
  - d. *"Materials of concern" means covered electronic device materials that are or may be hazardous or require special controls or consideration in order to enhance recyclability or address potential environmental or occupational health and safety risks that may arise from processing such covered electronic device materials. "Materials of concern" includes each of the following, and any covered electronic device materials containing:*
    - i. *Mercury;*
    - ii. *Polychlorinated biphenyls;*
    - iii. *Batteries;*
    - iv. *Cathode ray tubes or leaded glass; and*

v. *Circuit boards*

- e. *"Person" means the United States, the state or a public or private corporation, local government unit, public agency, individual, partnership, association, firm, trust, estate or any other legal entity.<sup>3</sup>*
  - f. *"Processor" means a person who recycles or otherwise processes covered electronic device materials derived from collected covered electronic devices.*
  - g. *"Refurbish" means to repair a used covered electronic device in order to restore or improve the covered electronic device so that the device may be used for the same purpose for which it was originally designed.*
  - h. *"Service provider or downstream vendor" means a person receiving a covered electronic device or covered electronic device materials from the time the covered electronic device is collected by an electronics producer responsibility program through final disposition of the covered electronic device materials in that covered electronic device.*
2. *An electronics producer responsibility organization must provide environmentally sound management practices that ensure:*
- a. *From the time a covered electronic device is collected from a covered entity through to the final disposition of the covered electronic device materials in that covered electronic device, any service provider or downstream vendor manages covered electronic device materials in a way that:*
    - i. *Is protective of human health and safety, the environment, and data privacy;*
    - ii. *Complies with all laws and regulations applicable to the person handling the covered electronic device materials, including legal requirements related to:*
      - 1. *Waste and recycling processing, storage, handling, and shipping;*
      - 2. *Air emissions and wastewater discharge, including storm water discharges;*
      - 3. *Worker health and safety;*
      - 4. *Minimum wage laws; and*
      - 5. *Transboundary movement of covered electronic device materials, including electronic equipment, components, materials, waste, or scrap for reuse, refurbishment, recycling, or disposal*
    - iii. *to the extent consistent with the above, considers and incorporates where practical the hierarchy of solid waste management for covered electronic device materials by:*
      - 1. *For reuse and refurbishment: screening for whole units at the point of collection;*
      - 2. *For recycling: dismantling, separating, or mechanically processing, as appropriate, covered electronic device materials from which raw materials are to be recovered into separate "streams" to generate value and minimize waste and sending separated materials for recovery of raw materials at facilities that use technologies and processes that have been determined to be protective of health, safety, and the environment;*

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<sup>3</sup> This definition aligns with the definition of "person" in ORS 459.005.

3. *For energy recovery and disposal: managing any residual that cannot safely or technically be reused, refurbished, or recycled by further separating for energy recovery or disposal in a safe manner in accordance with applicable laws; and*
  4. *Periodically evaluating management strategies to incorporate new, more effective technologies and continuously improve practices and processes where feasible within the context of the hierarchy*
- iv. *meets or exceeds best practices in electronics collection and processing, including for environmental, health, and safety management;*
- b. *The electronics producer responsibility organization can track and provide to DEQ:*
    - i. *The service providers and downstream vendors for any covered electronic devices that are sent for reuse and refurbishment;*
    - ii. *The downstream chain of documentation for covered electronic device materials, from each service provider or downstream vendor, through to the point of final disposition, including for covered electronic device materials from any covered electronic devices sent for reuse and refurbishment that are not sold at retail;*
    - iii. *The types and amounts of covered electronic device materials, including materials of concern, that are recycled by each processor, including processors receiving covered electronic device materials from downstream vendors or other processors, from the time covered electronic device materials are collected by the electronics producer responsibility program until final disposition;*
    - iv. *The types of recycling processes used by each processor for such covered electronic device materials; and*
    - v. *Documentation by each service provider or downstream vendor managing covered electronic device materials through to final disposition, that the service provider or downstream vendor adhered to environmentally sound management practices and complied with all laws and regulations applicable to their management of covered electronic device materials.*
  - c. *Covered electronic devices are picked up from collectors at a rate to ensure that collectors can continue to accept incoming covered electronic devices; that covered electronic device materials are not stored at collectors or processors beyond what is allowed under applicable law and regulatory requirements.*
  - d. *Covered electronic device materials are safely stored, transported, and processed under all circumstances, including in the event of an emergency, the closure of a collector or processor, or a collector or processor leaving the electronics producer responsibility program.*
  - e. *The electronics producer responsibility organization is notified promptly of fines, violations, or issues that may impact the ability of the electronics producer responsibility program to provide environmentally sound management practices and can respond to ensure the environmentally sound management of covered electronic devices.*
  - f. *Any service provider or downstream vendor located in Oregon comply with applicable state and local recordkeeping requirements, including Oregon Material Recovery Survey reporting requirements (Oregon Administrative Rule 340-090-0100), and any covered electronic devices reporting and tracking requirements for Oregon E-Cycles.*



3. *Environmentally sound management practices include:*
  - a. *adequate recordkeeping, tracking the fate of recycled materials, performance audits and inspections, provisions for reuse and refurbishment, compliance with worker health and safety requirements, maintaining liability insurance and financial assurances;<sup>4</sup>*
  - b. *adequate training, site management, and operation requirements for service providers and downstream vendors; and*
  - c. *regular monitoring, inspections, performance audits, and auditing in each program year of collectors, transporters, processors, and other service providers or downstream vendors or facilities, including auditing through random tracking of shipments with tracking devices to verify chain of custody and the fate of covered electronic device materials.*
4. *DEQ may require an electronics producer responsibility organization to provide in its annual report information sufficient to evaluate whether the electronics producer responsibility organization implemented its program in accordance with its approved program plan and with ORS 459A.305 to 459A.355, including information on environmentally sound management practices. Examples of information that DEQ can require in an annual report include:*
  - a. *The name, contact, type of covered electronic device materials received, and processing conducted by each service provider or downstream vendor;*
  - b. *The results, or summary of results, of audits conducted by an electronics producer responsibility organization to ensure environmentally sound management practices, including the results of random tracking of shipments to verify chain of custody and the fate of covered electronic device materials.*
5. *For the purposes of monitoring compliance with environmentally sound management practices and the Oregon Electronics Recycling Law, DEQ may use tracking devices to track the fate of recycled covered electronic device materials.*

## **Discussion prompts**

1. Are there obstacles or issues to implementing the rule concepts above?
2. Is there anything else DEQ should consider on environmentally sound management practices?
3. The rule concepts assume an electronics producer responsibility organization will evaluate, monitor, and audit a processor for environmentally sound management practices. Should there be additional requirements on an electronics producer responsibility organization that is its own processor? For example, a rule may require an electronics producer responsibility organization that operates as a processor in its program to maintain certification with an independent third-party accredited certification program.

## **References**

### **Topic 1: Program plans and annual reports**

- ORS 459A.320(2): requirements for an electronics producer responsibility organization’s program plan
- ORS 459A.320(4)(e): requirements for an electronics producer responsibility organization’s annual report
- Section 21(2) to HB 3220 (2023): due date for program plan for 2026

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<sup>4</sup> These practices in this subparagraph, i.e., from adequate recordkeeping to maintaining liability insurance and financial assurances, are taken from statute. See definition of “environmentally sound management practices” under ORS 459A.300.

## **Topic 2: Coordination**

- ORS 459A.305(3): definition of “coordinating body”
- ORS 459A.323: designation and requirements of coordinating body
- ORS 459A.327: requirements of coordinating body on public awareness

## **Topic 3: Fair financial compensation**

- ORS 459A.320(4)(c): requirement for an electronics producer responsibility organization to provide fair financial compensation to collection sites

## **Topic 4: Environmentally sound management practices**

- ORS 459A.305(8): definition of “environmentally sound management practices”
- ORS 459A.305(19): definition of “recycling”
- ORS 459A.320(2): requirement for describing environmentally sound management practices in a program plan
- ORS 459A.320(6): rulemaking authority for standards for environmentally sound management practices

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