



# Operations Plan Checklist and Reference Guide For Commingled Recycling Processing Facilities

DEQ is providing this checklist and reference guide to assist with developing or updating your facility's Operations Plan to meet the requirements for a Commingled Recycling Processing Facility Permit.

All CRPF applicants must provide DEQ with an operations plan for approval as part of the application process. While this guide is intended to help with drafting your own plan, it is the responsibility of the permit applicant to provide all information specific to your facility where appropriate and submit a complete operations plan, which becomes enforceable upon its incorporation into the permit by reference. All permitted solid waste disposal facilities must update their plans when operations change and resubmit their plans for DEQ's approval.

## General tips for completing your operations plan

This guide and checklist are intended to be used by new and existing solid waste facilities to create or modify operations plans to address new requirements for commingled recycling processing facilities. You ARE NOT required to follow this structure, but you will be required to provide a complete operations plan prior to permit issuance.

As you draft the operations plan, consider the following:

- What on-site operations are you proposing to have permitted or are required to be permitted?
- What material streams will the facility receive?
- How will incoming material be screened to avoid acceptance of hazardous or prohibited wastes? If these waste types are inadvertently accepted or discovered during processing, how will you manage and properly dispose of them?
- How do you propose to operate the site to prevent air or water pollution or other adverse impacts on public health and the environment? What will need to be built to operate the site in an environmentally safe manner and to meet permit requirements?
- What is the facility layout? Please provide an illustration of the property, buildings, equipment, utilities, and other physical (natural or constructed) features.
- How will you operate the facility to meet performance standards? How will you operate the facility to prevent litter, off-site dust, odors, vectors, nuisance conditions, or runoff and air quality concerns?
- What equipment (and backup, if required) will be used or installed to meet the permit requirements? How will you maintain equipment and continue operations if equipment breaks?
- What processes will your facility use to accurately and continuously record, track, and report waste origin, contamination rates, tonnage processed, and end-markets delivered to?
- What process do you have to address complaints?
- How will you make sure to get all local, regional, or state approvals if you make changes to your operations or facility?

### Translation or other formats

# Operations plan checklist

**Note:** Highlighted sections below are relevant for facilities with existing Solid Waste Disposal Site Permit, including a DEQ-approved Operations Plan. Please see footnotes 1 and 2 at the bottom of the table for more information.

Included (Y/N)	Section #	Page #	Content Covered	Reference Section	Ref. Pg. #
			<b>Introduction</b>	<b>1.0</b>	<b>3</b>
			Overview of Operations	1.1	3
			Regulatory Requirements and Local Permitting	1.2	3
			<b>Facility Description</b>	<b>2.0</b>	<b>4</b>
			Site Location and Topography	2.1	4
			Facility Layout	2.2	4
			Stormwater, Surface Water, and Sanitary Disposal and Control	2.3	4
			Leachate Management System	2.4	5
			<b>General Facility Operations</b>	<b>3.0</b>	<b>5</b>
			Hours of Operation	3.1	4
			Estimated Facility Capacity	3.2	4
			Access Controls	3.3	4
			Public Recycling Collection Site <sup>1,2</sup>	3.4	4
			<b>Waste Handling Operations</b>	<b>4.0</b>	<b>4</b>
			Acceptable Wastes <sup>2</sup>	4.1	4
			Special Wastes <sup>1</sup>	4.2	5
			Prohibited Wastes	4.3	5
			Waste Acceptance Procedures	4.4	6
			Waste Tracking Procedures <sup>2</sup>	4.5	6
			Waste Screening Procedures	4.6	6
			Waste Rejection Procedures	4.7	6
			<b>Material Recovery</b>	<b>5.0</b>	<b>6</b>
			Material Recovery Process <sup>2</sup>	5.1	6
			Inbound Contamination Evaluation <sup>2</sup>	5.2	6
			Capture Rate Performance <sup>2</sup>	5.3	6
			Outbound Contamination Rates <sup>2</sup>	5.8	7
			<b>Equipment and Facility Maintenance</b>	<b>6.0</b>	<b>7</b>
			Equipment <sup>2</sup>	6.1	7
			Truck Washing Facilities <sup>1</sup>	6.2	7
			Facility Maintenance	6.3	7
			<b>Job Descriptions and Training</b>	<b>7.0</b>	<b>7</b>
			Description of Personnel Duties	7.1	7

Included (Y/N)	Section #	Page #	Content Covered	Reference Section	Ref. Pg. #
			Employee Training Program	7.2	8
			<b>Environment, Health and Safety</b>	<b>8.0</b>	<b>8</b>
			Safety Programs	8.1	8
			Emergency Response Plan	8.2	8
			Emergency Contacts	8.3	8
			Emergency Access and Egress	8.4	8
			Spill Response	8.5	8
			On-Site Emergency Equipment	8.6	8
			Personal Protective Equipment	8.7	9
			<b>Recordkeeping and Reporting <sup>2</sup></b>	<b>9.0</b>	<b>9</b>
			<b>Recycling Modernization Act Records <sup>2</sup></b>	<b>9.1</b>	<b>9</b>
			<b>Responsible End Market Screening and Self-Attestation Reporting <sup>2</sup></b>	<b>9.2</b>	<b>9</b>
			<b>Material Disposition Reporting <sup>2</sup></b>	<b>9.3</b>	<b>9</b>
			Complaint and Nuisance Response Records	9.4	9
			<b>Closure Plans</b>	<b>10.0</b>	<b>9</b>
			<b>Additional Requirements</b>	<b>11.0</b>	<b>10</b>
			<b>Appendix</b>	<b>Appendix</b>	

**Note:**

1 - Include only if applicable to your facilities operation.

2 - contains important changes related to RMA.

# Reference guide

Use this reference guide for additional details and clarification for each of the sections listed in the checklist. You are **NOT** required to structure or format your operations plan according to this reference. If your operations plan is formatted differently than this reference guide, use the checklist above to indicate where all of the relevant content is located in your operations plan.

## 1. Introduction

### 1.1 Overview of operations

Please summarize facility operations. This may include general information about waste streams, volume processed, equipment, and anything important to highlight about the facility.

### 1.2 Regulatory requirements and local permitting

Describe the regulatory requirements that pertain to the facility including oversight from the Oregon Department of Environmental Quality, local jurisdictions such as Metro or the County/City Government, or other permits authorized by state or local governments.

**Sample text:**

The regulatory requirements governing solid waste facilities are defined in the Oregon Administrative Rules Chapter 340, Divisions 93 through 97. OAR 340-096-300 specifically addresses commingled recycling processing facilities including permit eligibility, performance standards, responsible end markets, capture rates, outbound contamination, plans and specifications, design and construction, operations, recordkeeping and reporting.

Include a list of all current building permits, stormwater permits, local land use permits, and if applicable, Metro licensing. Include the date of Issue and Expiration.

**Sample Table:**

Governing Body	Permit Type	Permit Number/ID	Date of Issuance	Date of Expiration
Oregon Secretary of State	Business License	1234	1/1/9999	1/2/99999
Oregon DEQ	1200-Z Permit	5678	1/1/9999	1/2/99999

## 2. Facility description

### 2.1 Site location and topography

Describe the location and physical features of the property such as contours, surface drainage control and any bioswales, access and on-site roads, parking, traffic routing, landscaping, fences, truck and area washing facilities, wash water disposal, and water supply and sanitary waste disposal.

In addition, please describe the zoning designation of the property including land use compatibility and zoning within ¼ mile of the facility. If there are siting restrictions at the facility, include a plan for how those limitations are addressed. Identify the facility's on-site landscaping, water features (rivers, streams, wetlands, etc.). Include map(s).

## **2.2 Facility layout**

Describe the facility's buildings, receiving areas, scales, processing areas, and storage areas. You should include maps, diagrams, or other visual aids to supplement the description of the facility.

## **2.3 Stormwater, surface water, and sanitary disposal and control**

Describe how the facility manages stormwater collection, treatment (if applicable), and discharge. If your facility has a National Pollutant Discharge Elimination System Permit, you may attach your Stormwater Pollution Control Plan. Describe the facility's water supply and sanitary (sewage) water disposal.

Describe methods, procedures and equipment to manage and control surface water and drainage to prevent pollution to the waters of the State.

## **2.4 Leachate management system**

Describe the methods and equipment used to manage leachate generated from incoming solid waste. Alternatively, describe the procedures to screen for and reject materials that could generate leachate and how the facility would manage any leachate incidentally generated.

## **3. General facility operations**

### **3.1 Hours of operation**

Describe hours of operation of the facility, including when the facility is open to inbound materials, or is open for processing if different.

### **3.2 Estimated facility capacity**

Estimate the processing and storage capacity of the facility in units of tons per day, month or year. This determination can be made based on historical data or theoretical capacity of equipment or machinery.

### **3.3 Access controls**

Describe how access to and from the property is managed. This may include personnel with after-hours access to the facility, and physical controls such as fencing, cameras, scale house attendants, security contractors, or other protective measures to prevent unauthorized access and dumping.

### **3.4 Public recycling collection site (if applicable)**

Describe any public drop off location on-site, or at an off-site location that is more convenient for the general public, to collect Uniform Statewide Collection List material and/or PRO recycling list material. Document the location, procedures for screening for contaminants, and procedures for controlling public access to the property and preventing unauthorized entry and dumping.

## **4. Waste handling operations**

### **4.1 Acceptable wastes**

List and describe all wastes the facility accepts for processing.

### **4.2 Special wastes**

List and describe any special waste the facility accepts. As required, include a special waste management plan for each material, including relevant rules and regulations for the safe and effective management and disposal of such wastes.

### **4.3 Prohibited wastes**

List and describe which wastes the facility does not accept. By definition, a CRPF may only accept commingled recyclable materials, until approved to accept other wastes by DEQ. Describe procedures if prohibited wastes are incidentally found.

### **4.4 Waste acceptance procedures**

Describe the procedures, equipment, and staff needed to accept and receive wastes for processing at the facility. The procedures in this section are crucial for ensuring that the facility is able to safely manage and track all inbound waste for processing and describes procedures to manage wastes that pose public and environmental health risks.

### **4.5 Waste tracking procedures**

Describe the procedures and equipment used by the facility to track the waste generator, hauler, customer information, and the net weight of each load brought into the facility.

### **4.6 Waste screening procedures**

Describe the procedures, equipment, and staff involved in waste screening at the facility. This screening may take place at the scale house, tipping floor, or other designated area. Include a procedure for identifying, isolating, containing any prohibited waste material, and reaching out to the relevant parties to determine appropriate next steps, including disposal at an appropriate facility.

### **4.7 Waste rejection procedures**

Describe the procedures, equipment, and staff needed to reject contaminated or improperly prepared, prohibited or special wastes. Procedures may differ if such wastes are found prior to tipping or after tipping. In either case, describe the methods to contact relevant parties, including the customer or generator, hauler, service providers, or Metro and DEQ where necessary.

## **5. Material recovery**

### **5.1 Material recovery process**

Describe procedures for presorting large bulky recyclable item and non-recyclable items from the inbound waste and storing them in an appropriate location. Describe the processes, equipment, and staff involved in the material recovery process including steps for processing fiber, plastic, and metal streams.

Flow diagrams or other visual aids detailing the movement of waste through the sorting process should be included to supplement this section. Include common processing scenarios for hard to process material, or processing materials in adverse conditions.

### **5.2 Inbound contamination evaluation**

Describe the procedures and equipment used to evaluate the inbound commingled recyclable material for contamination and report that figure to DEQ, pursuant to ORS 459A.959. If the permittee has agreed to allow the PRO to conduct inbound contamination evaluations, indicate as such.

### **5.3 Capture rate performance**

Describe the procedures, equipment, staff, and processing scenarios used to ensure that the facility continuously meets the Capture Rates described on OAR 340-096-0300 for the fiber, metal, and plastics streams. If directing material to a secondary downstream facility to achieve the performance standards, indicate the processes to track material. Use material flow diagrams or other visual aids to supplement this section.

## **5.4 Outbound contamination rates**

Describe the procedures, equipment, staff, and processing scenarios used to ensure that all Uniform Statewide Collection List material sent to a responsible end market does not contain more than 5% contamination, as defined in ORS 459A.863(4)(b), by weight. This can include scenarios for re-running material, additional screening and staff, or other procedures to meet this performance standard. Use material flow diagrams or other visual aids to supplement this section.

## **6. Equipment and Facility Maintenance**

### **6.1 Equipment**

Describe how the facility will maintain and repair major equipment, including scales, rolling stock, processing equipment, or other machinery to ensure continuous operation and compliance with performance standards. If this entails a daily inspection checklist and/or internal repair ticket, please include a copy.

The permittee must inform DEQ, at least twenty-four (24) hours in advance, of scheduled maintenance activities in the facility that would affect the permittees' ability to achieve the performance standards, prior to commencement of the planned activities. The permittee must inform DEQ within twenty-four (24) hours of critical equipment failure that affects the permittee's ability to achieve performance standards.

The permittee is required to demonstrate that records of equipment maintenance are being kept.

### **6.2 Truck washing facilities**

If applicable, explain if trucks or other rolling stock is washed or maintained on-site. If so, must be hard surfaced and all wash waters must be conveyed to a catch basin, drainage and disposal system approved by the Department or state or local health agency having jurisdiction.

### **6.3 Facility maintenance**

Describe the procedures for routine facility maintenance and housekeeping. The facility must demonstrate that they are operating the facility in such a way that vectors, blowing debris, dust, malodors, and nuisances are controlled. Please indicate if the facility designates staff to provide maintenance and housekeeping services, or contracts with service providers for rodent or pest control, environmental services for cleaning.

## **7. Job descriptions and training**

### **7.1 Description of personnel duties**

Document the organizational structure at the facility, including the roles and responsibilities of each position. There may be specific and important roles for certain personnel, such as managers and supervisors, in the events of shutdowns, emergency situations, or for the management of materials at the facility. It is best practice to avoid referencing specific persons or vendors by name in the operations plan, as these may change over time. Rather specify which responsibilities are assigned to titles/roles within the organization, or if specific functions are contracted out to vendors or other parties.

### **7.2 Employee training program**

Describe the training programs for staff, including equipment operators, sort line workers, management staff, administrative staff, and other operations staff at the facility. The training program materials and schedule can be attached as an appendix to this operations plan.

## **8. Environment, health and safety**

### **8.1 Safety programs**

If the permittee supports safety programs, initiatives, or committees, you may elect to include this information in this section or as an addendum.

### **8.2 Emergency response plan**

Describe plans and procedures for responding to an emergency at the facility. There may be different procedures and plans for different emergencies. You may elect to include this information in this section or as an addendum.

### **8.3 Emergency contacts**

The permittee must document that it has made arrangements with local emergency response providers (Fire Marshall, EMT services, environmental clean-up service providers, etc.). In a table or other format, detail which persons need to be contacted in the event of an emergency, the roles and responsibilities assigned to each person (the facility staff/managers, emergency responders, cleanup service providers, etc.), and include a any required reporting (such as to DEQ in the event of a spill or fire).

### **8.4 Emergency access and egress**

Document the locations for accessing the facility in the event of an emergency. Including maps or diagrams of the facility, that show access points, sources of water, the location of flammable or otherwise hazardous materials (such as flammable material cabinets, or raw materials with hazardous properties). You may elect to include this information in this section or as an addendum.

### **8.5 Spill response**

Describe procedures for identifying, isolating, managing, and cleaning up of spills of hazardous or prohibited materials. The procedures may differ between responding to a small spill versus a significant spill. Include a process for notifying DEQ in the event of a spill within 24 hours, pursuant to ORS 340-142-0040.

### **8.6 On-site emergency equipment**

Document the types of emergency response equipment, used at the facility. The permittee must include the use of two-way communication devices, and fire protection and prevention measures. This can be included on the same map or visual aid as section 8.4.

### **8.7 Personal protective equipment**

Describe personal protective equipment to be used by facility personnel, procedures for checking PPE, provision of replacement, PPE and PPE training for staff.

## **9. Recordkeeping and reporting**

### **9.1 Recycling Modernization Act records**

Describe where and how records will be maintained at the facility as required by DEQ to demonstrate compliance with the facility permit. The following records are required by the DEQ:

- a. Waste acceptance and disposal record.
- b. Capture rates
- c. Inbound and outbound contamination levels
- d. Contamination management fee and processor commodity risk fee transactional information
- e. Responsible end markets and material disposition reporting
- f. Financial assurance (if applicable)
- g. Environmental monitoring records (if applicable)
- h. Other facility records as necessary



## 9.2 Responsible end market screening and self-attestation reporting

Describe how the facility will ensure all processed materials are marketed to responsible end markets as provided by OAR 340-090-0670. If coordinating with a PRO to for ensuring completion of screening assessments and annual verification, indicate as such.

## 9.3 Material disposition reporting

Describe how the facility will implement disposition reporting described in OAR 340-096-0310. Another entity may be designated to report on some or all of the final disposition data on behalf of the facility. Please indicate if doing so.

## 9.4 Complaint and nuisance response records

Describe the procedures for receiving complaints (by phone, email, or other means), recording the complainants' information, the nature and date of the complaint, and the response the facility took to resolve the complaint.

## 10. Closure plans

There may be circumstances during which the facility must cease operations and close. This closure may be short-term or long-term. The facility must document the plans and procedures during periods of closure including for short-term and long-term or permanent closures. Closures may occur due to inclement or severe weather, lack of staff, equipment issues, post-emergency recovery, or other factors.

Be sure to include reporting procedures for Equipment Maintenance and failure reporting to DEQ.

As prescribed by ORS 459A.955, provide a plan to respond to an emergency failure of critical equipment, and the delivery of unsorted material to another recycling processing facility.

## 11. Additional requirements

DEQ may require additional operation plan components to address facility specific operations or condition.

## 12. Appendix: Supporting documents and appendices

This section is for the facility to include attachments and supporting documentation to the operations plan. This section can include maps, tables, figures, permits, program documentation, or other operation plan additions. A list of potential inclusions in this section is included below:

- 1) Financial Assurance Documentation (if applicable)
- 2) Site Characterization (if applicable).
- 3) Site map
- 4) Fire Evacuation Map
- 5) Emergency Response Equipment Locations Map
- 6) Training programming, schedules, and record
- 7) Stormwater Permit
- 8) Metro Solid Waste Facility License

## Non-discrimination statement

DEQ does not discriminate on the basis of race, color, national origin, disability, age, sex, religion, sexual orientation, gender identity, or marital status in the administration of its programs and activities. Visit DEQ's [Civil Rights and Environmental Justice page](#).