

## Metro | Agenda

<b>Meeting:</b>	MRF/CT Subcommittee Meeting #4
<b>Date:</b>	Monday April 18th, 2016
<b>Time:</b>	10:00 a.m. to 12:00 p.m.
<b>Place:</b>	Metro Council Chambers
<b>Purpose:</b>	To continue discussion of issues related to potential regulation of source-separated recyclables material recovery facilities (SSR MRFs) within the region.
<b>Outcomes:</b>	The subcommittee will have heard additional clarification from Metro staff in response to issues identified at prior meetings, will better understand when a facility would be required to obtain a license or continue to be exempted, and will have provided at least initial input on whether to remove exemptions for a certain class of facilities.

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10:00 a.m.	Welcome, Review Summary and Agenda	Roy Brower
10:15 a.m.	Address Stakeholder Concerns Identified at March 17 Mtg. <ul style="list-style-type: none"><li>- Metro Solid Waste Definition Change</li><li>- Land Use &amp; Solid Waste License Issues</li><li>- MRF Performance Issues</li></ul>	Shane Abma Shane Abma Matt Korot
10:30 a.m.	Facility Classes – Where Metro Draws the Line	Dan Blue
10:40 a.m.	Discuss Whether to Regulate SSR MRFs	Roy Brower
11:45 a.m.	Review Next Meeting Topics	Dan Blue
11:50 a.m.	Public Comments	Public
12:00 p.m.	Adjourn	Roy Brower

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# MRF/CT Subcommittee Meeting 4

April 18, 2016

10:00 a.m. – 12:00 p.m.

Metro Council Chambers



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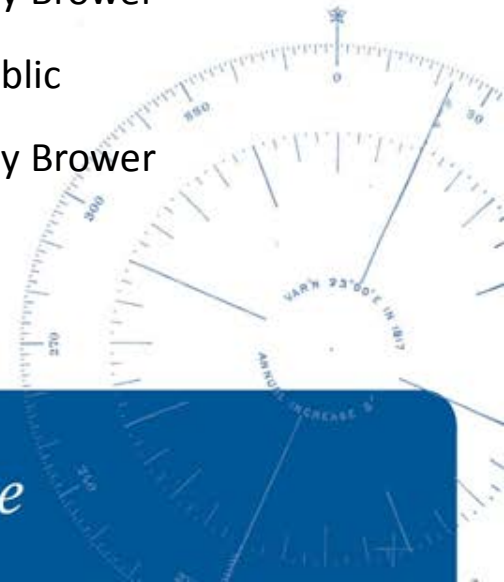
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	- Metro Solid Waste Definition Change	Shane Abma
	- Land Use & Solid Waste License Issues	Shane Abma
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\*see detailed Agenda handout



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# MRF/CT Subcommittee Charge

**Purpose:** Consider whether MRFs that process source-separated recyclable materials and facilities that convert waste to energy or fuel should be subject to licensing and inspection similar to other facilities. If so, identify which requirements are appropriate?

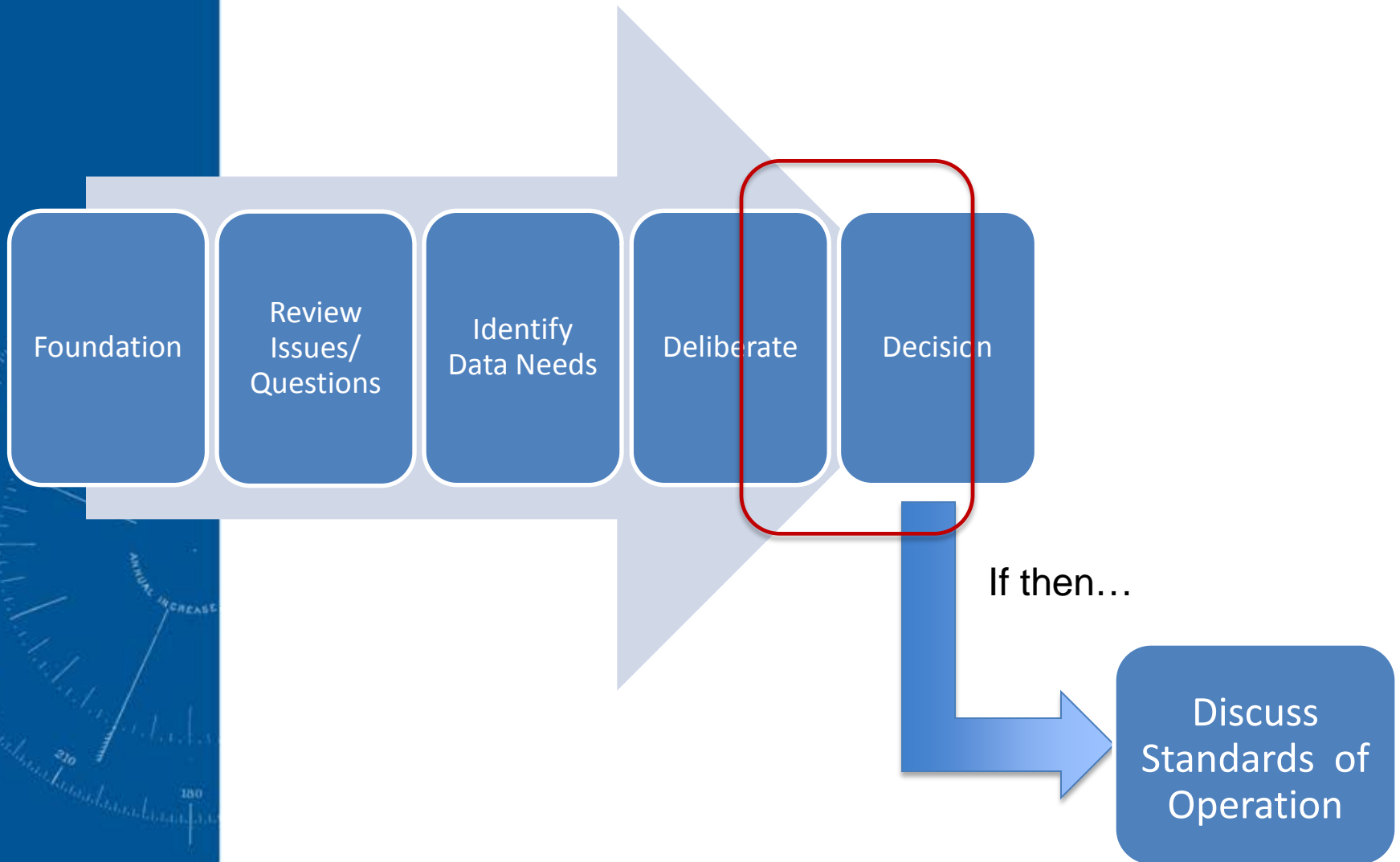
**Outcome:** Provide the best advice possible to SWAAC on MRF/CT regulation, so that SWAAC can advise Metro Council on alternatives.



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# Process Check



# Metro Authority

## Metro Authorizations (Franchises - Licenses)

Wet Waste	Dry Waste	Yard Debris	Roofing, Tire, Other Facilities
<b>F</b> Pride Recycling Troutdale Transfer Station Forest Grove Transfer Station Willamette Resources, Inc.	<b>L</b> ECR Greenway Recycling KB Recycling Aloha Garbage CORE Recycling	<b>L</b> Grimm's Fuel McFarlane's Bark Allwood Wood Waste Management	<b>L</b> RB Recycling (Tires) Tire Disposal Corp. Northwest Shingle Recyclers Thermo Fluids

## Metro Exemptions (by Code)

<b>E</b> Aggregate/Inert Facilities	<b>E</b> Single Stream Recyclers
Portland Sand & Gravel Tigard Sand & Gravel Fazio Landfill and Recycling	Calbag Schnitzer Environmental Fibers Inc. EFI Denton Plastics

<b>E</b> Conversion Technologies
Agylux Wastech Agylux Tigard Gasification* Autoclaving* Hydropulping*  *MSW or segment of MSW

<b>E</b> Source Separated Recycling Recovery Facilities n = 6
Far West Recycling Hillsboro Far West Recycling Portland Oregon Recycling Systems Pioneer Recycling Clackamas WestRock Columbia Recycling Inc.

F = Franchise  
 L = License  
 E = Exempted

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# Characteristics of currently exempt SSR MRFs:

- Accept or purchase comingled curbside and commercial recycling streams for processing, sorting, consolidation, baling, and marketing
- Comingled material typically collected within a regulated environment
- Variable contamination rates depending on generator practices
- Little or no control over incoming material
- Speculative accumulation can occur and accompanying potential degradation of materials if not processed and moved in timely fashion
- Potential for negative environmental or health/safety issues
- Potential for negative impacts offsite e.g. adjoining properties and community (dust, noise, smell, vectors, litter, fire safety...)
- Subject to negative impacts of a highly volatile commodity market
- Can impact rates charged to generators



# Metro Code 5.01:

Mixed Dry Waste Facility Standards (existing licensed facilities)

## SOLID WASTE FACILITY REGULATION

SECTION	TITLE
5.01.053	Issuance and Contents of Licenses

(i) Licenses shall specify the activities authorized to be performed, the types and amounts of wastes authorized to be accepted at the solid waste facility, and any other limitations or conditions attached by the Chief Operating Officer. In addition to all other requirements of this section, a license approving acceptance of mixed non-putrescible waste for the purpose of conducting material recovery or reloading shall **be subject to the performance standards, design requirements, and operating requirements adopted as administrative procedures pursuant to Section 5.01.132, and shall require that the facility operate in a manner that meets the following general performance goals:**

- (1) **Environment.** Facilities shall be designed and operated to preclude the creation of undue threats to the environment including, but not limited to, stormwater or groundwater contamination, air pollution, and improper acceptance and management of hazardous waste asbestos and other prohibited wastes.
- (2) **Health and Safety.** Facilities shall be designed and operated to preclude the creation of conditions that may degrade public health and safety including, but not limited to, fires, vectors, pathogens and airborne debris.
- (3) **Nuisances.** Facilities shall be designed and operated to preclude the creation of nuisance conditions including, but not limited to, litter, dust, odors, and noise.
- (4) **Material Recovery.** Facilities conducting material recovery on non-putrescible waste shall be designed and operated to assure materials are recovered in a timely manner, to meet standards in Section 5.01.125, and to protect the quality of non-putrescible waste that has not yet undergone material recovery.
- (5) **Reloading.** Facilities conducting reloading of non-putrescible waste shall be designed and operated to assure that the reloading and transfer of non-putrescible waste to Metro authorized processing facility is conducted rapidly and efficiently while protecting the quality of non-putrescible waste that has not yet undergone material recovery.
- (6) **Record-keeping.** Facilities shall keep and maintain complete and accurate records of the amount of all solid waste and recyclable materials received, recycled, reloaded and disposed.



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# Review the Question – SSR MRFs

1. Should MRFs that process source-separated recyclable materials be subject to licensing and inspection similar to other facilities.
2. If so, identify which operational requirements are appropriate?





# Subcommittee Check In

- Is approach working?
- Anything in particular that is not working for you?



# Next Meeting Topics

## Meeting: #5 – TBD

- ***Review Prior Meeting Summary, Clarifications, Questions***
- ***Review Meeting #5 Objectives***
- Deliberation
- Recommendation for SWAAC on SSR MRFs
  - Discuss Operating Standards
- Stakeholder feedback, questions
- ***Member Check in (every meeting)***
- ***Review schedule (what's on deck)***



# MRF/CT Subcommittee

## Adjourn.

Thank You!



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## Metro | *Meeting minutes*

Meeting: MRF/CT Subcommittee Meeting #4 Summary  
Date/time: Wednesday, April 18th, 2016; 10:00 a.m. to 12:00 p.m.  
Place: Metro Council Chambers  
Purpose: To continue discussion of issues related to potential regulation of source separated recyclables material recovery facilities (SSR MRFs) within the region.  
Outcomes: The subcommittee will further discuss issues related to the potential regulation of SSR MRFs and will provide input on whether additional regulation is necessary.

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### **Attendees**

Bruce Walker, City of Portland  
Theresa Koppang, Washington County  
Vinod Singh, Far West Recycling  
Brian May, WRI Republic  
Jeff Murray, EFI  
Dylan de Thomas, Resource Recycling  
Matt Marler, Covanta  
Audrey O'Brien, Oregon Dept. of Environmental Quality  
Mike Lafferty, Citizen Rep  
Francisco Ibarra, Citizen Rep  
Betty Patton, Recycling Advocates  
Andy Kahut, KB Recycling  
Roy Brower, Metro  
Mike Davis, Clark County Washington

### **Absent**

Scott Farling, Agilyx

### **Presenters & Staff:**

Dan Blue, Metro  
Kim Waxler, Metro  
Shane Abma, Metro  
Warren Johnson, Metro  
Tom Chaimov, Metro

Guest list is available upon request.

### **1. CALL TO ORDER AND DECLARATION OF A QUORUM**

Chair Roy Brower called the meeting to order and declared a quorum.

### **2. COMMENTS FROM THE CHAIR AND SUBCOMMITTEE MEMBERS**

Chair Brower welcomed members to the fourth meeting of the Material Recovery Facility and Conversion Technology Subcommittee (MRF/CT).

Chair Brower reviewed the agenda and indicated that Shane Abma, Matt Korot, Dan Blue would all be sharing information with the Subcommittee. Chair Brower sought comments/revisions to the meeting summary from the March MRF/CT Subcommittee meeting, there were none.

Chair Brower reminded the subcommittee membership that the subcommittee was not intending to take any formal votes on issues, but was looking for the membership's best advice.

### **3. ADDRESSING LEGAL QUESTIONS RAISED AT THE MARCH MEETING. SHANE ABMA**

Shane Abma, of Metro Attorney's Office, responded to some legal issues and questions that were raised at the last subcommittee meeting. First was a question of when the definition of solid waste had changed in Metro code to include source separated recyclables. Mr. Abma found the original ordinance from 2007. This was an omnibus ordinance that made a lot of changes to Title V, and was done during a period of many changes occurring in the solid waste system. As to why it was changed, Mr. Abma reported that he didn't think there was any one reason why it was changed, but that part of the reason was that Metro does consider source separated recyclables to be solid waste. Mr. Abma indicated that he would look for additional documentation or staff reports as to why the change was made at that time. Mr. Abma indicated that if anyone on the subcommittee wanted a copy of the original ordinance, to please contact him.

Mr. Abma then addressed the question regarding if Metro were to regulate SSR MRFS would there be some impact related to land use issues when MRFs were seeking to expand operations or site a new facility? Mr. Abma indicated that he did some research into this, spoke to other Metro land use attorney's, indicated that he himself had done land use work in the past, and that he could not find anything that would be a problem related to land use. Mr. Abma indicated that if Mr. Murray had any specific code of specific concerns related to this, that he should please provide that to Mr. Abma for additional research. Mr. Abma indicated that it was certainly not Metro's intention to do anything that would create any land use related problems at the local level. At this point in time, Metro does not see any conflict with local or regional land use process.

Mr. Brower added that back in 2005-7 Metro was changing how they were accounting for recovery at facilities from a 25% total standard to a back end residual standard for EDWRP, and were moving away from a credit program related to fees and taxes based on how much they recovered. There were some big ticket items going through Metro at that time, and there is no clear indication of why that particular definition was changed, but Mr. Brower suspects that it had to more with which kinds of materials were being covered by the EDWRP program.

Mr. Murray clarified relating to the land use issue that industry is not saying that having a solid waste license is going to change anything from a land use perspective for existing facilities, rather that when an existing facility is going to go in and seek to remodel or expand an existing facility that now they would be considered a solid waste facility when they weren't considered that before. Mr. Murray stated that for some local governments it matters, and some it does not, and that that is an issue for the industry. Mr. Murray indicated that he would like to discuss that outside of the subcommittee.

#### **4. CLARIFICATIONS ON METRO PERFORMANCE STANDARDS WORK VERSUS MRF/CT CONSIDERATION OF REGULATION – MATT KOROT**

Mr. Korot clarified that he was going to discuss how the performance standards that Metro has been engaged in differs and is distinct from the work of the MRF/CT Subcommittee.

Mr. Korot presented some history related to MRF performance standards going back to 2008 with an EPA Region 10 stakeholder process to develop standards for sorting and collection of commingled recyclable materials. That process fell apart for various reasons.

Mr. Korot further discussed that in 2009 DEQ convened a Commingled Recycling System Improvements Workgroup which met for a number of meetings and then DEQ initiated a project to characterize front door and back door curbside recyclable materials at MRFs.

After a long hiatus, there was a final meeting in late 2010 to share and discuss the results. Individuals made soft commitments for follow-up actions but there was no single agreed upon set of recommendations.

Mr. Korot indicated that there was not satisfaction by a number of local governments and Metro with the rushed ending of the process and a belief that the level of loss of recyclables during the MRF process was not acceptable and inconsistent with what users of the system could expect to be happening with the recyclables they set out for collection

These thoughts gestated for a while and then, in response to them and the belief that the MRF system was and would be a linchpin to the success of our regional recycling efforts, in 2013 Metro initiated a project to look at potential options for government action to help:

- Ensure that MRFs are high performers in managing today's materials, ensuring that recyclables get to the right markets
- Ensure MRFs are adaptable to future system needs and market conditions
- Profitable and able to invest in capital improvements
- Ensure that they are good neighbors to their communities

Mr. Korot and Marta McGuire met with the MRF operators at the start of the project to inform them of what they intended to do, get their thoughts and input generally, and specifically get input on a contractor's scope of work. Mr. Korot and Metro wanted to hire a contractor to look at what was happening outside of Oregon, and informed by the knowledge of how communities outside Oregon try to achieve those desired identify some options for the Metro region. The work by this company, CalRecovery, was intended to be one source of input to Metro's identification of many alternatives. CalRecovery was hired because of their extensive experience work in California and other states.

Mr. Korot indicated that CalRecovery completed that work and then Metro shared its report with the MRF operators and responded to their comments. The MRF operators subsequently provided written comments to Metro as well.

In late fall of 2014, Metro, informed by input from stakeholders, Metro's own internal discussion, and the CalRecovery report, identified a set of alternatives for further research with a desire to complete that research in spring 2015. Mr. Korot said shared those alternatives and that timeline with the MRFs. Those alternatives were focused on the performance elements of the MRF system that started the whole project (how to make the product as good as it can be coming out of the MRFs).

Mr. Korot stated that as 2015 approached, on a separate track staff was beginning to identify desired amendments of Metro code Title V as it applied to solid waste facility oversight. An element of that work was looking at the desired option of ensuring that the operations of MRFs minimize nuisances to surrounding communities. As the timeline for the entirety of the MRF work began to come into focus, staff made the decision to essentially suspend work related to the performance elements of the MRF system. Metro thought running the two tracks simultaneously would be confusing to stakeholders and the entirety of the regulatory work represented by the Title V work was more timely to address than Metro's longer-term work.

Mr. Korot concluded stating that the only work done since that decision has been to research - in house - how cities in CA and WA structure the relationship between government and the MRFs. That work is being done by a staff person. At this time Metro does not have a timeline for when performance standards work might be reinstated. Mr. Korot stated that his team was waiting to see how the MRF/CT Subcommittee work proceeds before going forward with the performance standards work.

Mr. Murray stated that he felt that the other shoe may fall at some point, but ultimately the reason we are talking about this now is because of material quality and performance standards. Mr. Murray indicated that it would be easier for him to handle both the housekeeping work of the MRF/CT Subcommittee and the performance standards work, rather than discussing them separately. Mr. Korot said he understood this but felt that the two should be taken on separately and that performance standards could be addressed outside of the Metro license/regulatory system. He felt that the discussion of performance standards was bigger, and a different kind of discussion. Mr. Brower added that for most Metro regulated facilities, Metro does not have a lot of performance standards in place. It made a lot of sense for Metro to separate those two activities so that these SSR MRFs could be held to the same standards of operation that other Metro regulated facilities are.

Mr. Korot indicated that performance standards could go a number of ways, including outcome based performance standards which seemed more appealing to industry.

Ms. O'Brien indicated that DEQ was involved in those earlier discussions, and that there are very complicated factors on how to define a standard for performance in these facilities. How do you make sure that they are producing a quality product? She wanted to reiterate how challenging it is to set these types of standards.

Mr. Murray stated that the industry's concern is that with the initial housekeeping requirements under a license, that there is a potential that Metro could potentially start talking about what kind of equipment, how many people you have on your line, that this is concerning to the industry. Because of this, Mr. Murray would rather have the whole conversation (housekeeping and performance standards).

Mr. Brower reminded the subcommittee that standards of operation would be discussed in this workgroup. Mr. Korot responded to Mr. Murray's concerns stating that Metro has made a good faith effort to have open discussions with industry on the performance standards and how we ensure that the region has a MRF system that fully serves the region and its customers. Mr. Korot appreciates the wide range of input from various stakeholders, and Metro does want to have a fully inclusive process.

Mr. Murray stated that he is hearing that Metro has no intent to get that deep into the business of the facilities, but he wants to reiterate his concern that once the facilities have a license, Metro would have a vehicle to go into more prescriptive requirements for facilities.

## 5. CLARIFICATION OF FACILITY CLASSES – DAN BLUE

Mr. Blue introduced the next agenda item, which was to review again the different types of facility classes that were under Metro authority, and which currently had an authorization versus which were exempt. Mr. Blue reminded the subcommittee that Metro and the subcommittee was considering whether SSR MRFs that receive and process commingled recyclable materials should be under a Metro license and be subject to inspection like other similar material recovery facilities.

Mr. Blue raised the question of how we draw the line between the exempted classes of facilities and those under consideration for licensing, and reviewed the list of characteristics of these facilities that might be subject to license. These include the following, with an emphasis on the bolded items:

- **Accept or purchase comingled curbside and commercial recycling streams for processing, sorting, consolidation, baling, and marketing**
- **Comingled material typically collected within a regulated environment**
- Variable contamination rates depending on generator practices
- Little or no control over incoming material
- Speculative accumulation can occur and accompanying potential degradation of materials if not processed and moved in timely fashion
- **Potential for negative environmental or health/safety issues**
- **Potential for negative impacts offsite e.g. adjoining properties and community (dust, noise, smell, vectors, litter, fire, life safety)**
- Subject to negative impacts of a highly volatile commodity market
- **Can impact rates charged to generators**

Mr. Blue asked if these characteristics might begin to form the basis for criteria for requiring additional authorization?

Mr. De Thomas asked if these characteristics line up with a facility like a dry waste facility currently under a Metro license? Mr. Kahut said no, but upon further clarification agreed that some of them would apply to his facility. The question was raised of how we would define comingled? Two items mixed together, three, ten? Mr. Brower indicated that multiple characteristics would apply. Mr. Kahut suggested that there are many more SSR MRF's in operation than what we have on our list of facilities.

Mr. Walker suggested that there would need to be some consistent definition used within the region, and suggested that using "business to business" exchange as way to help define those facilities that would not be subject to regulation.

Ms. Patton indicated that Oregon E-cycle facilities have a set of standards like these. Ms. O'Brien stated that yes there are standards for e-cycle facilities, but not all e-waste recyclers are under the Oregon E-Cycles program, EG Metals was an example that had significant issues. There was additional discussion of single stream facilities like roofing material facilities that might come under a DEQ permit for stockpiling materials in piles on a site. Mr. Murray asked if e-waste facility standards apply to housekeeping or just how the materials are handled, and Ms. O'Brien indicated that standards would apply both to facility standards and ensuring that materials are not degraded.

Mr. Blue handed out a one page code excerpt from Title V that includes operating standards for dry waste material recovery facilities (see Attachment A.). Mr. Blue clarified in this section of code the use of "performance" standards really apply to the types of facility



operating standards that have been discussed in the subcommittee, and not the types of performance standards discussed by Mr. Korot related to material quality, belt speed, number of pickers etc. Mr. Blue also said that the Administrative Procedures would be posted to the MRF/CT Subcommittee for the membership's review. This is in advance of the next meeting where the subcommittee is likely to discuss operating standards in more detail.

## **6. MRF/CT SUBCOMMITTEE MEMBERSHIP POLL ON SSR MRF REGULATION**

Mr. Brower posed the question of whether SSR MRFs should be subject to some Metro regulation (licensing and inspection). Mr. Walker asked whether this is a hard vote or could his position be modified as we progress? Mr. Brower clarified that this was a first look at where the subcommittee stands now, and that it will help Metro determine how to prepare for and conduct upcoming meetings. Mr. Murray raised the concern that the word "license" was in the question.

Mr. Blue clarified that the question in front of the committee came from the original "charter" of the subcommittee and this first poll of the membership was a "soft poll" and that members comments would not be held to the term "license". Mr. Brower indicated that Metro was not entirely tied to the word "license" and suggested substituting the word "authorization" for the word "license" for the sake of the poll.

Each subcommittee member then provided their input on and response to the question. The majority of the members indicated that they agree that this class of facilities (SSR MRFs) should be under some form of Metro authorization and be subject to inspection. 10 of the members present indicated clear support for some regulatory oversight, including inspections and for some reporting requirements as well. Four members indicated that there should be some form of increased oversight, but had concerns with the term license and wanted to better understand what the operating standards would be before advancing further. One member was unwilling to take a position until there was more clarity about what standards would be required of this class of facilities.

Following the poll there was additional conversation among the membership regarding the impact of recycling market volatility on rates charged to generators within regulated collection programs. Ms. Koppang clarified that in strong markets, the revenues earned from the sale of recyclables help to offset the collection costs, and when markets are low, the processing fees paid at the SSR MRFs are a cost to the system and affect rates. Mr. Lafferty clarified that if that is the case, customers don't really understand that, and that these facilities should be under additional regulation.

Mr. Murray responded that the region's market is unique due to the competitive nature of our system. His concern is that additional regulation may reduce the number of facilities in the system and that the system benefits from competitiveness. Mr. Murray also cited his concern that unprocessed materials may move out of the region under stricter regulations.

The subcommittee membership discussed the impacts of baling and shipping material out of region without processing. Mr. Walker and Ms. Koppang both stated that materials currently do get baled and shipped out with limited processing, and that the local governments don't necessarily pay attention to where it goes so long as it is ending up in markets to be recycled.

Mr. Brower shared that Metro has an interest in the overall solid waste and recycling system, and that Metro needed to be in a position to respond to market fluctuations. Mr. Brower provided the example of the recent major shift in the chipped wood/hog fuel

market with the closure of the Newberg mill and that Metro was able to respond quickly to that issue.

Mr. Murray clarified that extreme regulation can lead to unintended consequences and that currently Metro has the opportunity to understand the flow of materials via the voluntary and collaborative relationship with the region's MRFs. Mr. Davis reiterated that what the focus of the subcommittee discussion is on operational standards or housekeeping requirements and that we should avoid continuing to discuss material quality and performance measures at this time.

Mr. Kahut asked about Metro getting involved in processing recyclables, and that there was a conspiracy floating around regarding advanced material recovery processing and asked if Metro intends to do processing itself? Mr. Brower responded that Advanced Material Recovery (AMR) is the processing of waste material that is landfill bound, not further upstream curbside or commingled materials set out for recycling by generators. Metro is looking at the role AMR could play in the system but at this point it is just a concept. Mr. Chaimov stated that he has not heard any discussion that Metro wants to get into the business of processing source separated or commingled recyclables. Metro is looking at the landfill bound "dregs" and that AMR concept is looking at whether there is anything left in that landfill bound segment and would it be cost effective to look at that.

Mr. Murray pointed out that at multiple AOR sessions over the years, there has been discussion of larger modern MRFs and that there has been comments by local government staff that perhaps Metro should get involved in that side of the market. Mr. Murray referenced a presentation that Mr. Chaimov made in Washington County which referenced a processing facility for AMR. Mr. Chaimov responded that he did not recall the specifics of that presentation, but that AMR has been discussed as part of the broader Solid Waste Roadmap projects, which are looking out 10 to 20 years, and that there is no specific direction on AMR at this point in time.

## **7. PUBLIC COMMENTS**

Mr. Brower invited public comments, and Mr. David White of Oregon Refuse and Recycling Association spoke. Mr. White spoke to the difference between performance standards and operational or "housekeeping standards". Mr. White clarified that what he understands is that this is a two step process, and that Metro regulates through franchises and licenses. Mr. White asked if Metro can provide, in writing, what their goals are for this process so that industry might provide an alternative approach to achieving those goals other than a license? Mr. White suggests that Metro already has the authority to inspect and ensure compliance with Metro Code. Mr. White then referenced local government comments on objectives of the process including "highest and best use" and is that an example of how Metro could regulate how recovered materials should be marketed?

Mr. White suggests an independent third party certification system coupled with local government's restricting delivery of materials to facilities that fail to meet certain standards. Mr. White offered Earthwise standards from the 1990's as an example of a third party certification system region which included certain standards of operation and the quality of the material. Mr. White indicated that the City of Portland required that organics had to go to Earthwise certified facilities and that this was an example of how a third party certification system could work. Mr. White also offered E-Stewards as another example of third party certification system that could work for SSR MRFs in the region, with agreed upon standards.

Mr. Doug Drennen with JR Miller and Associates provided public comments regarding Metro's recovery system and referenced a regional average contamination level of 7%, and cited a national average of 16% contamination, and that the Metro region has done an excellent job of keeping a clean material stream. Mr. Drennen commented that private/public approach to this is the best approach to handle this material stream due to market issues. He indicated that the number one challenge on performance issues is the material coming in the door and that upfront collection is being handled appropriately. The second biggest issue is market conditions. Metro and the state need to consider how they can support marketability of the materials collected. Private facilities won't make investments in new equipment unless these issues are addressed (markets and collection side).

Mr. Brower thanked everyone for attending. The meeting adjourned at 12 p.m.

Upcoming MRF-CT Meeting: Friday May 20<sup>th</sup>, 1 p.m. Metro Council Chamber

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**SOLID WASTE  
ADMINISTRATIVE PROCEDURE  
(AND PERFORMANCE STANDARDS)**

**AP NO. 501  
Section 7**

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**Standards for  
Non-Putrescible Mixed Waste Material Recovery Facilities and  
Non-Putrescible Mixed Waste Reload Facilities**

**7.1 Policy and Legal Authority**

- 7.1.1 Ordinance No. 07-1138 adopted by the Metro Council on February 22, 2007 amended the Metro Code Chapters 5.01 and 5.05 to ensure that mixed non-putrescible waste material recovery facilities and reload facilities are operated in accordance with Metro administrative procedures and performance standards issued by the Chief Operating Officer
- 7.1.2 These administrative procedures and performance standards are published under the authority of Metro Code section 5.01.132, which directs the Chief Operating Officer to issue administrative procedures and performance standards governing the obligations of licensees and franchisees under Chapter 5.01 and are in addition to all requirements and provisions in Metro Code Chapter 5.01.
- 7.1.3 These administrative procedures and performance standards are organized into the following parts:

**General Administration**

Definitions.  
Applicability.  
Variances.

**Specific Performance Goals, Performance Standards and Operating Conditions**

Issue Specific Performance Goals.  
Facility Design Requirements.  
Performance Standards and Standard Operating Conditions (license or franchise requirements)

**General Administrative and Legal Obligations for Operating**

Standard administrative and legal obligations included in a license

**Attachment A – Standard Operating Condition Templates**

Material recovery facility license or franchise requirements.  
Reload facility license or franchise requirements.

**Attachment B – Standard Application Form Templates**

Material recovery facility application form.  
Reload facility application form.

## **7.2 General Administration**

### **7.2.1 Definitions**

See Metro Code Chapter 5.01.010 for all applicable definitions.

### **7.2.2 Applicability**

7.2.2.A New facilities. These administrative procedures and performance standards shall apply to all new non-putrescible mixed waste material recovery facilities and non-putrescible mixed waste reload facilities

7.2.2.B Existing facility phase-in and license/franchise renewal requirements. Upon adoption of the standards, existing facilities will have two years (until April, 2009) to demonstrate compliance with the requirement that all mixed non-putrescible waste tipping, sorting and reloading activities must occur on an asphalt or concrete surface and inside a roofed building that is enclosed on at least three sides. Other than that requirement, no additional design requirements will be required for existing facilities. However, any new or revised operating requirements will become part of a facility replacement license or franchise upon renewal for all facilities

### **7.2.3 Variances**

7.2.3.A The Chief Operating Officer, upon recommendation of the Solid Waste and Recycling Department Director, may grant specific variances from particular requirements of the performance standards to applicants for licenses or to licensees upon such conditions as the Chief Operating Officer may deem necessary to protect public health, safety and welfare, if the Chief Operating Officer finds that the purpose and intent of the particular requirement can be achieved without compliance and that compliance with the particular requirement:

7.2.3.A.1 Is inappropriate because of conditions beyond the control of the applicant, or licensee requesting the variance; or

7.2.3.A.2. Due to special physical conditions or causes, will be rendered extremely burdensome or highly impractical.

7.2.3.B A variance must be requested by a license applicant, or a licensee, in writing and state in a concise manner facts to show cause why such variance should be granted. The Director of the Solid Waste and Recycling Department may make such investigation as the Director deems necessary and shall make a recommendation to the Chief Operating Officer to approve or deny the variance coincident with any recommendation made on approval or denial of any license application; or, upon a request for variance from an existing licensee, within 60 days after receipt of the variance request.

7.2.3.C A request for a variance shall not substitute for an application that would otherwise be required under Section 5.01.045 of the Metro Code.

7.2.3.D If the Chief Operating Officer denies a variance request, the Director of the Solid Waste and Recycling Department shall notify the person requesting the variance of the right to a contested case hearing pursuant to Code Chapter 2.05.

7.2.3.E If a request for a variance is denied, no new application for this same or substantially similar variance shall be filed for at least six months from the date of denial.

### 7.3 Specific Performance Goals, Performance Standards and Operating Conditions

This section identifies issue specific facility performance goals and the corresponding performance standards and operating conditions (license or franchise requirements).

#### 7.3.1 Material Recovery

##### 7.3.1.A Specific Performance Goal

7.3.1.A.1 Facilities that perform material recovery must be designed and operated to achieve the level of material recovery from mixed non-putrescible waste as specified in Metro Code.

7.3.1.A. 2 Facility design and operations shall ensure that unprocessed mixed non-putrescible wastes and recyclables are protected from contamination from other solid wastes or degradation from wind and precipitation.

##### 7.3.1.B Design requirement (to be addressed in application)

7.3.1.B.1 Describe how material recovery will be conducted at the facility. For example:

7.3.1.B.1.a waste sources (e.g. commercial, residential), expected incoming tonnage, and characteristics, and expected tons recovered, including commodities, and tons of waste to be disposed;

7.3.1.B.1.b the material recovery methods and equipment to be used on site (e.g., sorting lines, hand picking, magnets, etc.) ; and

7.3.1.B.1.c the general markets for the materials recovered at the facility (subject to confidential information provisions in Section 2 X).

7.3.1.B.2 Submit a proposed facility design providing asphalt or concrete surfaces and a roofed building that is enclosed on at least three sides for the tipping floor, processing (sorting) areas, storage and reloading areas.

##### 7.3.1.C Performance Standards and Operating Requirements

7.3.1.C.1 The facility shall perform material recovery on mixed non-putrescible wastes. Recovery must be performed at no less than the minimum level stipulated in Metro Code Chapter 5.01 (at least 25% by weight of non-putrescible waste accepted at the facility).

7.3.1.C.2 Source-separated recyclable materials, including source-separated yard debris or wood wastes brought to the facility shall not be mixed with any other solid wastes.

7.3.1.C.3 Source-separated recyclable materials may not be disposed of by incineration or landfilling.

7.3.1.C.4 All mixed non-putrescible waste tipping, storage, sorting and reloading activities must occur on an impervious surface (e.g. asphalt or concrete) and inside a roofed building that is enclosed on at least three sides. Unusually large vehicles (i.e., 30-foot tippers) may tip wastes outside, provided the tipped wastes are

moved under cover prior to processing, or reloading within 12 hours of receipt, or by the end of the business day, whichever is earlier.

- 7.3.1.C.5 Mixed non-putrescible solid waste shall at all times be kept physically separated from, and shall not be mixed or allowed to commingle at any time with source-separated recyclable materials, including wood waste, yard debris and other recyclables.

### **7.3.2 Reloading non-putrescible waste**

#### **7.3.2.A Specific Performance Goal**

- 7.3.2.A.1 Non-putrescible waste reload facilities shall be designed and operated to assure that the reloading and transfer of non-putrescible waste to a Metro authorized processing facility is conducted rapidly and efficiently.
- 7.3.2.A.2 Facility design and operations shall ensure that unprocessed non-putrescible wastes and recyclables are protected from contamination from other solid wastes or degradation from wind and precipitation.

#### **7.3.2.B Design requirement (to be addressed in application)**

- 7.3.2.B.1 Submit a facility design that supports the rapid and efficient reloading of solid waste. Describe the equipment and methods that will be used.
- 7.3.2.B.2 Submit a proposed design providing asphalt or concrete surfaces and a roofed structure, that is enclosed on at least three sides for the tipping floor, storage and reloading areas.

#### **7.3.2.C Performance Standards and Operating Requirements**

- 7.3.2.C.1 All mixed non-putrescible waste must be reloaded and transferred to a Metro authorized facility that conducts material recovery.
- 7.3.2.C.2 All unprocessed mixed non-putrescible waste must be removed from the site within 48 hours after it has been received.
- 7.3.2.C.3 All mixed non-putrescible waste tipping, storage and reloading activities must occur on an impervious surface (e.g. asphalt or concrete) and inside a roofed building that is enclosed on at least three sides. Unusually large vehicles (i.e., 30-foot tippers) may tip wastes outside, provided the tipped wastes are moved under cover prior to reloading, within 12-hours of receipt, or by the end of the business day, whichever is earlier.

### **7.3.3 Dust, airborne debris and litter**

#### **7.3.3.A Specific Performance Goal**

- 7.3.3.A.1 Minimize and mitigate the generation of dust, airborne debris and litter on-site and prevent its migration beyond property boundaries.

#### **7.3.3.B Design requirement (to be addressed in application)**

- 7.3.3.B.1 Submit a proposed design providing a roofed structure enclosed on at least three sides for the tipping floor, processing (sorting)

areas, and reloading areas. Unusually large vehicles (i.e., 30-foot tippers) may tip wastes outside, provided the tipped wastes are moved under cover for processing within 12-hours of receipt or the end of the business day whichever is earlier.

7.3.3.B.2 Describe control measures to prevent fugitive dust, airborne debris and litter. The design shall provide for shrouding and dust prevention for the receiving area, processing area, reload area, and all dry processing equipment and all conveyor transfer points where dust is generated.

7.3.3.B.3 Provide a discussion of any additional facility design measures and procedures for the control of dust, windblown materials, airborne debris, litter and for the handling of the waste in the case of major processing facility breakdown.

#### 7.3.3.C Performance Standards and Operating Requirements

7.3.3.C.1 The facility shall be operated in a manner that minimizes and mitigates the generation of dust, airborne debris and litter, and shall prevent its migration beyond property boundaries. The facility shall:

Take reasonable steps, including signage, to notify and remind persons delivering solid waste to the facility that all loads must be suitably secured to prevent any material from blowing off the load during transit.

7.3.3.C.2 Maintain and operate all vehicles and devices transferring or transporting solid waste from the facility to prevent leaking, spilling or blowing of solid waste on-site or while in transit.

Maintain, and operate all access roads, receiving, processing (including grinding), storage, and reload areas in such a manner as to minimize and mitigate dust and debris from being generated on-site and prevent such dust and debris from blowing or settling off-site.

7.3.3.C.3 Keep all areas within the site and all vehicle access roads within ¼ mile of the site free of litter and debris generated directly or indirectly as a result of the facility's operation.

7.3.3.C.4 All mixed non-putrescible waste tipping, storage, sorting and reloading activities must occur on an impervious surface (e.g. asphalt or concrete) and inside a roofed building that is enclosed on at least three sides. Unusually large vehicles (i.e., 30-foot tippers) may tip wastes outside, provided the tipped wastes are moved under cover prior to processing within 12-hours of receipt.

7.3.3.C.5 Mixed non-putrescible waste and processing residual may not be stored unless it is on an impervious surface (e.g. asphalt or concrete) within a covered building or alternatively, inside water tight covered or tarped containers or within covered or tarped transport trailers.

7.3.3.C.6 On-site facility access roads shall be maintained to prevent or control dust and to prevent or control the tracking of mud off-site.



#### **7.3.4 Facility capacity**

##### **7.3.4.A Specific Performance Goal**

7.3.4.A.1 The operational capacity of the facility or site shall not be exceeded.

##### **7.3.4.B Design requirement (to be addressed in application)**

7.3.4.B.1 Provide engineering plans/reports and specifications to document that the size and configuration of the facility grounds, building and equipment, including the facility layout, drainage structures, building design, and major facility equipment, processing systems and storage areas are of sufficient capacity to accommodate seasonal throughput of all materials that will be delivered to and generated by the facility.

##### **7.3.4.C Performance Standards and Operating Requirements**

7.3.4.C.1 Applicable standards are addressed in other sections.

#### **7.3.5 Storage and exterior stockpiles**

##### **7.3.5.A Specific Performance Goal**

7.3.5.A.1 Stored materials and solid wastes shall be suitably managed, contained and removed at sufficient frequency to avoid creating nuisance conditions, vector or bird attraction or harborage, or safety hazards.

##### **7.3.5.B Design requirement (to be addressed in application)**

7.3.5.B.1 The facility site plan shall identify stockpile footprints, the type of materials and the maximum height of each material stockpile.

7.3.5.B.2 The facility design must include processing systems and storage areas of sufficient capacity to accommodate seasonal throughput of all materials that are delivered to and generated by the facility.

##### **7.3.5.C Performance Standards and Operating Requirements**

7.3.5.C.1 Exterior stockpiles shall be positioned within footprints identified on the facility site plan. Stored materials and solid wastes shall be suitably managed, contained and removed at sufficient frequency to avoid creating nuisance conditions, vector or bird attraction or harborage, or safety hazards. Storage areas must be maintained in an orderly manner and kept free of litter.

7.3.5.C.2 Materials may not be stockpiled for longer than 180 days (6 months). Exceptions may be granted provided the facility has received written authority to store materials for longer periods of time based on a demonstrated need and the materials will be used productively and provided that such stockpiles will not create nuisances, health, safety or environmental problems.

7.3.5.C.3 Mixed non-putrescible waste or processing residual may not be stored on-site unless it is on an impervious surface (e.g. asphalt or concrete) within a covered building or alternatively, inside water tight covered or tarped containers or within covered or tarped

transport trailers.

- 7.3.5.C.4 All non-putrescible waste processing residual shall at all times be kept physically separated from, and shall not be mixed or allowed to commingle at any time with, other source-separated recyclable or recovered materials, including wood waste, yard debris and other recyclables.

### **7.3.6 Fire prevention**

#### **7.3.6.A Specific Performance Goal**

- 7.3.6.A.1 Provide adequate fire prevention, protection, and control measures.

#### **7.3.6.B Design requirement (to be addressed in application)**

- 7.3.6.B.1 Submit proof of compliance with local and state fire codes. Stockpiles shall be located, sized and configured as required by local fire authorities.
- 7.3.6.B.2 Identify water sources for fire suppression and layout that allows for isolation of potential heat sources.

#### **7.3.6.C Performance Standards and Operating Requirements**

- 7.3.6.C.1 The operator shall provide fire prevention, protection, and control measures, including but not limited to, adequate water supply for fire suppression, and the isolation of potential heat sources and/or flammables from the processing area.

### **7.3.7 Qualified operator**

#### **7.3.7.A Specific Performance Goal**

- 7.3.7.A.1 Provide a qualified operator on-site during all hours of operation to carry out the functions required by the license and operating plan.

#### **7.3.7.B Design requirement (to be addressed in application)**

- 7.3.7.B.1 Not applicable.

#### **7.3.7.C Performance Standards and Operating Requirements**

- 7.3.7.C.1 The facility shall, during all hours of operation, provide a qualified and competent operating staff.
- 7.3.7.C.2 Facility personnel, as relevant to their job duties and responsibilities, shall be familiar with the relevant provisions of the license and the relevant procedures contained within the facility's operating plan.
- 7.3.7.C.3 A qualified operator must be an employee of the facility with training and authority to reject prohibited loads and properly manage prohibited waste that is inadvertently received.

### **7.3.8 Prohibited waste**

#### **7.3.8.A Specific Performance Goal**

- 7.3.8.A.1 Prevent the acceptance of prohibited waste, including but not

limited to putrescible waste, hazardous waste and asbestos.

7.3.8.A.2 Prohibited waste shall be properly managed and disposed when inadvertently received.

7.3.8.B Design requirement (to be addressed in application)

7.3.8.B.1 Designate a load checking area on the facility site plan and a location for the storage of prohibited wastes removed during the load checking process that is separately secured or isolated.

7.3.8.B.2 Containment areas shall be covered and enclosed and constructed to prevent leaking and contamination.

7.3.8.C Performance Standards and Operating Requirements

7.3.8.C.1 The facility shall provide qualified operators on-site during all hours of operation.

7.3.8.C.2 The facility shall not accept prohibited waste, including but not limited to putrescible waste, hazardous waste and asbestos. Prohibited loads must be rejected upon discovery. Prohibited waste shall be properly managed and disposed when inadvertently received.

7.3.8.C.3 The facility shall implement a load checking program to prevent the acceptance of waste which is prohibited by the license. This program must include at a minimum:

7.3.8.C.3.a Visual inspection. Ensure that as each load is tipped, it is visually inspected by a qualified operator to prevent the acceptance of waste that is prohibited by the license; and

7.3.8.C.3.b A secured or isolated containment area for the storage of prohibited wastes that are inadvertently received. Containment areas shall be covered and enclosed to prevent leaking and contamination.

7.3.8.C.4 Records of the training of personnel in the recognition, proper handling, and disposition of prohibited waste shall be maintained in the operating record and be available for review by Metro.

### **7.3.9 Measurement of waste**

7.3.9.A Specific Performance Goal

7.3.9.A.1 All non-putrescible waste and source-separated recyclable materials shall be accurately weighed when they are received, transferred to market or intra-facility, and transported from the facility.

7.3.9.B Design requirement (to be addressed in application)

7.3.9.B.1 The location of scales shall be designated on the facility site plan.

7.3.9.C Performance Standards and Operating Requirements

7.3.9.C.1 The facility operator shall weigh all non-putrescible waste and source-separated recyclable material when it is received, transferred to market or intra-facility, and transported from the facility.

- 7.3.9.C.2 The scale used to weigh all solid waste shall be licensed by the state of Oregon (Weights and Measures Act).

### **7.3.10 Transaction records and reporting**

#### **7.3.10.A Specific Performance Goal**

- 7.3.10.A.1 Maintain complete and accurate transaction records on the weights and types of all solid wastes and recyclable materials received, recovered, reloaded, removed or disposed from the facility.

#### **7.3.10.B Design requirement (to be addressed in application)**

- 7.3.10.B.1 Not applicable.

#### **7.3.10.C Performance Standards and Operating Requirements**

- 7.3.10.C.1 Record transmittals. Records required shall be transmitted to Metro no later than fifteen days following the end of each month in electronic format prescribed by Metro.
- 7.3.10.C.2 Hauler account number listing. Within 5 business days of Metro's request, licensee shall provide Metro with a computer listing that cross references the incoming hauler account number with the hauling company's name and address.
- 7.3.10.C.3 Transactions to be based on scale weights. Except for minimum fee transactions for small, light-weight loads, the licensee shall record each transaction electronically based on actual and accurate scale weights using the licensee's on-site scales.
- 7.3.10.C.4 For all solid waste the licensee is authorized to receive, including all non-putrescible waste, source-separated recyclables, inert materials, and yard debris, the licensee shall keep and maintain accurate records of the amount of such materials the licensee receives, recovers, recycles, reloads, and disposes.
- 7.3.10.C.5 The licensee shall keep and maintain complete and accurate records of the following for all transactions:
  - 7.3.10.C.5.a Ticket Number (should be the same as the ticket number on the weight slips);
  - 7.3.10.C.5.b Account Number or Business Name: Incoming hauler account number on all incoming transactions and outgoing destination account number on all outgoing transactions. For incoming cash commercial customers, incoming hauler business name for all incoming commercial cash transactions;
  - 7.3.10.C.5.c Material category: Code designating the following types of material (more detail, such as differentiating yard debris, is acceptable): (1) incoming source-separated recyclable materials by type; (2) incoming mixed dry waste; (3) outgoing recyclable materials by type; (4) outgoing mixed dry waste;

- 7.3.10.C.5.d      Origin: Code designating the following origin of material: (1) from inside Metro boundaries; (2) from within Multnomah, Clackamas and Washington Counties but outside Metro boundaries; and (3) from out-of-state;
- Any load containing any amount of waste from within the Metro region shall be reported as if the entire load was generated from inside the Metro region.
- If the Licensee elects to report all loads delivered to the facility as being generated from inside the Metro region, then the Licensee is not required to designate the origin of loads in (d)(2) and (3) above.
- 7.3.10.C.5.e      Date the load was received at, transferred within, or transmitted from the facility;
- 7.3.10.C.5.f      Time the load was received at, transferred within, or transmitted from the facility;
- 7.3.10.C.5.g      Indicate whether Licensee or Franchisee accepted or rejected the load;
- 7.3.10.C.5.h      Net weight of the load;
- 7.3.10.C.5.i      The fee charged to the generator of the load.

### **7.3.11      Access control**

#### **7.3.11.A      Specific Performance Goal**

- 7.3.11.A.1      Control access and prevent unauthorized pedestrian and vehicular traffic and illegal dumping.

#### **7.3.11.B      Design requirement (to be addressed in application)**

- 7.3.11.B.1      Control pedestrian and vehicular access to the proposed facility by means of fencing, gates which may be locked, natural barriers or security guards.

#### **7.3.11.C      Performance Standards and Operating Requirements**

- 7.3.11.C.1      Access to the facility shall be controlled as necessary to prevent unauthorized entry and dumping.
- 7.3.11.C.2      A gate or other suitable barrier shall be maintained at potential vehicular access points to prevent unauthorized access to the site when an attendant is not on duty.

### **7.3.12      Adequate vehicle accommodation**

#### **7.3.12.A      Specific Performance Goal**

- 7.3.12.A.1      Provide and maintain access roads to allow the orderly egress and ingress of vehicular traffic.

#### **7.3.12.B      Design requirement (to be addressed in application)**

- 7.3.12.B.1      Access roads shall be provided from the public highways or roads,

to and within the facility site and shall be designed and maintained to prevent traffic congestion and traffic hazards.

- 7.3.12.B.2 Adequate on-site area at the facility's entrance, scales, loading and unloading points and exit points shall be provided to allow the number and types of vehicles expected to use the facility during peak times to safely queue off the public roads and right-of-way.

7.3.12.C Performance Standards and Operating Requirements

- 7.3.12.C.1 Provide access roads of sufficient capacity to adequately accommodate all on-site vehicular traffic. Access roads shall be maintained to allow the orderly egress and ingress of vehicular traffic when the facility is in operation, including during inclement weather.
- 7.3.12.C.2 Take reasonable steps to notify and remind persons delivering solid waste to the facility that vehicles shall not park or queue on public streets or roads except under emergency conditions or in accordance with local traffic ordinances.
- 7.3.12.C.3 Signs shall be posted to inform customers not to queue on public roadways.
- 7.3.12.C.4 Adequate off-street parking and queuing for vehicles shall be provided, including adequate space for on-site tarping and untarpping of loads.

**7.3.13 Water contaminated by solid waste and solid waste leachate**

7.3.13.A Specific Performance Goal

- 7.3.13.A.1 Provide pollution control measures to protect surface and ground waters from contamination from solid waste.

7.3.13.B Design requirement (to be addressed in application)

- 7.3.13.B.1 Submit a DEQ approved stormwater management plan (or equivalent) with pollution control measures to protect surface and ground waters, including runoff collection and discharge and equipment cleaning and washdown water.

7.3.13.C Performance Standards and Operating Requirements

- 7.3.13.C.1 The facility shall be operated consistent with an approved DEQ stormwater management plan (or equivalent), and shall:  
  
Operate and maintain the facility to prevent contact of solid wastes with storm water runoff and precipitation; and
- 7.3.13.C.2 Dispose of or treat water contaminated by solid waste generated onsite in a manner complying with local, state, and federal laws and regulations.
- 7.3.13.C.3 All mixed non-putrescible waste tipping, storing, sorting and reloading activities must occur on an asphalt or concrete surface and inside a roofed building that is enclosed on at least three sides. Unusually large vehicles (i.e., 30-foot tippers) may tip wastes outside, provided the tipped wastes are moved under cover for processing within 12-hours of receipt or by the end of the business

day whichever is earlier.

**7.3.14 Vectors (e.g.: birds, rodents, insects)**

7.3.14.A Specific Performance Goal

7.3.14.A.1 Prevent the attraction or harborage of rodents, birds, insects and other vectors.

7.3.14.B Design requirement (to be addressed in application)

7.3.14.B.1 Describe facility design features that will prevent vectors.

7.3.14.C Performance Standards and Operating Requirements

7.3.14.C.1 The facility shall be operated in a manner that is not conducive to the harborage of rodents, birds, insects or other vectors capable of transmitting, directly or indirectly, infectious diseases to humans or from one person or animal to another.

7.3.14.C.2 If vectors are present or detected at the facility, vector control measures shall be implemented.

**7.3.15 Nuisance complaints**

7.3.15.A Specific Performance Goal

7.3.15.A.1 Respond to all nuisance complaints in a timely manner, and keep a record of such complaints, and any action taken to respond to the complaints, including actions to remedy the conditions that caused the complaint.

7.3.15.B Design requirement (to be addressed in application)

7.3.15.B.1 Not applicable.

7.3.15.C Performance Standards and Operating Requirements

7.3.15.C.1 The facility operator shall respond to all nuisance complaints in timely manner (including, but not limited to, blowing debris, fugitive dust or odors, noise, traffic, and vectors), and shall keep a record of such complaints and any action taken to respond to the complaints, including actions to remedy the conditions that caused the complaint.

7.3.15.C.2 If the facility receives a complaint, the operator shall:  
  
Attempt to respond to that complaint within one business day, or sooner as circumstances may require, and retain documentation of its attempts (whether successful or unsuccessful); and log all such complaints as provided by the recordkeeping and reporting standards. Each log entry shall be retained for one year and shall be available for inspection by Metro.

**7.3.16 Noise**

7.3.16.A Specific Performance Goal

7.3.16.A.1 Prevent excessive noise that creates adverse off-site impacts.

7.3.16.B Design requirement (to be addressed in application)

- 7.3.16.B.1 Identify noise abatement design features on the facility site plan, if proposed.
  - 7.3.16.C Performance Standards and Operating Requirements
    - 7.3.16.C.1 The facility shall be operated in a manner that prevents the creation of noise sufficient to cause adverse off-site impacts and to the extent necessary to meet applicable regulatory standards and land-use regulations.
- 7.3.17 Odor**
  - 7.3.17.A Specific Performance Goal
    - 7.3.17.A.1 Prevent odors that create off-site impacts.
  - 7.3.17.B Design requirement (to be addressed in application)
    - 7.3.17.B.1 Identify odor abatement design features on the facility site plan, if proposed
  - 7.3.17.C Performance Standards and Operating Requirements
    - 7.3.17.C.1 The facility shall be operated in a manner that prevents the generation of odors that create off-site impacts. Odors from the facility shall not be detectable off-site.
    - 7.3.17.C.2 The Licensee shall establish and follow procedures in the operating plan for minimizing odor at the facility.
- 7.3.18 Signage**
  - 7.3.18.A Specific Performance Goal
    - 7.3.18.A.1 Have signage that identifies the facility, shows the required information, and is posted in locations as required.
  - 7.3.18.B Design requirement (to be addressed in application)
    - 7.3.18.B.1 Identify where the sign(s) will be located on the facility site plan.
  - 7.3.18.C Performance Standards and Operating Requirements
    - 7.3.18.C.1 The Licensee shall post signs at all public entrances to the facility, and in conformity with local government signage regulations. These signs shall be easily and readily visible, and legible from off-site during all hours and shall contain at least the following information:
      - 7.3.18.C.1.a General facility information to include:
        - Name of the facility
        - Address of the facility;
        - Emergency telephone number for the facility;
        - Operating hours during which the facility is open for the receipt of authorized waste;
        - Fees and charges;
        - Metro's name and telephone number (503) 234-3000;
        - A list of authorized and prohibited wastes;



		Directions not to queue on public roadways.
	7.3.18.C.1.b	Vehicle / traffic flow information or diagram.
	7.3.18.C.1.c	Covered load requirements.
<b>7.3.19</b>	<b>Operating plan</b>	
7.3.19.A	Specific Performance Goal	
7.3.19.A.1	Develop, keep and abide by a Metro approved operating plan.	
7.3.19.B	Design requirement (to be addressed in application)	
7.3.19.B.1	Not applicable.	
7.3.19.C	Performance Standards and Operating Requirements	
7.3.19.C.1	Plan compliance-The Licensee must operate the facility in accordance with an operating plan approved by the Manager of the Metro Solid Waste Regulatory Affairs Division. The operating plan must include sufficient detail to demonstrate that the facility will be operated in compliance with this license. The operating plan may be amended from time to time, subject to approval by the Manager of the Metro Solid Waste Regulatory Affairs Division.	
7.3.19.C.2	Plan maintenance-The Licensee must revise the operating plan as necessary to keep it current with facility conditions, procedures, and requirements. The Licensee must submit revisions of the operating plan to the Manager of the Metro Solid Waste Regulatory Affairs Division for written approval prior to implementation.	
7.3.19.C.3	Access to operating plan-The Licensee shall maintain a copy of the operating plan on the facility premises and in a location where facility personnel and Metro representatives have ready access to it.	
7.3.19.C.4	The operating plan shall establish:	
	7.3.19.C.4.a	Procedures for inspecting loads Procedures for inspecting incoming loads for the presence of prohibited or unauthorized wastes; A set of objective criteria for accepting and rejecting loads; and An asbestos testing protocol for all material that appears as if it may contain friable asbestos.
	7.3.19.C.4.b	Procedures for processing and storage of loads Processing authorized solid wastes, Reloading and transfer of authorized solid wastes, Managing stockpiles. Storing authorized solid wastes; and Minimizing storage times and avoiding delay in processing of authorized solid wastes.
	7.3.19.C.5	Procedures for managing prohibited wastes
	7.3.19.C.5.a	The operating plan shall establish procedures

for managing, reloading, and transporting to appropriate facilities or disposal sites each of the prohibited or unauthorized wastes if they are discovered at the facility. In addition, the operating plan shall establish procedures and methods for notifying generators not to place hazardous wastes or other prohibited wastes in drop boxes or other collection containers destined for the facility.

7.3.19.C.6 Procedures for odor prevention

The operating plan shall establish procedures for preventing all objectionable odors from being detected off the premises of the facility. The plan must include:

7.3.19.C.6.a A management plan that will be used to monitor and manage all odors of any derivation including malodorous loads delivered to the facility; and

7.3.19.C.6.b Procedures for receiving and recording odor complaints, immediately investigating any odor complaints to determine the cause of odor emissions, and remedying promptly any odor problem at the facility.

7.3.19.C.7 Procedures for dust prevention

The operating plan shall establish procedures for preventing the production of dust from blowing or falling off the premises of the facility. The plan must include:

7.3.19.C.7.a A management plan that will be used to monitor and manage dust of any derivation; and

7.3.19.C.7.b Procedures for receiving and recording dust complaints, immediately investigating any dust complaints to determine the cause of dust emissions, and remedying promptly any dust problem at the facility.

7.3.19.C.8 Procedures for emergencies

The operating plan shall establish procedures to be followed in case of fire or other emergency.

7.3.19.C.9 Procedures for nuisance complaints

For every nuisance complaint (e.g. odor, dust, vibrations, litter) received, the Licensee shall record:

7.3.19.C.9.a The nature of the complaint;

7.3.19.C.9.b The date the complaint was received;

7.3.19.C.9.c The name, address and telephone number of the person or persons making the complaint; and

7.3.19.C.9.d Any actions taken by the operator in response to the complaint (whether successful or

unsuccessful).

- 7.3.19.C.9.e Records of such information shall be made available to Metro upon request. The Licensee shall retain each complaint record for a period of not less than two years.

### **7.3.20 Pre-Operating conditions (for new construction or new authorizations)**

#### **7.3.20.A Specific Performance Goal**

- 7.3.20.A.1 The facility shall not be permitted to accept solid waste until it has demonstrated that construction is complete and the facility will likely be able to comply with all license conditions.

#### **7.3.20.B Performance Standards and Operating Requirements**

- 7.3.20.B.1 The facility may not accept any solid waste until the Director of the Solid Waste and Recycling Department has approved in writing that:
  - 7.3.20.B.1.a The facility construction is complete according to plans submitted by the facility and approved by Metro. Any amendments or alterations to such plans must be approved by the Director of the Solid Waste and Recycling Department.
  - 7.3.20.B.1.b The storm water management system must be constructed and in proper working order in accordance with the plans submitted to Metro and approved by the DEQ. Any amendments or alterations to such plans must be approved by the Director of the Solid Waste and Recycling Department.
  - 7.3.20.B.1.c An adequate operating plan has been submitted and approved by the Director of the Solid Waste and Recycling Department.
- 7.3.20.B.2 Such written approval shall be based upon the Licensee's compliance with license provisions, including the Director's inspection of the facility and the documents submitted to the Director by the Licensee. Prior to the required construction inspection, the Licensee shall submit to the Director of the Solid Waste and Recycling Department "as constructed" facility plans which note any changes from the original plans submitted to Metro.
- 7.3.20.B.3 When construction is complete or nearly complete, the Licensee shall notify the Director of the Solid Waste and Recycling Department so that an inspection can be made before acceptance of any solid waste.

### **7.3.21 General Recordkeeping and Reporting**

#### **7.3.21.A Specific Performance Goal**

- 7.3.21.A.1 Maintain complete and accurate records and report such information to Metro.

- 7.3.21.B Performance Standards and Operating Requirements
- 7.3.21.B.1 DEQ submittals. Licensee shall provide Metro with copies of all correspondence, exhibits, or documents submitted to the DEQ relating to the terms or conditions of the DEQ solid waste permit or this license within two business days of providing such information.
  - 7.3.21.B.2 Copies of enforcement actions provided to Metro. Licensee shall send to Metro, upon receipt, copies of any notice of violation or non-compliance, citation, or any other similar enforcement actions issued to licensee by any federal, state, or local government other than Metro, and related to the operation of the facility.
  - 7.3.21.B.3 Unusual occurrences. Licensee shall keep and maintain accurate records of any unusual occurrences (such as fires or any other significant disruption) encountered during operation, and methods used to resolve problems arising from these events, including details of all incidents that required implementing emergency procedures. If a breakdown of the operator's equipment occurs that will substantially impact the ability of the facility to remain in compliance, or create off-site impacts, the operator shall notify Metro within 24-hours. The licensee shall report any facility fires, accidents, emergencies, and other significant incidents to Metro at (503) 234-3000 within 12 hours of the discovery of their occurrence.
  - 7.3.21.B.4 Nuisance complaints. For every nuisance complaint (e.g. odor, noise, dust, vibrations, litter) received, the licensee shall record: a) the nature of the complaint, b) the date the complaint was received, c) the name, address and telephone number of the person or persons making the complaint; and d) any actions taken by the operator in response to the complaint (whether successful or unsuccessful). Records of such information shall be maintained on-site and made available to Metro upon request. The licensee shall retain each complaint record for a period not less than one year.
  - 7.3.21.B.5 Changes in ownership. The licensee must, in accordance with Metro Code Section 5.01.090, submit a new license application to Metro if the licensee proposes to transfer ownership or control of (1) the license, (2) the facility property, or (3) the name and address of the operator.

## **7.4 General Administrative and Legal Obligations for Operating**

This section identifies standard administrative and legal obligations, required by the Metro Code, for all solid waste facility licenses and franchises. These requirements are not unique to a mixed non-putrescible waste material recovery facility or to a mixed non-putrescible waste reload facility.

### **7.4.1 Compliance by agents**

#### **7.4.1.A Operating Requirement (license / franchise provision)**

- 7.4.1.A.1 Compliance by agents. The Licensee shall be responsible for ensuring that its agents and contractors operate in compliance with this license.

## **7.4.2 Compliance with law**

### **7.4.2.A Operating Requirement (license / franchise provision)**

- 7.4.2.A.1 Compliance with law. The Licensee shall fully comply with all applicable local, regional, state and federal laws, rules, regulations, ordinances, orders and permits pertaining in any manner to this license, including all applicable Metro Code provisions and administrative procedures adopted pursuant to Chapter 5.01 whether or not those provisions have been specifically mentioned or cited herein. All conditions imposed on the operation of the facility by federal, state, regional or local governments or agencies having jurisdiction over the facility shall be deemed part of this license as if specifically set forth herein. Such conditions and permits include those cited within or attached as exhibits to the license document, as well as any existing at the time of the issuance of the license but not cited or attached, and permits or conditions issued or modified during the term of the license.

## **7.4.3 Confidential information**

### **7.4.3.A Operating Requirement (license / franchise provision)**

- 7.4.3.A.1 Confidential information. The Licensee may identify as confidential any reports, books, records, maps, plans, income tax returns, financial statements, contracts and other similar written materials of the Licensee that are directly related to the operation of the facility and that are submitted to or reviewed by Metro. Licensee shall prominently mark any information that it claims confidential with the mark "CONFIDENTIAL" prior to submittal to or review by Metro. Metro shall treat as confidential any information so marked and will make a good faith effort not to disclose such information unless Metro's refusal to disclose such information would be contrary to applicable Oregon law, including, without limitation, ORS Chapter 192. Within five (5) days of Metro's receipt of a request for disclosure of information identified by Licensee as confidential, Metro shall provide Licensee written notice of the request. Licensee shall have three (3) days within which time to respond in writing to the request before Metro determines, at its sole discretion, whether to disclose any requested information. Licensee shall pay any costs incurred by Metro as a result of Metro's efforts to remove or redact any such confidential information from documents that Metro produces in response to a public records request. Nothing in this Section 13.0 shall limit the use of any information submitted to or reviewed by Metro for regulatory purposes or in any enforcement proceeding. In addition, Metro may share any confidential information with representatives of other governmental agencies provided that, consistent with Oregon law, such representatives agree to continue to treat such information as confidential and make good faith

efforts not to disclose such information.

#### **7.4.4 Deliver waste to appropriate destinations**

##### **7.4.4.A Operating Requirement (license / franchise provision)**

- 7.4.4.A.1 Deliver waste to appropriate destinations. The Licensee shall ensure that solid waste transferred from the facility goes to the appropriate destinations under Metro Code chapters 5.01 and 5.05, and under applicable local, state and federal laws, rules, regulations, ordinances, orders and permits.

#### **7.4.5 Enforcement**

##### **7.4.5.A Operating Requirement (license / franchise provision)**

- 7.4.5.A.1 Generally. Enforcement of the license shall be as specified in Metro Code.
- 7.4.5.A.2 Authority vested in Metro. The power and right to regulate, in the public interest, the exercise of the privileges granted by this license shall at all times be vested in Metro. Metro reserves the right to establish or amend rules, regulations or standards regarding matters within Metro's authority, and to enforce all such requirements against Licensee.
- 7.4.5.A.3 No Enforcement Limitations. Nothing in this license shall be construed to limit, restrict, curtail, or abrogate any enforcement provision contained in Metro Code or administrative procedures adopted pursuant to Metro Code Chapter 5.01, nor shall this license be construed or interpreted so as to limit or preclude Metro from adopting ordinances that regulate the health, safety, or welfare of any person or persons within the District, notwithstanding any incidental impact that such ordinances may have upon the terms of this license or the Licensee's operation of the facility.

#### **7.4.6 Indemnification**

##### **7.4.6.A Operating Requirement (license / franchise provision)**

- 7.4.6.A.1 Indemnification. The Licensee shall indemnify and hold Metro, its employees, agents and elected officials harmless from any and all claims, damages, actions, losses and expenses including attorney's fees, or liability related to or arising out of or in any way connected with the Licensee's performance or failure to perform under this license, including patent infringement and any claims or disputes involving subcontractors.

#### **7.4.7 Modifications**

##### **7.4.7.A Operating Requirement (license / franchise provision)**

- 7.4.7.A.1 Modification. At any time during the term of the license, either the Chief Operating Officer or the Licensee may propose amendments or modifications to this license. The Chief Operating Officer has the authority to approve or deny any such amendments or modifications provided that the activities authorized in the amended or modified license do not require a Metro Solid Waste

Facility Franchise under Metro Code Chapter 5.01. No amendment or modification pursuant to this section shall be effective unless in writing and executed by the Chief Operating Officer.

7.4.7.A.2 Modification, suspension or revocation by Metro. The Chief Operating Officer may, at any time before the expiration date, modify, suspend, or revoke this license in whole or in part, in accordance with Metro Code Chapter 5.01, for reasons including but not limited to:

- 7.4.7.A.2.a Violation of the terms or conditions of this license, Metro Code, or any applicable statute, rule, or standard;
- 7.4.7.A.2.b Changes in local, regional, state, or federal laws or regulations that should be specifically incorporated into this license;
- 7.4.7.A.2.c Failure to disclose fully all relevant facts;
- 7.4.7.A.2.d A significant release into the environment from the facility;
- 7.4.7.A.2.e Significant change in the character of solid waste received or in the operation of the facility;
- 7.4.7.A.2.f Any change in ownership or control, excluding transfers among subsidiaries of the Licensee or Licensee's parent corporation;
- 7.4.7.A.2.g A request from the local government stemming from impacts resulting from facility operations.
- 7.4.7.A.2.h Compliance history of the Licensee.

#### **7.4.8 Right of inspection and audit**

7.4.8.A Operating Requirement (license / franchise provision)

7.4.8.A.1 Right of inspection and audit. Authorized representatives of Metro may take photographs, collect samples of materials, and perform such inspection or audit as the Chief Operating Officer deems appropriate, and shall be permitted access to the premises of the facility at all reasonable times during business hours with or without notice or at such other times upon giving reasonable advance notice (not less than 24 hours). Metro inspection reports, including site photographs, are public records subject to disclosure under Oregon Public Records Law. Subject to the confidentiality provisions in Section 13.5 of this license, Metro's right to inspect shall include the right to review all information from which all required reports are derived including all books, maps, plans, income tax returns, financial statements, contracts, and other similar written materials of Licensee that are directly related to the operation of the Facility.

#### **7.4.9 Insurance**

7.4.9.A Operating Requirement (license / franchise provision)



- 7.4.9.A.1 General liability. The Licensee shall carry broad form comprehensive general liability insurance covering bodily injury and property damage, with automatic coverage for premises, operations, and product liability. The policy shall be endorsed with contractual liability coverage.
- 7.4.9.A.2 Automobile. The Licensee shall carry automobile bodily injury and property damage liability insurance.
- 7.4.9.A.3 Coverage Insurance coverage shall be a minimum of \$500,000 per occurrence. If coverage is written with an annual aggregate limit, the aggregate limit shall not be less than \$1,000,000.
- 7.4.9.A.4 Additional insureds. Metro, its elected officials, departments, employees, and agents shall be named as ADDITIONAL INSURED.
- 7.4.9.A.5 Worker's Compensation Insurance. The Licensee, its subcontractors, if any, and all employers working under this license, are subject employers under the Oregon Workers' Compensation Law shall comply with ORS 656.017, which requires them to provide Workers' Compensation coverage for all their subject workers. Licensee shall provide Metro with certification of Workers' Compensation insurance including employer's liability. If Licensee has no employees and will perform the work without the assistance of others, a certificate to that effect may be attached in lieu of the certificate showing current Workers' Compensation.
- 7.4.9.A.6 Notification. The Licensee shall give at least 30 days written notice to the Director of the Solid Waste and Recycling Department of any lapse or proposed cancellation of insurance coverage.

#### **7.4.10 Financial assurance**

- 7.4.10.A Operating Requirement (license / franchise provision)
  - 7.4.10.A.1 Financial assurance The Licensee shall maintain financial assurance in an amount adequate for the cost of the facility's closure and in a form approved by Metro for the term of the license, as provided in Metro Code section 5.01.060(c)(4).

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# Overview of the Sorting Process



# Sorting Equipment in the Region





# Screen are Ubiquitous to Most Systems



# Shafts Rotate to Transfer and Separate Recyclables



# Shafts Rotate to Transfer and Separate Recyclables



# Post Screen QC





# Container Screens (V-Screen)





# Container Screens



# Container Screens (QC)





# Optical Sorting



# Optical Sorting (QC)

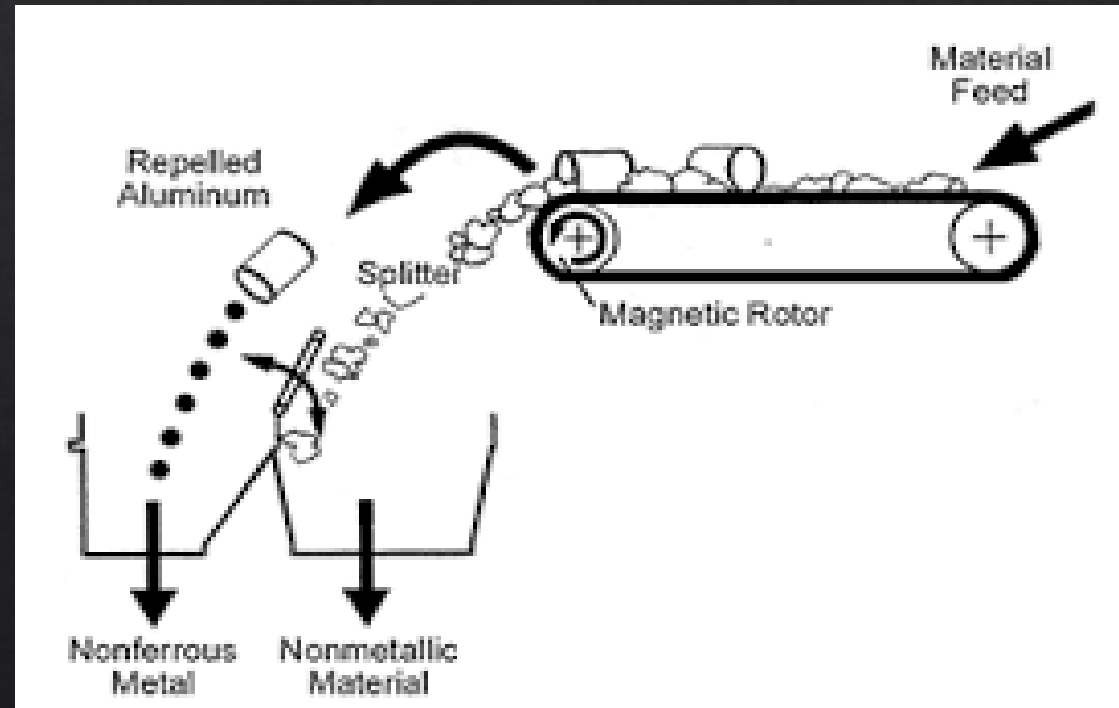




# Magnets Remove Ferrous (Tin Cans)



# Eddy Currents Remove Non-Ferrous (Aluminum)





# Air Separation for Shredded and Fines





# Air Separation for Shredded and Fines (Cyclone)





# Recyclables Sorted (Mixed Paper)





# Recyclables Sorted (OCC & Mix)





# Recyclables Sorted (Aluminum)





# Recyclables Sorted (PET)





# Recyclables Sorted (Tin)





# Recyclables Sorted (HDPE Natural and Colored)





# Recyclables Sorted (Mixed & Bulky Plastics)





And Yes, There is Garbage





Thank You For Your Time!

Questions?

MRF/CT Subcommittee Meeting #4 – Handout 1.  
Mixed Dry Waste Facility Standards (existing licensed facilities)

CHAPTER 5.01

SOLID WASTE FACILITY REGULATION

SECTION TITLE

5.01.053 Issuance and Contents of Licenses

(i) Licenses shall specify the activities authorized to be performed, the types and amounts of wastes authorized to be accepted at the solid waste facility, and any other limitations or conditions attached by the Chief Operating Officer. In addition to all other requirements of this section, a license approving acceptance of mixed non-putrescible waste for the purpose of conducting material recovery or reloading shall be subject to the performance standards, design requirements, and operating requirements adopted as administrative procedures pursuant to Section 5.01.132, and shall require that the facility operate in a manner that meets the following general performance goals:

(1) **Environment.** Facilities shall be designed and operated to preclude the creation of undue threats to the environment including, but not limited to, stormwater or groundwater contamination, air pollution, and improper acceptance and management of hazardous waste asbestos and other prohibited wastes.

(2) **Health and Safety.** Facilities shall be designed and operated to preclude the creation of conditions that may degrade public health and safety including, but not limited to, fires, vectors, pathogens and airborne debris.

(3) **Nuisances.** Facilities shall be designed and operated to preclude the creation of nuisance conditions including, but not limited to, litter, dust, odors, and noise.

(4) **Material Recovery.** Facilities conducting material recovery on non-putrescible waste shall be designed and operated to assure materials are recovered in a timely manner, to meet standards in Section 5.01.125, and to protect the quality of non-putrescible waste that has not yet undergone material recovery.

(5) **Reloading.** Facilities conducting reloading of non-putrescible waste shall be designed and operated to assure that the reloading and transfer of non-putrescible waste to Metro authorized processing facility is conducted rapidly and efficiently while protecting the quality of non-putrescible waste that has not yet undergone material recovery.

(6) **Record-keeping.** Facilities shall keep and maintain complete and accurate records of the amount of all solid waste and recyclable materials received, recycled, reloaded and disposed.

