Oregon Department of Environmental Quality



Recycling Contamination Reduction Statewide Goals and Approved Program Elements

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Background and Context

One of the aims of Oregon's Plastic Pollution and Recycling Modernization Act is to reduce contamination in the recycling. In addition to requiring improved sorting at recycling processing facilities, the RMA requires the producer responsibility organization to fund local governments and their service providers (no more than \$3/capita, based on population) in their efforts to reduce contamination from entering the commingled recycling stream. DEQ has a role to play in supporting this work.

State law (ORS 459A.929(1)) requires DEQ to:

- Establish statewide recycling contamination reduction goals.
- Evaluate the relative cost-effectiveness of different educational programs and other methods for reducing recycling contamination
- Establish and maintain a list of approved contamination reduction program elements, among other requirements.

This document establishes the statewide contamination reduction goals and list of approved contamination reduction program elements.

State law (ORS 459A.929(2)) requires local governments subject to Opportunity to Recycle requirements to establish and implement a program to reduce contamination that includes:

- One or more local recycling contamination reduction goals that are consistent with the statewide goals established by DEQ.
- At least one element from each of three categories (A, B and C below) of contamination reduction
 program elements on DEQ's approved list or uses materials or methods that are at least as effective as
 materials or methods on DEQ's approved list.
 - A. Customer-facing contamination reduction materials and elements that are responsive to the needs of diverse populations;
 - B. Standards for providing feedback to generators that contribute to contamination that is responsive to the needs of diverse populations; and
 - C. Standards for providing financial or service consequences to generators that are significant and repeated sources of contamination and that continue to contaminate separated recyclables after being subject to elements described in subparagraphs (A) and (B) of this paragraph. Consequences must be responsive to the conditions of diverse populations.
- A process for reviewing and revising as appropriate, at least once every five years, the local goals and local elements established under this subsection.

Please note that a local government may only be required to implement contamination reduction programming to the extent that funding is provided by the PRO under ORS 459A.890(4).





Statewide Recycling Contamination Goals

Through research and interviews with entities that handle and sort commingled recycling, DEQ identified two important aspects related to contamination. While contamination impacts the economic viability, health and safety of industry workers and environmental benefits of recycling, it may not be cost-effective or necessary to eliminate all inbound contamination. However, some types of contaminants, while constituting a very small percentage of collected material, can cause major problems for workers and facilities. To emphasize the importance of eliminating risk from dangerous contaminants, DEQ has established two distinct aspirational statewide contamination reduction goals.

When developing contamination reduction programs, local governments must include contamination reduction goals that are consistent with both of the statewide goals. DEQ encourages local governments and their service providers to design and implement contamination reduction programming that will help them to meet their contamination reduction goals. However, there will be no regulatory consequence for not meeting the goals.

Goal #1: Zero high-risk contaminants

High-risk materials in the commingled recycling, such as sharps, non-empty pressurized gas cylinders, batteries and explosives, pose a significant risk to staff, equipment and facilities. Due to the health and safety risk, the goal for these materials should be zero and is akin to zero injuries or incidents. Research conducted for DEQ identified the following high-risk contaminants:

- Syringes and sharps
- Red bags and medical waste
- Human and animal waste
- Batteries and products with embedded batteries
- Fluorescent lights, mercury thermometers and other items that contain mercury
- Weapons and sharp tools
- Explosives
- Non-empty pressurized gas cylinders
- Non-empty aerosol containers with "Danger" on label

Goal #2: 10% overall contamination

Although contamination comes with challenges and increases the cost of recycling program operations, commingled recycling processing facilities are designed to handle some level of contamination. An overall goal of zero contamination for non-high-risk materials is unrealistic. Given Oregon's current contamination rate of 15.5%, a 10% overall contamination goal is an achievable and realistic goal that strikes a good balance of cost and feasibility. Because full implementation of contamination reduction efforts will take time, DEQ is setting incremental goals toward achieving the 10% goal as follows:

- 12.5% contamination by 2030
- 10% contamination by 2033

Approved Contamination Reduction Program Elements

What activities are eligible for PRO funding?

Local governments and their service providers may include costs for planning, staffing, and engaging contractors, if those activities are *necessary* to conduct the contamination reduction programming. However, only that portion of a staff person's time devoted to contamination reduction programming would be considered an eligible cost.

Program evaluation is a valuable activity and can also be very expensive. Given the limited nature of the available funding for contamination reduction activities, up to 10 percent of a community's eligible costs may be spent on program evaluation. Communities may seek supplementary funding from other sources to implement desired contamination reduction efforts.

Communities may propose an alternative approach using the <u>Request to Implement Other Contamination</u> <u>Reduction Program Elements Form</u>.

What does it mean to be responsive to the needs or conditions of diverse populations?

Contamination reduction programming that is "responsive to the needs of diverse populations" means that information is reasonably accessible to all people that recycle, regardless of background, ability, preferred language, access to technology, or where they live or work. A local government must implement best practices for accessibility, including but not limited to the following, as appropriate and when practicable:

- Information is easy to understand. Messaging is clear and simple, using common words and short sentences.
- Written materials and webpages follow universal design principles and comply with Section 508 of the Rehabilitation Act, 29 U.S.C. § 798. 57. Materials use design elements such as headings, bullets, images, and white space to improve readability.
- Assistance is provided in multiple ways. Recipients can learn more and ask questions via phone, email, online, or in person. When practicable, local governments and service providers offer assistance in the customer's preferred language.
- Information is translated into or made available in commonly spoken languages. When practicable, information is created in collaboration with those who speak the language fluently to ensure the content is culturally relevant to the language group.
- Information is inclusive and culturally relevant to all community members. Local governments or their service providers tailor the approach and delivery to the intended audience and incorporate imagery of products and people that represent a variety of cultures and Oregon's diverse communities.

Category A. Approved customer-facing material and methods

Approved customer-facing materials and methods are shown in the table below in no particular order. Some of the methods focus on improving the function and clarity of the recycling container and enclosure space to reduce customer confusion that can lead to contamination. Some tools disseminate general contamination-reduction messaging, while others incorporate an inspection component that enables customer-specific feedback.

The table is organized by customer type, or sector, with the recognition that not all approaches are applicable to all types of customers. Given funding limitations, local governments may choose to focus contamination reduction programming on just one sector. However, multiple sectors can be chosen, if desired. A broad-based media campaign can also be undertaken, to reach all types of customers. Please note that the PRO will focus on contamination-reduction in the early phases of its statewide campaign.

As noted above, a local government may choose to implement more than one material/method in *Category A. Approved customer-facing materials and methods* for their programming. However, for at least one of the chosen materials/methods, local governments must implement elements from both *Category B. Approved standards for providing feedback to generators* and *Category C. Approved standards for service or financial consequences* that apply to the same sector receiving the chosen material/method in *Category A.*

When choosing a method that allows for customer-specific feedback, DEQ encourages local governments to consider strategies that offer all customers within the chosen sector(s) the opportunity to receive feedback, perhaps by focusing on different geographies over the course of multiple years. For example, a community could plan to inspect roll carts and distribute cart tags for one quarter of its curbside customers each year, eventually reaching all curbside customers after four years.

For assistance in developing a contamination reduction program, local governments can reach out to their <u>DEQ Regional Specialist</u>.

Table A. Approved customer-facing materials and methods

Single Family		
1. Container labels	Affix recycling label/decals to customer roll carts/bins.	
2. Standardized color for recycling containers/lids	Standardize color of recycling roll carts/bin/lids.	
3. Mailer	Distribute one or more mailers containing contamination reduction messaging.	
4. Cart tags	Distribute one or more rounds of cart tags and/or Oops! tags containing contamination reduction messaging.	
5. Cart inspections and customer feedback	2-4 rounds of cart inspections within a year. If contaminants are identified, provide prompt feedback to customer. May include cart tags and postcards.	
6. Cameras on trucks	Install on-board monitoring equipment on trucks to identify contaminants when the container is emptied into the truck. If contaminants are identified, provide prompt feedback to customer.	
Commercial		
1. Container labels	Affix clear labels/decals to customer containers.	
2. Standardized color for recycling containers/lids	Standardize color of recycling containers/lids.	
3. Signage	Install clear and visible signage in appropriate languages in customer enclosures.	
4. Technical Assistance	Provide individualized guidance to customers, including site visits and suggested improvements to service levels, enclosures, and internal processes.	

5. Container audit program	Set up process to periodically inspect customer containers, provide prompt feedback to customer, and follow-up with more frequent audits if contamination is identified.	
6. Cameras on trucks	Install on-board monitoring equipment on trucks to identify contaminants when the container is emptied into the truck. If contaminants are identified, provide prompt feedback to customer.	
7. On-site cameras	Presence of visible camera in enclosure space can deter illegal dumping. Camera may also be used to identify generators who contribute to contamination in recycling.	
Multifamily		
Container labels or standardized colors	Affix clear labels/decals to customer containers.	
2. Standardized colors for recycling containers/lids	Standardize color of recycling containers/lids.	
3. Signage	Install clear and visible signage in appropriate languages in customer enclosures.	
4. Internal recycling containers / bags	Provide tenants with internal containers or tote bags that prominently display information on top contaminants and the importance of not placing contaminants in recycling.	
5. Technical assistance	Provide individualized guidance to customers, including site visits and suggested improvements to garbage and recycling service levels, enclosures, and internal processes.	
6. Apartment champion(s)	Champions serve as on-site promoters and recycling resources for tenants at multi-tenant properties. They liaise between property manager and tenants and can distribute materials or verbally share information about contamination reduction as well as flag enclosure concerns to enable prompt	
7. Container audit program	resolution. Champions may be compensated, but not by the property manager. Set up process to periodically inspect customer containers, provide prompt feedback to customer, and follow-up with more frequent audits if contamination is identified.	
8. Cameras on trucks	Install on-board monitoring equipment on trucks to identify contaminants when the container is emptied into the truck. If contaminants are identified, provide prompt feedback to customer.	
9. On-site cameras	Presence of visible camera in enclosure space can deter illegal dumping. Camera may also be used to identify generators who contribute to contamination in recycling.	
Depot		
1. Improved signage	Ensure clear signage in appropriate languages.	
2. Mailer	Distribute one or more mailers containing contamination reduction messaging.	
3. On-site cameras	Presence of visible camera can deter illegal dumping. Camera may also be used to identify generators who contribute to contamination in recycling.	
4. On-site staff	Staff can provide technical assistanceincluding contamination reduction educationto customers and keep containers well-sorted, in addition to deterring illegal dumping.	

All Customers	
1. Media campaign	Communication to customers via print, broadband, or social media.

Category B. Approved standards for providing feedback to generators

DEQ has approved three standards for local governments and service providers to use when providing feedback to generators that contribute to contamination as part of a process that may lead to application of financial or service consequences. A local government or service provider may choose to follow any one of the following standards.

B-1

- Document identified contamination as well as the feedback provided.
- Provide feedback at least two different ways:
 - Information on container
 - Information on doorstep
 - o Email, text, or other electronic communication
 - o Phone call
 - o Mail
 - In-person conversation
- Provide the first type of feedback as soon as possible, preferably same day, but no later than three
 business days after identifying and documenting contamination. Provide the second type of feedback
 within five business days.
- Ensure feedback is responsive to the needs of diverse populations.

B-2

- Document identified contamination as well as the feedback provided.
- Provide information on container or doorstep same day and follow up within five business days with an email, text, or phone call.
- Ensure feedback is responsive to the needs of diverse populations.

B-3

- Document identified contamination as well as the feedback provided.
- Within three business days, provide information via email, text, or other electronic communication and send a postcard or other mailer.
- Ensure feedback is responsive to the needs of diverse populations.

At multi-tenant properties, feedback may be provided to the property manager as well as the generator, if known. If the source of the contamination is unknown, the feedback may go to the property manager.

Category C. Approved standards for service or financial consequences

DEQ has two approved standards for local governments and service providers to use when applying consequences to generators that are significant and repeated sources of contamination and that continue to contaminate recycling after receiving targeted feedback that is responsive to the conditions of diverse populations. A local government or service provider may choose to follow either of the following standards.

C-1

- The local government or service provider has documented that the generator is a source of both **significant and repeated** contamination.
- After each documented instance of significant contamination, feedback was provided that is responsive to the needs of diverse populations.
- Customer was notified using two different types of outreach.
- Customer is offered remedy options.
- Customer is sent a warning letter and customer receipt is verified.
- Customer is charged a contamination fee and/or customer's recycling container is temporarily removed.
 - o Opportunity to recycle is maintained at multi-tenant properties.
 - o Financial consequences are set at lowest possible corrective level.

C-2

- The local government or service provider has documented that the generator is a source of **significant** contamination.
- After first and second documented instances of significant contamination, feedback was provided that was responsive to the needs of diverse populations using two different types of outreach.
- After third documented instance of significant contamination, customer outreach via phone, email, and/or in-person conversation is initiated to confirm customer understanding and identify barriers to compliance.
- After fourth documented instance of significant contamination, customer is sent a warning letter via certified mail that includes:
 - a. Documentation of the contamination
 - b. Available remedy options
 - c. Potential consequences, if a remedy option is not pursued, and
 - d. Timeline for responding
- If opportunities to remedy are refused or a response is not received, customer is charged a contamination fee and/or customer's recycling container is temporarily removed.
 - o Opportunity to recycle is maintained at multi-tenant properties.
 - o Financial consequences are set at lowest possible corrective level.

Significant recycling contamination is the documented presence of the following materials:

- High-risk contaminants;
- Tanglers such as hoses, cords, or wires;
- Bagged material; or
- Other contaminants that in either quantity or type represent an egregious misuse of the recycling service.

Repeated recycling contamination occurs at least three times within a six month period.

At multi-tenant properties, if the generator is known and has received targeted feedback, consequences may be applied to the generator. Otherwise, consequences may be applied to the property manager.

When developing a process for applying consequences to generators that are significant and repeated sources of contamination, the local government or service provider should consider the impact of consequences and, to the extent practicable, ensure that the process and the actions taken do not disproportionately negatively

impact people because of their background, ability, preferred language, access to technology, or where they live or work.

Local governments may choose to develop a process that offers many opportunities for customers to learn more, problem-solve, and implement solutions before financial or service consequences are applied. For example, customers may be offered multiple options for remedy, such as:

- Remove contaminants from recycling container
- Watch a video about recycling
- Take an online class about recycling
- Sign a pledge to recycle right
- Implement recycling agreements in tenant leases

Requesting approval for other contamination reduction program elements

Local governments that would like to request approval to implement other contamination reduction program elements should complete the <u>Request to Implement Other Contamination Reduction Program Elements</u> Form.

What is the process for updating this document?

DEQ is required to establish the statewide goals and establish and maintain the approved list of contamination reduction programming elements.

DEQ will update this document containing the approved list of contamination reduction programming elements as needed. Updates to the approved list will not require changes to a local government's contamination reduction program.

When an updated version of this document is posted to DEQ's website, DEQ will notify all local governments subject to Opportunity to Recycle requirements via email and also send a GovDelivery email to those signed up to receive updates about the RMA.

Contact

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