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FINAL REPORT

EVALUATION OF SOLID WASTE FEE AND TAX POLICIES

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EXECUTIVE SUMMARY

Project Background

Metro assesses both a Regional Service Fee (RSF) and Excise Tax (ET) on every ton of disposed solid waste originating within the region, regardless of where the landfill is located. There are three rate tiers for the RSF and ET: full rate (\$30.24), reduced rate (\$3.50), and exemption (\$0). Metro uses multiple factors to determine whether the disposed tons are subject to the full set of fees and taxes including origin, type, final destination, and use of waste, among others¹. Metro does not assess RSF and ET on materials that are recycled or reused or which are otherwise specifically exempted.

The policies around reduced and exempted fees were originally adopted to encourage the clean-up of contaminated soils from underground storage tanks. Over time, the policies, materials, businesses and markets in the region have changed. Today, nearly one-third of all disposed materials receive either exempted or reduced rates. Metro contracted with Resource Recycling Systems (RRS) to assist in a review of the RSF and ET assessment policies, procedures, and material disposal trends. The following is a summary of the findings and recommendations.

Current Situation

Over a decade has passed since the publication of the Metro commissioned 2006 URS report “Evaluation of Disposal Trends for Environmental Clean-up and Beneficial Use Materials”. In that time, Oregon DEQ has adopted policies to address the issue of landfills accepting more ADC or beneficial use materials than they can use. However, Metro has taken little action to address the RSF and ET issues raised in the 2006 report. Since 2006 the types of materials qualifying for exemptions has broadened and the total annual amount of exempted and reduced material has increased (based on annual average tonnages). The same issues discussed in 2006 regarding data tracking, private disposal companies or generators maximizing exempted materials to reduce costs, and mixed economic incentives for highest and best use remain today. The interviews and evaluation of the Metro code conducted for this report found that the code language is complex and in some places confusing, that there are materials that are exempt by practice but not in code, and there are concerns around the equity of the exemptions. The research indicates that exemptions and discounts as currently administered do help to support diversion and provide an environmental benefit in the region, but there are areas of the code and its administration that could be improved or revised. Figure 1 below displays the tons of full, reduced, and exempted materials from 2012 to 2015.

¹ The complete list of factors and their descriptions can be read in the Fee and Tax Policy Background section of the full report.

Figure 1: Full, Reduced, Exempted, and Total Disposed Tons

Year	Exempted	Reduced	Full Rate	Total Tons
2012	135,400 (10%)	99,400 (8%)	1,065,200 (82%)	1,300,000
2013	134,200 (9%)	308,800 (21%)	1,047,000 (70%)	1,490,000
2014	195,900 (13%)	234,600 (15%)	1,088,500 (72%)	1,519,000
2015	176,900 (10%)	422,700 (24%)	1,139,400 (66%)	1,739,000
Average	160,600 (11%)	266,400 (18%)	1,085,000 (72%)	1,512,000

Stakeholder Input

As part of the research, RRS staff conducted a series of interviews with landfill operators, exempted parties, and eligible parties in the region. The interviews were followed by in-person stakeholder meetings hosted by Metro with RRS in attendance as the technical presenter². A summary of the stakeholder input is included in Figure 2. The information in Figure 2 reflects the opinions of the stakeholders and are not the conclusions of the consultant team.

Figure 2: Stakeholder Input Summary

Landfills	Exempted Parties	Eligible Parties
<ul style="list-style-type: none"> Exemptions provide a positive impact Removal would hurt landfills in the region Metro Code and policy are generally clear, understandable, and equitable Metro should examine the acceptance of shaker fines as ADC Exemptions do provide a public and environmental benefit to the region Most landfills support no changes to the Metro Code 	<ul style="list-style-type: none"> Exemptions help businesses in the region Eliminating exemptions would hurt business Policy is generally clear, understandable, and equitable Exemptions provide a positive environmental and public benefit ADC exemptions are necessary to meet Metro’s EDWRP requirement Metro would face strong opposition to changes to the policy Perception among some generators that Metro is considering changes to increase revenue Most support no changes to the Metro Code 	<ul style="list-style-type: none"> Several dry waste processors could get exemptions but choose not to do so Believe there are issues around clarity and equity The exemptions do not help to improve the environment in the region Metro Code and RSF and ET should be revised

Findings

² The feedback and comments received by the stakeholders are included in full in the appendix of the report. Stakeholders were provided with the opportunity to comment on the draft versions of this report and RRS made revisions based on the input.



RRS concludes that current policies surrounding the RSF and ET exemptions and reduced rates have evolved over time, and while the system is not ‘broken’, there is room for improvement and even alternative options. RRS evaluated the different material types, Metro’s policy justifications, benefits, and current economic signals to determine where changes may be justified. RRS, also interviewed other jurisdictions and state regulators to assess Metro’s policies on a broader regional context. Based on the evaluation, RRS recommends the following:

- **Recyclables and Organics:** No changes recommended to the policies around exemptions for these materials.
- **Tire Processing:** RRS recommends no changes that would increase the RSF or ET on tire processor residuals.
- **Captive Landfill:** Recommend that any potential policy change does not result in charging RSF or ET on the materials going to the captive landfill.
- **Useful Materials:** The research identified challenges around the exemptions for useful materials. Thus, RRS recommends several alternative options around the useful material exemptions. The recommendations have the potential to increase equity, simplify the code language, and increase the environmental benefit of the RSF and ET exemptions.
 - **Auto Shredder Residue (auto fluff):** Auto Shredder Residue is a subset of ‘useful material’. Due to several unique factors around auto fluff, RRS examined the justification for continued exemptions of the material separately. RRS does not recommend significantly changing the exemptions around auto shredder residue.

Top Four Options

RRS evaluated a total of nine potential alternatives to the RSF and ET exemptions and reductions. The options covered a spectrum of possibilities from ‘do nothing’ all the way to removing the exemptions and reductions on all materials. Each of the alternatives were scored on five criteria; public benefit, waste reduction / diversion, simple and transparent, equity, and industry acceptance. Based on the research and evaluation conducted for this report, RRS presents the following top four options for consideration by Metro. All the presented options have aspects with the potential to improve the current system.

Option 1: *Two Tier System (Full and Reduced Rates) with Exemptions for Tire Processing Residuals and Auto Fluff.*

Under this recommendation Metro would allow only two narrowly defined materials: Automobile Shredder Residual and Tire Processing Residual, to be fully exempt from RSF and ET. The exemption would be based



on the material type, not material use at the landfill. This change would help to increase the clarity of the code and reduce issues with verification that the materials are ‘in fact’ being used productively at the landfill. By exempting the specific materials Metro would continue to support infrastructure around diversion and provide a meaningful benefit to the public.

All other ‘useful materials’ would be eligible for *reduced* rates (not exempted from RSF and ET). The reductions would be based on the incoming material type, not material use at the landfill. This change would remove the need for verification that materials are ‘in fact used’ productively at the landfill. The standing list based on incoming material type would eliminate the reliance on an unaffiliated agency’s approval for exemption, and make it clear to generators and landfill operators which materials do and do not qualify for reduced fees. Under this recommendation, RRS suggests that the standing material list for reduced fees includes all materials that currently receive exceptions as useful material and that the list is revisited by Metro on a regular basis.

The final change includes modifying the code to define captive Landfill and Dredge and clarifying the fee status on dredge and captive landfill materials.

Option 2: *Limited Exemptions based on Incoming Material (Standing list).* Option 2 continues three tiers of rates (full, reduced, and exempted) but undertakes changes to the code to simplify the language and reduce issues related to approval of materials by an unaffiliated agency (Oregon DEQ ADC approval). Under the option, Metro would define a standing list of materials that can receive exemptions. The exemptions would no longer be based on material use but instead be based on material type. The initial standing list materials would include only three materials: Tire processing residual, auto shredder fluff, and dredge. Both auto fluff and tire processing residuals have historically been exempt in the region, and the current code allowing exemptions was written with the materials in mind. RRS believes there is a justification for continuing these exemptions in the future. Under this scenario, it is anticipated that Metro would face significant opposition to the change from some generators and perhaps by some landfill operators as well.

Option 3: *Commodity Based Exemptions.* The commodity based exemptions are designed to transition Metro to a system of incentives that support highest and best use diversion of commodities. It would also remove the outside parties (Oregon DEQ and counties in Washington) from the determination of what is approved. The policy would rely on the market, not Metro, to dictate what generator’s materials are exempt from RSF and ET. The commodity based exemptions would be a major departure from past Metro policy. The approach would require significant build-up, planning, and monitoring to ensure success. Under this recommendation, Metro would no longer base the exemptions on material use. Instead Metro would provide exemptions if:

- A. The processor (i.e. some MRFs, auto shredders) *pays* the generator for the material they receive / process, or;
- B. The processor can sell the recovered commodity for a value above \$0.00, or;
- C. The disposed materials are tire processing residuals.



Conversely, if the processor charges a gate fee for processing, then the non-saleable residuals *cannot* be exempted from the RSF and ET. As with options 1 and 2, the code would be modified to define Captive Landfill materials and Dredge and clarify the fee status on both.

Option 4: *Status Quo with Improvements.*

The fourth option is to keep the status quo and implement RRS recommended improvements to the code and its administration. The policy justification for the option is that while the current system is not perfect, it has been in place in some form or other for multiple decades and is helping to support diversion and improve the environment in the region. Metro has the option to adopt several of the modifications suggested in the report to improve the administration and clarity of the policy. This option is supported by the majority of landfills and exempted parties in the region.

Recommendations

The recommendations are proposed under the presumption that Metro does have the proper legal authority to manage the RSF and ET system. RRS did not undertake an evaluation of the regulatory authority of Metro. Based upon the research and evaluation of options, RRS recommends that Metro consider adopting Option 1, the two-tiered rate system with exemptions for auto fluff and tire processing residuals. RRS recognizes that each of the proposed options have both benefits to the region as well as drawbacks and that any change will have repercussions throughout the region. It is the opinion of RRS that Option 1 best meets Metro's mission of benefiting the people and environment of the region, while simultaneously creating a code that is transparent, equitable, and easy to understand. Option 1 will minimize negative impacts by allowing many of the currently exempted generators to benefit from reduced fees, it will also create a standing list based on material type, not use, and will help to reduce confusion over what materials are (or are not) used productively in the operation of a landfill moving forward.

By limiting the number of exempted materials to a standing list of three materials (auto fluff, tire residual, dredge) Option 2 significantly simplifies the code and increases the clarity of the code. However, it would have negative impacts on many of the currently exempted generators. RRS believes that Option 1 achieves many of the same goals as Option 2 with a smaller negative impact on the market and a slightly larger environmental benefit to the public. Option 2 puts Metro squarely in the position of picking 'winners' and 'losers' in the marketplace, and some of those choices would be vociferously opposed by currently eligible generators.

Option 3 benefits the region and Metro by implementing an equitable system that relies on the marketplace to determine which generators can benefit from the exemptions (as opposed to Metro staff). It also transitions Metro toward a system of incentives based on highest and best use. However, the

challenges in managing and verifying the exemptions, as well as the potential confusion around how the code is implemented and administered, lead RRS to score Option 3 lower than Option 1 or 2.

Finally, the 4th highest ranked option, Status Quo, offers benefits to Metro in that the current system *does* encourage diversion and benefit the region. The benefits are countered by the fact that it would not ameliorate any of the issues outlined in the 2006 report or in this report. If Metro prefers Option 4 and chooses to maintain the status quo, RRS recommends the following improvements to the current code and policy³:

High Importance

- Add new definitions to the code to increase clarity
- Codify historic exemptions
- Increase transparency of code administration through public engagement

Medium Importance

- Review management and transportation fees charged by landfills on ‘useful’ material to gain a better understating of how they are being applied
- Increase reporting and data tracking of reduced fee materials
- Establish a working group to evaluate the allowance of wall board and gypsum fines in Alternative Daily Cover
- Promote the availability of exemptions and discounts

Low Importance

- Investigate an ISO 14001 Environmental Management System (EMS)
 - Adopt new administrative procedures for promulgating rules as proposed by Metro in 2015.
-

On a final note, RRS suggests that prior to adopting a change in policy that Metro internally and externally identifies the aim of the policy change. The RRS evaluation assumed that the aims of Metro are relatively evenly divided between the main evaluation criteria (Public Benefit, Increase Waste Reduction / Diversion, Simple and Transparent, Equitable). However, if Metro decides that their priority is Waste Diversion, or alternatively Industry Acceptance, Metro should consider adopting a policy that moves the region in that direction.

³ RRS suggests that Metro consider adopting the recommended improvements to the system under any chosen option.



SECTION 1: BACKGROUND

Metro is the regional government that provides a variety of services for the urbanized portions of Clackamas, Multnomah and Washington counties of Oregon. Solid waste planning and the management and disposal of solid waste generated within its jurisdictional boundary are two of Metro’s principal responsibilities. To support its solid waste responsibilities, Metro recovers its direct service costs through a point of service tonnage charge assessed at its two transfer stations. In addition, Metro assesses a regional system fee and excise tax on each ton of waste disposed from the Metro region, regardless of which facility—public or private—disposed the waste.

Under certain circumstances, Metro assesses a reduced regional system fee and excise tax rate. Metro also exempts certain waste from the regional service fee and excise tax that is used productively in a landfill. Over the years, certain solid wastes have been subject to Metro’s reduced fee and tax rate or otherwise exempted based on various factors such as the generator intent, type of contaminant, or whether the waste is ultimately “used” at a disposal site. This has created different rules for similar types of wastes and may prevent Metro from fulfilling its responsibilities to ensure consistent and transparent application of its fee and tax determinations and ensure equity and fairness for participants in the solid waste system.

PROJECT GOALS

Metro contracted with Resource Recycling Systems (RRS) to assist in a review of the RSF and ET assessment policies, procedures, and material disposal trends. Metro’s population, businesses, and waste streams have grown and changed over time and thus, Metro’s solid waste system has evolved to meet the needs of the residents and businesses in the Region. These changes have resulted in uncertainties around the basis of the RSF and ET policies. The policies were originally adopted to encourage the clean-up of contaminated soils from underground storage tanks, however, today nearly one-third of all disposed materials receive either exempted or reduced rates and the categories of useful materials has grown significantly. Metro seeks to ensure that the policies and administration of the RSF and ET are clear, equitable, reflect best management practices in sustainable materials management. Additionally, Metro seeks to understand whether or not the current policies around the RSF and ET help to enhance the quality of life and environment in the region.

The major goals of the project include:

- Update the 2006 URS report “Evaluation of Disposal Trends for Environmental Clean-up and Beneficial Use Materials”;

- Compare Metro fees and policies to those in other jurisdictions;
- Assess the public benefit / policy rationale of the exemption system;
- Identify potential improvements that can be made to the fee and tax assessment policies; and
- Address how the system (and potential alternatives) helps the region provide benefits to the public, increases waste reduction and recycling, and provides simple, transparent, and equitable rules.

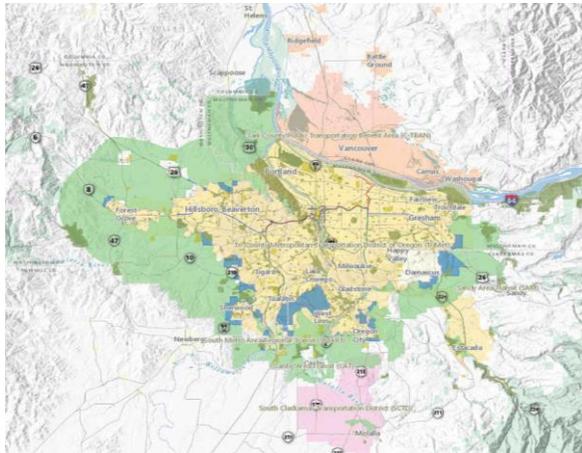
In order to achieve the project goals, RRS staff completed the following major tasks:



The remainder of this draft report shares the findings of the research and the report appendix contains the full interview details⁴. RSS will provide an additional chapter with the consultant recommendations (Section 5) as well as an Executive Summary after the stakeholder meetings scheduled to be held in the Spring of 2017. RRS is not a legal expert. The report, review, and recommendations are written with the presumption that Metro does have the proper legal authority to manage the RSF and ET system. RRS did not undertake an evaluation of the regulatory authority of Metro.

⁴ The names, titles, and companies from the landfill, exempted party, and eligible party interviews are only included in aggregate. In order to gather frank and relevant information, all interview results are reported anonymously and are not linked to individual companies or individuals.

BACKGROUND



Metro is a directly elected regional government and metropolitan planning organization responsible for managing the Portland region's solid waste system, growth of the cities in the region, regional parks, preserves and other natural areas, Oregon Zoo, Oregon Convention Center, Centers for the Arts, and the Portland Expo Center.

Within its regional portfolio of solid waste management assets Metro owns and operates two transfer stations. Metro also authorizes and regulates privately-owned solid waste facilities. Metro is responsible for ensuring that Clackamas, Multnomah and Washington counties meet state-mandated waste reduction goals and that the region implements the waste reduction programs set forth in the Regional Solid Waste Management Plan (RSWMP). Metro is responsible for meeting the regional Metro Wasteshed goal.

Metro assesses both a RSF and ET on every ton of disposed solid waste originating within the region, regardless of where the landfill is located. Together, the RSF and ET currently amount to \$30.24 per ton.⁵ In addition to the RSF and ET, the tip fee at Metro's transfer stations also includes a \$1.00 host fee⁶ and a \$1.82 Oregon Department of Environmental Quality (Oregon DEQ) fee. Metro has three rate tiers for the RSF and ET, the tiers are: full rate (\$30.24), reduced rate (\$3.50), and full exemption (\$0). Both the full rate and the reduced rate are assessed at time of disposal, whereas the exemption applies to materials that are not disposed and some materials sent to a landfill. Figure 1.1 provides a brief overview of the RSF and ET.

Figure 1.1: RSF and ET Amounts⁷ and Uses

Regional Service Fee \$18.48/ton	Excise Tax \$11.76 /ton
Collected at the time of disposal of solid waste generated within the region	Levied for the use of waste facilities, equipment, systems, functions, services or improvements

⁵ This is Metro's combined fee and tax rate for July 1, 2016, through June 30, 2017. This combined rate, which is adjusted annually, consists of a regional system fee of \$18.48 and excise tax of \$11.76.

⁶ The host fee is also known as the 'community enhancement fee.' A community enhancement fee is assessed on every ton of putrescible waste received at solid waste facilities within the Metro region and the funds are used to rehabilitate and improve the area around the facility in which the waste is received. The Community Enhancement Fee is charged at transfer stations and food waste reloads, not the landfill. The landfills' local jurisdiction may have its own host fee/tax.

⁷ Effective July 1, 2016. The rates change annually.

Collected and remitted to Metro by disposal facility operators (designated facilities located outside of region) or haulers and generators of waste (non-system licensees)

Revenue is used for:

- Regional waste reduction programs, planning, education
- Hazardous waste collection and disposal
- Staffing and overhead associated with regional waste programs
- Other waste-related programs that benefit the region

Collected and remitted to Metro by disposal facility operators (designated facilities located outside of region) or haulers and generators of waste (non-system licensees)

Revenue is used for:

- General fund to pay for general governmental activities

REVIEW OF 2006 URS REPORT

As part of the project, RRS staff completed a review of the 2006 URS report titled ‘Evaluation of Disposal Trends for Environmental Clean-up and Beneficial Use Materials’. Figure 1.2 provides an overview of the 2006 report problem statement and recommendations as well as the 2016/17 status. Additional information and updates to the 2006 report can be found in Appendix 4.

Figure 1.2: 2006 URS Report Update

Problem Statement	
2006 URS Report	2016 Status
Disproportionate growth in reduced fee materials compared to landfilled tons	The amount of RSF and ET materials has not been disproportionately increasing over the past five years. The proportion of RSF and ET materials has remained around 30% of total disposed materials. The 2006 report does not share proportion of reduced and exempted or the total disposed tons making comparisons to the 2006 report challenging. However, the total number of exempted and reduced tons is higher than in the early 2000s. From 2000 to 2006 there was an average of 299,308 tons per year that were reduced or exempted, from 2011 to 2015 the average annual amount was 427,000 (42% increase).
Private disposal companies working within existing regulations to reduce government fees to the maximum extent possible	This continues to be an area of interest in 2016. Additional material categories are being considered useful and are exempted from RSF and ET compared to 2006, potentially exacerbating the previously identified concerns.
Exemptions may encourage unwanted disposal as companies work to lower their costs to the maximum extent possible	This continues to be a potential area of interest in 2016. The RSF and ET do provide an incentive for diversion, but the incentive may not be driving highest and best use practices. Metro’s EDWRP requirement combined with market pressures may also play a role in this concern.

Landfill receiving more reduced fee materials than volumes of full fee materials	No longer a concern. OR DEQ regulations adopted in 2010 now limit the amount of ADC materials a landfill can claim.
While Metro prohibits landfills from charging a disposal fee on RSF and ET materials, Metro does allow landfills to collect a volume management or transportation fee on RSF and ET materials. This provides a financial incentive to landfills to maximize the volumes of these materials.	No changes since 2006 report, landfills continue to charge disposal fees for materials that are exempted from RSF and ET and may be using the policy framework as a way to compete for volumes in the market place.
Recommendations	
2006 URS Report Recommendation	2016 Status
1. Keep current process and policies (status quo)	Added a pre-approval process for determination of useful material status, streamlined and improved reporting process
2. Clarify code and reporting to improve data tracking	No changes implemented
3. Establish new comprehensive category for reduced fee and eliminate exempted fees	No changes implemented
4. Eliminate RSF and ET categories, charge full rate to all materials disposed in landfills	No changes implemented

FEE AND TAX POLICY BACKGROUND

Metro RSF and ET are assessed at the time materials are disposed. Metro does not assess RSF and ET on materials that are recycled or reused or which are otherwise specifically exempted. Metro uses multiple factors to determine whether the disposed tons are subject to the full set of fees and taxes including:

Origin of Waste: Full or partial loads of disposed waste originating within the region are subject to the RSF and ET regardless of final destination. Waste that is generated entirely outside of the Metro region is not subject to Metro’s fee and tax unless it is processed within the region or mixed with Metro area waste.

Type of Waste: RSF and ET are not charged on materials that are reused, recycled, composted, or used productively at a landfill.⁸ Additionally, tire processing waste produced by a Metro-regulated tire processor is exempt from Metro’s fee and tax.

⁸ In order for waste to qualify for a useful material exemption at a disposal site, it must meet the conditions provided in Metro Code Section 5.02.120(c)(3).

Waste Processor Activities: Facilities located within the region that process wastes, including material recovery facilities (MRFs)⁹, are considered to be generators regardless of whether the waste originates outside the region. These facilities are responsible for paying Metro’s RSF and ET on disposed residual waste from their operation unless it qualifies for an exemption. All unrecovered residual waste, even materials received from outside of the Metro region, are subject to the full fee and tax rate upon disposal.

Transfer Stations: Facilities that reload and transfer putrescible waste, but do not process beyond basic compaction, are not considered to be generators of the waste that originates outside the region. Putrescible waste that originates outside the Metro boundary, but is transferred within the region is subject to Metro tax, but not the fee.

Final destination and use: Metro exempts RSF and ET on certain ‘useful materials’ that are approved for use by Oregon DEQ and are used productively in the operation of a landfill. Metro Code states that in order to qualify as a “useful material” the material must be accepted at the landfill at “no charge.” In practice, Metro has interpreted this condition to mean that the landfill may not assess a disposal charge for the material, but the landfill may still assess other charges for receipt of the material such as a transportation or management fee.

Together, the RSF and ET have been structured over time to encourage waste diversion, minimization, and environmental protection. Historically, Metro has incorporated both a beneficial use reduction and an exemption on the RSF and ET to help achieve their regional goals. A brief summary of the three tiers of RSF and ET offered by Metro including Full, Reduced, and Exempted is included below:

- 1) Full Rate:** The full RSF and ET assessed on every ton of disposed solid waste originating within the region.
- 2) Reduced Rate:** Metro provides reductions on ‘cleanup material’ that is derived from an environmental cleanup event. The discounted regional system fee is \$2.50 and the discounted excise tax is \$1.00 per ton. Unlike the exempted materials, the reduced fee is based on the incoming material type and is assessed regardless of the material use on-site. The material does not qualify for an exemption even if it is used beneficially by a landfill.
- 3) Exempted Fees:** Metro allows a generator, hauler, or landfill to claim an exemption to the RSF and ET on the waste materials described below.
 - a. Recycled materials (material that is not sent to disposal) – all recyclable material that is transferred to recovery facilities or markets including organics

⁹ Tire processors are exempt from Metro’s fee and tax. Facilities that dewater soils within the region are typically subject to full or reduced rates. Facilities that dewater outside the region are typically exempt. Generally, dredge spoils are dewatered outside the region and are exempt from fee and tax.

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- b. Useful material - Material that still has or retains useful properties including materials that can be reused, recyclables, organics that can be composted, materials used for making fuel, material used for construction or land reclamation, and material used productively in the operation of a landfill. In order for material to qualify for a useful material exemption, the landfill may not charge a disposal fee.
 - c. Tire processing waste – Tire processing residuals from regulated tire processors that sort, classifies, or processes used tires into fuel or other products.
 - d. Captive Landfill – Waste is not subject to fee and tax because the waste does not enter the solid waste system. Not included in Metro Code but current practice.
 - e. Dredge material –Dredged material is not specifically addressed in Metro Code. This material may be classified as ‘Inert’, ‘Cleanup Material’, or ‘Useful material’ and *may* qualify for reduced RSF and ET depending on its composition and form. Metro’s practice is to allow a fee and tax exemption for dredge materials that are dewatered or otherwise processed outside of the region prior to disposal. Otherwise, dredge material processed inside the region is subject to the full fee and tax rate upon disposal.

REVIEW OF METRO CODE

Although there have been no significant changes in the Metro Code relating to exemptions and reductions since URS published its 2006 report, a brief summary of the relevant Metro Code sections is included below¹⁰:

Authority: Oregon Revised Statutes Chapter 268 and Metro’s home rule Charter authorize Metro to, among other things, manage solid wastes. This includes authority to impose, levy, and collect taxes and user charges in the region.

Definitions: Metro Code Chapter 5.00 defines relevant materials. Definitions relevant to this study are:

- **Cleanup Material:** Solid waste resulting from cleanup of release of hazardous substances, includes petroleum contaminated soils (PCS).¹¹
- **Inert:** Materials containing only constituents that are biologically and chemically inactive.

¹⁰ There have been no significant changes to the Metro Code since the publication of the 2006 URS report, “Evaluation of Disposal Trends for Environmental Clean-up and Beneficial Use Materials”. Readers interested in a longer review of Metro Code should refer to Section 3.1 of the 2006 report.

¹¹ The definition was updated in February 2017 by Metro.

- **Useful Material:** Material that still has or retains useful properties including materials that can be reused, recyclables, organics that can be composted, materials used for making fuel, and “material intended to be used, and which is in fact used, for construction or land reclamation such as Inert material for fill; and material intended to be used, and which is in fact used, productively in the operation of landfills such as roadbeds or alternative daily cover.” Cleanup material is not useful material.

Metro Code does not have specific definitions for Alternative Daily Cover, Automobile Shredder Fluff, or Beneficial Use Materials¹².

Regional System Fee: Metro Code Chapter 5.02 establishes solid waste disposal rates, charges and fees in the region. The Metro Code defines the Regional System Fee (which pays the cost of services related to managing Metro’s recycling, processing, and disposal system) and the rules for setting the fee. The fee is assessed at the time of disposal on waste generated, originating, or collected inside Metro boundaries.

Reductions and exemptions: Chapter 5.02 includes exemptions to the RSF and establishes reduced RSF for Cleanup Material delivered to any Solid Waste System Facility authorized to accept such material. The Metro Council sets the reduced fee rate separately through ordinance.

Metro Code Section 5.02.120 establishes fee exemptions for the following:

- Solid waste accepted at licensed, franchised, or exempt facilities.
- Cleanup Material that are accepted by facilities that treat the materials to Oregon DEQ standards.
- ‘Useful Material’ that is “(A) is intended to be used, and is in fact used, productively in the operation of the Disposal Site such as for roadbeds or alternative daily cover; and (B) is accepted at the Disposal Site at no charge”.
- Processing residual produced by a tire processor.
- Captive Landfill – This is not described in Metro Code, but it is Metro’s practice to exempt this material.
- Dredge material – This is not described in Metro Code, but it is Metro’s practice is to exempt this material.

Excise Tax: Metro Code Chapter 7.01 describes the excise tax on solid waste disposed at a solid waste system facility. The Metro Code sets a reduced excise tax rate of \$1.00 per ton on each ton of “Cleanup Material.” Section 7.01.050 exempts the following:

- Users of facilities that are licensed, franchised, or exempt from Metro regulations.
- Facilities that treat Cleanup Material to Oregon DEQ standards.
- Processing residuals from facilities that process tires.

¹² OR DEQ does provide a definition of Beneficial Use Materials (OAR 340-093-0030(13)).

- Useful materials if the useful material is “(A) is intended to be used, and is in fact used, productively in the operation of such site for purposes including roadbeds and alternative daily cover; and (B) is accepted at such site at no charge.”
- Captive Landfill – This is not described in Metro Code, but it is Metro’s practice to exempt this material.
- Dredge material – This is not described in Metro Code, but it is Metro’s practice is to exempt this material.

Enhanced Dry Waste Recovery Program (EDWRP): In 2007 Metro amended Metro Code (Chapters 5.01 and 5.05) to ensure that all of the region’s non-putrescible waste undergoes a uniform material recovery standard prior to disposal. Metro also required that its own facilities meet the new recovery standard, which went into effect in 2009. The new program prohibited the direct disposal of unprocessed dry waste in a landfill and required the sorting of dry waste to recover recyclable materials. This program has directly influenced the dry waste recovery market and infrastructure, and it has contributed to an increase in the types and amounts of materials for which entities seek exemptions to the RSF and ET.

Ordinance Review: RRS Staff reviewed two significant ordinances and their associated staff reports to understand the historical justification for some of the current policy. The reviewed ordinances include:

96-634: The 1996 ordinance covers a franchise agreement between Metro and Waste Recovery Incorporated (WRI). The ordinance is significant because it includes a staff recommendation to amend Metro Code Section 7.01.050 and exempt tire processing residuals from taxes at disposal. Staff justified the exemption because:

- a) the franchise agreement was voluntary and not required at that time;
- b) if WRI had to pay the tax it would be unable to operate economically in the region, resulting in a loss for local tire processing capacity; and
- c) Metro had not previously imposed excise taxes on the residuals from WRI so there would be no financial impact to Metro.

The staff report identified tires as unique material because there is a landfill ban on them, they are not handled in mixed municipal solid waste loads, state of the art processing generates significant amounts of residuals, and the tire marketplace was very price sensitive. Staff also believed that the exemption would help recyclers compete with disposal operations and provide an economic incentive to ‘encourage recycling, reduce disposal in landfills, and help maintain and enhance local recycling capacity.’ These same considerations would also apply to any private waste tire processor operating in Metro.

98-762: The ordinance significantly updated and revised Chapters 5.01 and 5.02 of the Metro Code. The Metro Code was updated to reflect the management goals of the newly adopted RSWMP, and to implement a new rate structure. The revisions added definitions (including inert and useful material) and updated the user fee section of Metro Code Section 5.01.150. Metro did



not expect the changes to have a significant impact on the RSF but did expect them to impact the ET. At the time, the Metro staff report for the ordinance stated that the ET exemptions were ‘enacted to encourage the development of MRFs,’ and that ‘it served that purpose well and should not be extended to facilities that engage in other activities that do not contribute to recycling and recovery goals’.

The Appendix contains a detailed timeline of changes to Metro Code, including more detail regarding the two ordinances described above (timeline provided by Metro staff).

HISTORICAL PERSPECTIVE

Metro policies around the RSF and ET collected on the disposal of solid waste have changed significantly over the past several decades. The exempted and reduced RSF and ET has evolved from a tool aimed at encouraging underground storage tank (UST) cleanups to an incentive that supports additional waste diversion and improved environmental health in the region. The history of each material currently exempted is different and the justification for exemption varies by material type and use. For example, Automobile shredder residue used as ADC was one of the first materials exempt from fees and taxes in the Metro system. Auto shredder residue has been exempt from fees and taxes since 1994 when Columbia Ridge landfill began using the material as ADC. As a result of the beneficial use of the auto shredder residue, Schnitzer, the generator of the material, worked closely with the landfill and Metro counsel to confirm that Schnitzer was not required to pay disposal charges on the material. Over the next several decades the user fee exemption, including auto shredder residue, was written into Metro code. Throughout Metro’s history industry has worked within Metro’s and Oregon DEQ’s regulatory structure to find opportunities to reduce their operational costs and increase diversion by capitalizing on the exemptions and reduced fees. The figure on the following page briefly reviews the history of the policies around exemptions and reduced fees.

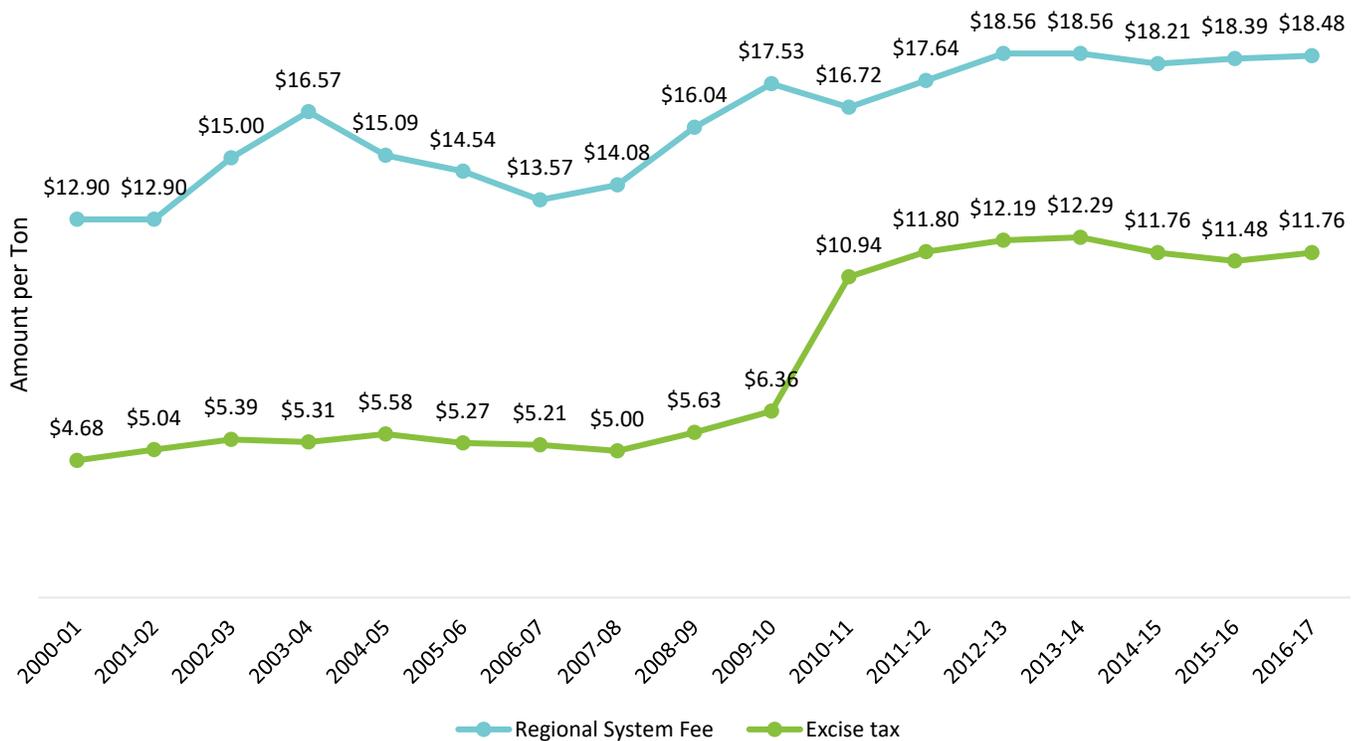
REGULATORY ACTION

INDUSTRY ACTION



Figure 1.3 displays the rate history of the RSF and the ET since fiscal year 2000-2001.

Figure 1.3: RSF and ET Rates – Fiscal year 2000-2001 to 2016-2017



METRO CHALLENGES

As a result of many factors including the changing waste stream, generators, markets, technology, and processing infrastructure, Metro currently faces several challenges in administering the RSF and ET exemptions and reduced fees. The major challenges include:

Definition, ‘Clarity’ of Key Terms: The definition for Useful Materials is broad and open-ended (Metro Code includes ‘such as’) resulting in multiples opportunities for interpretation and potential confusion. Metro Code does not define Beneficial Use Materials, Alternative Daily Cover, Auto Shredder Residual, Shaker and other types of Fines, or other terms that may be helpful to landfills and generators.

Evolving Interpretation of Policy: The original aim of the exemptions was to help encourage the cleanup of contaminated soils and later to support tire processing in the Region. Currently, the exemptions create an economic signal to promote recovery and recycling. Over time, the industry



actions, and Metro reactions, have resulted in additional and broader types of materials being exempted. Metro seeks to determine whether the exemptions are still helping encourage waste diversion in the region, or if they are instead bolstering certain business revenues in a way that is neither desirable nor equitable.

Lack of oversight: Metro does not have regulatory authority over facilities located outside of the Metro region. This lack of direct oversight makes it challenging for Metro to verify whether the useful materials from Metro generators are ‘in fact used’ in a reasonable and beneficial manner or just disposed and claimed as beneficial.

Overlap with State Regulators in two States: Metro has facility agreements with landfills in both Washington and Oregon. Metro’s approval of an exemption for ADC as a useful material is based on approval from a secondary agency (i.e., the regulatory agency that oversees landfill operations). This can cause inconsistency around what materials are and are not exempted among the generators and landfills and can make it difficult for Metro to manage administratively. There are also different definitions at the state level in Oregon and Washington, potentially resulting in conflicting or at a minimum, confusion by generators and landfill operators over terms such as beneficial use, useful materials, and ADC.

Long Term Policy Outcomes: The exemptions and reduced RSF and ET, although changing over time, have been in place in some form for over three decades. Accordingly, any change in fee and tax policy has the potential to impact an established marketplace that has structured its activities based on current policy.

Mixed Incentives: The RSF and ET do provide an incentive for diversion, but the incentive may not be driving highest and best use practices among all generators. The fee exemptions do not directly incentivize higher rates of recovery for all generator types.

In late 2015, Metro proposed a number of potential Metro Code changes as part of an effort to consistently apply the reductions and exemptions, increase transparency and clarity, and limit some of the challenges listed above. In brief, the changes would have removed the exemptions to the RSF and ET that are based on a material’s use at the landfill and instead, base the exemptions on the specific type of material. The proposal would have removed ADC from an exempted material category. The only materials that would have been exempted were auto fluff, tire processing residual, and dredge materials, regardless of how the materials were used at the landfill. The reduced fee and tax rate would have been broadened to include soil from excavation sites, street sweepings, dredge, and filter media from catch basins, ponds, and other similar sources. These proposed changes, specifically those around exemptions, were met with regional stakeholder concern regarding equity and fairness of the changes, questions about the legal authority of Metro to make the changes, and concern about the overall length and timing of the process. The proposed

language around the reduced fee and tax rate was reintroduced in a subsequent separate proposal and was adopted by Metro Council. The revised reduced rate approach became effective in February 2017.

ASSESSMENT OF CURRENT METRO POLICY

RRS staff evaluated the current RSF and ET exemptions and reductions as they relate to Metro’s goals. The evaluation assessed the potential for the current system to meet the following aims:

- Provide benefits to the public - Does the policy provide a benefit to the residents and businesses located in Metro?
- Increases waste reduction and recycling - Does the policy lead to increased recycling and waste reduction?
- Simple and transparent - Is the Metro Code and administration of the Metro Code and policy easy to understand and transparent for actors in the region?
- Provide equitable rules - Does the policy create a level playing field for all actors in the Region

RSS graded each Metro goal on an A to F scale where A was “Excellent” and F was “Fail”. The letter grade and the positive and challenging attributes of the current policy are included in the figure below.

Figure 1.4: Evaluation of Current Metro Policy

Category	Score	Positives	Challenges
Public Benefit	C	<ul style="list-style-type: none"> • Encourages proper disposal and handling of contaminated soils • Decreases illegal dumping (tires, contaminated soils) • Decreases tire stockpiles and related health issues • Reduced RSF and ET can help keep brownfield development costs down • Helps to keep some industries in the Metro region – providing direct, indirect, and induced economic impacts to the region and its residents 	<ul style="list-style-type: none"> • Difficult to measure how much of the activity is driven by the fee and tax policy versus which percentage of activities are free-riders • Metro is not collecting fees and taxes on thousands of tons of waste that is placed in a landfill each year. This may result in inequities in payments among generators in the region • Policy application has evolved away from the clean-up of UST and the original policy intent • Some material exemptions may benefit certain business owners / operators more than the general public and region

Category	Score	Positives	Challenges
Increase Waste Reduction / Diversion	C	<ul style="list-style-type: none"> Helps to reduce use of virgin materials used at the landfill (ADC, drainage, road base) Reduced RSF and ET support some recycling industries and processors in the region Helps to support Metros dry waste recovery infrastructure 	<ul style="list-style-type: none"> Much of the material is still ending up in the landfill, it is not being recycled¹³ May be providing the wrong incentive for processors – policy does not encourage increased recovery rates or improved efficiency in recovery The ADC is often mixed with soil or other cover material to meet Oregon DEQ performance requirements
Simple and Transparent	C-	<ul style="list-style-type: none"> Has been in place for many years and industry generally understands the Metro Code 	<ul style="list-style-type: none"> Challenges around definitions in the Metro Code and policy Issues with multiple levels of regulators (two states and local) Metro does not have oversight to monitor useful material utilization at all facilities Long history that has led to some exemptions being standard practice that are not clearly defined in code (i.e. dredge and captive landfills) Same material generated by the same entity may not be exempted at two landfills – this can be confusing Takes one year to get ADC approval for Oregon DEQ
Equitable	B-	<ul style="list-style-type: none"> Any landfill can apply for exemption, it is open market and fair competition Any eligible entity can get the exemption or reduction if it goes through the process of approval Allows certain generators and / or processors located in the Metro region to compete on a level playing field with other businesses not located in the Metro region 	<ul style="list-style-type: none"> Metro policy may inadvertently create winners and losers in the marketplace (i.e., tires, auto scrap processors) Not all entities in the region are eligible for the reductions or exemptions Perception that some generators are using Metro Code as a loophole to reduce their operating costs and gain an advantage in the market

¹³ The materials are being used, thus qualify as ‘useful materials. The are not being recycled based on Metro’s definition of recycling which is ‘any process by which waste materials are transformed into new products in such a manner that the original products may lose their identity.’

The tables below evaluate the current exemptions and reduced fee materials by material use. The figures include the underlying Metro policy rationale and public benefit of the exemptions, as well as the potential challenges around the exemption or reduction.

USE: Alternative Daily Cover

Tons	Approximately 145,000 tons per year
Material Types	Auto fluff, sandblast grit, filter press cake, refractory brick, shaker screen waste
Classification	Useful material, not charged a tip fee and must be used productively in operation of landfill
Fee and Tax Status	Exempt, no RSF and ET
Policy Rationale	<ul style="list-style-type: none"> • Material is useful and replaces virgin material for ADC • Provides a beneficial use for materials that may otherwise have no other option than landfill disposal • Some materials can operate as well or better than soil alone • Helps promote industry that is processing and recovering materials in Metro Region • If individual processors generating large amounts of exempted materials (ie. auto fluff) had to pay the RSF and ET they would be paying for a large portion of Metro's system without receiving proportionate benefits • Supports recycling infrastructure by keeping processing costs lower for recyclers in the Metro Region • Supports businesses in the Metro Region by keeping disposal and overall operating costs lower
Policy Challenges	<ul style="list-style-type: none"> • Challenging for Metro to verify if material is 'in fact used' as ADC because Metro does not have regulatory authority to monitor¹⁴ out of region facilities • Specifications for some ADC materials make it challenging for Metro to evaluate compliance through periodic inspections • The material is ultimately ending up in a landfill and not being 'recycled' • Oregon DEQ (or the corresponding agency in another state), not Metro, determines ADC approval • Oregon DEQ's evaluation process considerations are very different from that of Metro (i.e., functional evaluation vs. public benefit). • Assessment of Metro's fee and tax does not limit the use of waste within a landfill (the landfill may use the waste for cover regardless if the material is exempt from Metro's fee and tax). • Often material is required to be mixed with soil or other cover material to meet Oregon DEQ performance requirements, not clear if it really is beneficial material by itself or it is just a way to reduce disposal costs for waste

¹⁴ Metro does not have regulatory authority at these disposal sites, but does typically enter into contracts with the sites that allow Metro to observe site conditions.

- May not be beneficial unless it substitutes for other trucked-in cover material and the costs and environmental impact are positive.
- Does not create a level playing field for all stakeholders in the Region and opens potential for some to get a competitive advantage due to the exemptions, especially landfill owners
- Concern that the exemptions may just be a loophole that some stakeholders are able to exploit
- Metro Code states waste must be accepted at “no charge,” but practice is that the requirement applies to disposal charges only. The landfill may assess other charges.
- In most cases, useful material consists of waste that must otherwise be disposed. No useful purpose outside the footprint of the landfill.

USE: Landfill Drainage

Tons	Approximately 4,000 tons per year
Types	Crushed glass
Classification	Useful material, not charged a tip fee and must be used productively in operation of landfill
Fee and Tax Status	Exempt, no RSF and ET
Policy Rationale	<ul style="list-style-type: none"> • Replaces virgin material at landfill • Helps to reduce costs of processing recyclables • Material is not ending up inside of the lined area of a landfill and is not being ‘landfilled’ • Lowered costs support local recycling infrastructure
Policy Challenges	<ul style="list-style-type: none"> • Challenging for Metro to verify if material is 'in fact used' as landfill drainage or actually substituted for another material • Metro does not have regulatory authority to monitor out of region facilities • There may be other highest and best use options for these materials such as bottle to bottle recycling, fiberglass, or others

Landfill Road Base

Tons	Approximately 6,000 tons per year
Types	Roofing waste
Classification	Useful material, not charged a tip fee and must be used productively in operation of landfill
Fee and Tax Status	Exempt, no RSF and ET
Policy Rationale	<ul style="list-style-type: none"> • Replaces virgin material at landfill • Helps to reduce costs of processing recyclables • Lowered costs for processors helps support local recycling infrastructure

Policy Challenges	<ul style="list-style-type: none"> • Challenging for Metro to verify if material is 'in fact used' as road base and whether it is necessary • Metro does not have regulatory authority to monitor out of region facilities
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Captive landfill

Tons	Unknown
Types	Non-putrescible waste that is going to a private landfill owned by the material generator, material is not going through Metro's system
Classification	Captive landfills are not subject to fee and tax because the waste does not enter the solid waste system
Status	Exempt, no RSF and ET
Policy Rationale	<ul style="list-style-type: none"> • Material never enters the Metro solid waste system • Does not require Metro infrastructure, services, or programs
Policy Challenges	<ul style="list-style-type: none"> • May not be equitable for business competitors that pay full fees and taxes on disposal • Potential incentive for more tons to leave the system through loophole over time • Metro does not have a monthly reporting process and the ability to monitor is limited • There is no clear policy basis for this in Metro Code.

Tire residual

Tons	Approximately 28,000 tons a year
Types	Tire processing residual
Classification	Processing residuals from tire processors, residuals are disposed in landfill
Status	Exempt, no RSF and ET
Policy Rationale	<ul style="list-style-type: none"> • Improves environment in the region by supporting tire processors and reducing tire dumps and disease vectors • State law prohibits whole tires from disposal • Exemption helps to keep tire processing infrastructure viable, providing a resource to residents • Reduces risk of commodity market crash leaving large unprocessed tire piles in Region • Addresses a unique waste stream that is handled separately from MSW, banned from disposal in the landfill, and has extremely price sensitive markets
Policy Challenges	<ul style="list-style-type: none"> • Minimal - May result in an un-level playing field for processors of other materials in Region

Recyclable materials

Tons	Not reviewed for this project
Types	Materials that are reused, recycled, or composted such as metal, cardboard, paper, plastics, yard debris, food scraps, and others
Classification	Recyclable materials that are not disposed in a landfill are exempted from RSF and ET
Status	Exempt, no RSF and ET
Policy Rationale	<ul style="list-style-type: none"> • Encourages increased recycling and diversion in the Metro Region through the use of economic incentives and signals • Promotes diversion and improves the environment of the Metro Region • Helps to reduce costs of recycling and composting in the Metro Region both for processors and generators • Supports higher and best use hierarchy
Policy Challenges	<ul style="list-style-type: none"> • Minimal

Clean-up materials

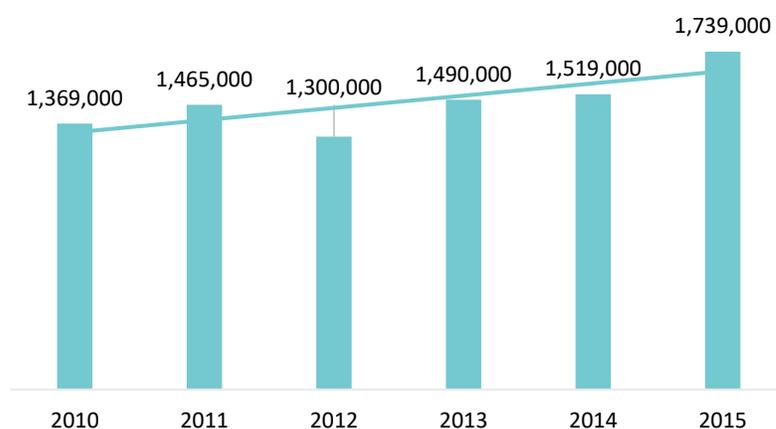
Tons	Approximately 266,000 tons per year
Types	Contaminated soils, environmental cleanup
Classification	Cleanup materials and disposed in a landfill, can be charged a tip fee
Status	Reduced RSF and ET (\$3.50 / ton combined)
Policy Rationale	<ul style="list-style-type: none"> • Ensures that contaminated soils are properly handled and kept out of the environment and instead disposed in a lined landfill • Encourages growth (construction) in Region • Reduces illegal dumping
Policy Challenges	<ul style="list-style-type: none"> • Oregon DEQ regulations around contaminated soils require large quantities of soil to be labeled as contaminated • Tons qualifying for reductions have been increasing over time • Ensuring that materials are from cleanup events and not reoccurring industrial activities requires Metro oversight (revised Metro Code to allow routine materials such as street sweepings and catch basin clean outs).

REVIEW OF METRO DATA

RRS analyzed Metro’s landfill disposal data from 2010 through the third quarter of 2016, which includes tonnage data on fee and tax reduced or exempted material.

Total Disposed Tons: Figure 1.5 shows the total Metro landfill tonnage, including exempted and reduced fee and tax materials, for each year between 2010 and 2015¹⁵. The highest disposal year was 2015 with 1,739,000 tons of material sent to landfill. There has been a slight upward trend towards greater disposal in the six-year period.

Figure 1.5: Total Landfill Tonnage 2010 to 2015¹⁶



Exempted and Reduced RSF and ET Materials: From 2012 to 2015 an annual average of 72% of Metro materials sent to landfills paid full fees and taxes. Annually, an average of 160,600 tons (11% of total) received fee and tax exemptions and an average of 266,400 tons (18% of total) received fee and tax reductions.¹⁷ Figure 1.6 graphically displays the annual averages for full fee and tax, reduced fee and tax, and exempted fee and tax materials in Metro and Figure 1.7 displays the underlying data.

¹⁵ Annual data for 2016 was not available for analysis.

¹⁶ Available 2016 data only covered the first three quarters of the year thus was not included in the annual totals in Figure 1.5. RRS completed an analysis of quarterly data from 2010 through 2016 and the data indicated that 2016 was on track to become one of the highest disposal years of the seven-year period.

¹⁷ Reduced taxes and fees average is based on years 2010 through 2016. 2016 data is only through the third quarter of the year. Full data for 2010 and 2011 was unavailable for analysis.

Figure 1.6: Annual Average of Exempted and Reduced Fee Materials (2012 to 2015)

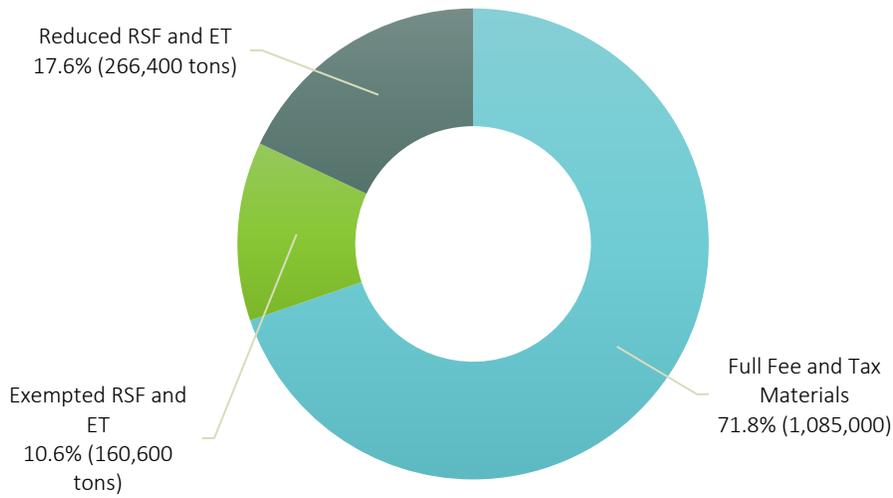


Figure 1.7: Full, Reduced, Exempted, and Total Disposed Tons

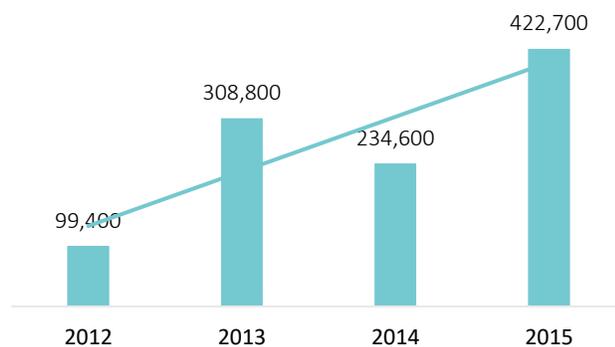
Year	Exempted	Reduced	Full Rate	Total Tons
2012	135,400 (10%)	99,400 (8%)	1,065,200 (82%)	1,300,000
2013	134,200 (9%)	308,800 (21%)	1,047,000 (70%)	1,490,000
2014	195,900 (13%)	234,600 (15%)	1,088,500 (72%)	1,519,000
2015	176,900 (10%)	422,700 (24%)	1,139,400 (66%)	1,739,000
Average	160,600 (11%)	266,400 (18%)	1,085,000 (72%)	1,512,000

Reduced Fee and Tax Materials: The highest portion of the total tons and the greatest total tons of materials qualifying for reduced fee and taxes was observed in 2015 with 422,700 tons receiving reductions (28% of total). This is also higher than the highest annual amount reported in the 2006 URS report (286,594 tons in 2005). The lowest tonnage of reduced fee materials was reporting in 2012 with less than 100,000 tons receiving reductions in RSF and ET (7% of total). This is higher than the lowest reported amount from the 2006 report (38,965 in 2000). Over the past several years, the total number of tons and proportional amount of tons receiving reduced RSF and ET has been trending upward. The annual totals are displayed in Figures 1.8 and 1.9.

Figure 1.8: Percent of Total Disposal that Received Reduced RSF and ET¹⁸

2012	7.3%
2013	21.1%
2014	18.0%
2015	28.4%
Average	18.0%

Figure 1.9: Reduced Tax and Fee Disposal Tonnage

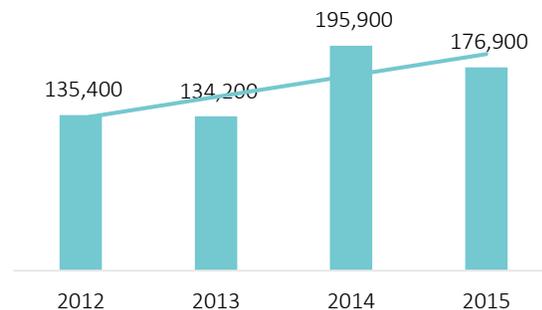


Exempt Fee and Tax Materials: The tons of materials receiving RSF and ET exemptions averaged 181,700 tons (12%) from 2010 to 2015. Tonnages historically hovered near that average except for a slight bump up to more than 263,000 tons in 2011 shown in Figures 1.10 and 1.11.

Figure 1.10: Percent of Total Disposal that Received Exemption from RSF and ET

2012	10.4%
2013	9.0%
2014	12.9%
2015	10.0%
Average	11.4%

Figure 1.11: Exempted Disposal Tonnage



¹⁸ 2016 only includes data through the first three-quarters of the year

Exemptions by Material Category: Over the past 6 years the majority of the exempted tons have been auto shredder residual (58% of the total exempted tons on average) followed by Tire residuals (16%) and dredge (12%). In 2010, auto shredder residual comprised 70% of all useful material exemption tonnages. While total auto shredder residual disposal has declined annually except for the slight increase in 2011 it still remains the largest useful material disposed. The remaining useful exemption material categories (shaker screen waste, roofing waste, sandblast grit, crushed glass, filter press cake, and refractory brick) comprises a combined annual average of 15% of exempted tonnage. Crushed glass has seen decreasing tonnage, and in 2015 no crushed glass was exempted. At the same time, shaker screen waste has mostly seen a steady increase, increasing from 3% of total exemptions in 2010 to 8% in 2015. Figure 1.12 displays the average portion of exempted materials by category and Figure 1.13 displays the total tons by category over time.

Figure 1.12: Average Portion of Exempted Materials by Category 2010 to 2015

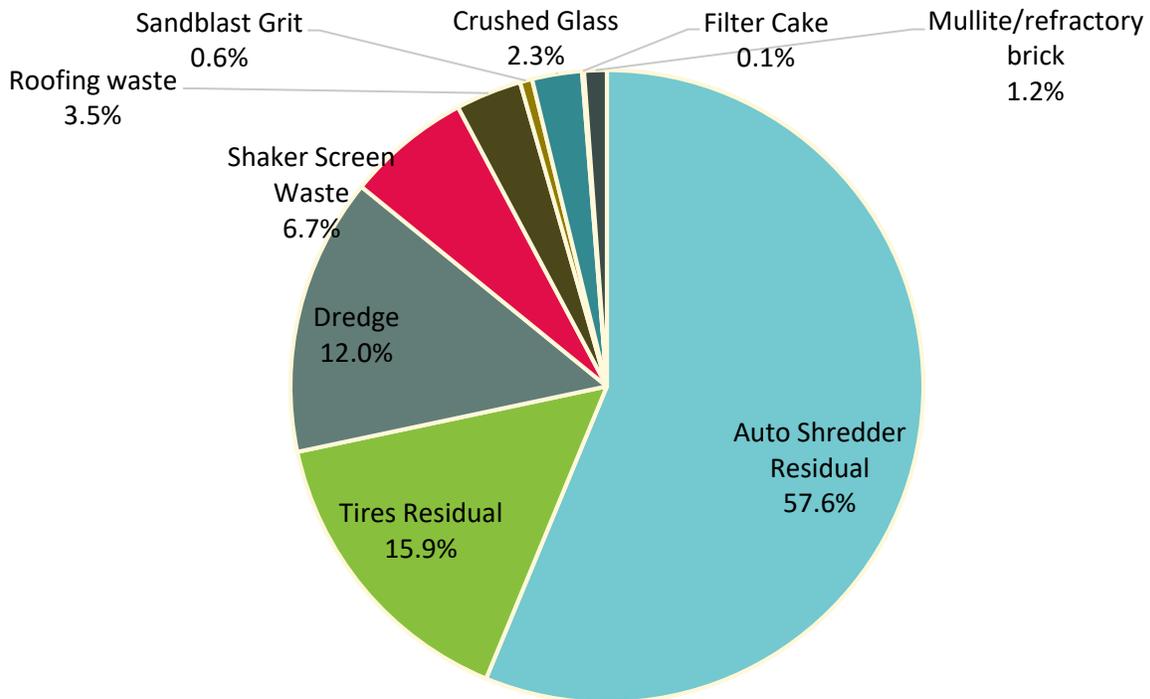


Figure 1.13: Annual RSF and ET Exempted Tons 2010 to 2015

	2010	2011	2012	2013	2014	2015	Annual Avg.
Auto Shredder Residual	129,610	136,088	93,029	88,076	90,527	75,846	102,196
% of Total	70.2%	51.7%	68.8%	65.7%	46.3%	42.9%	57.6%
Tires Residual	33,884	27,217	21,405	22,669	31,747	31,409	28,055
% of Total	18.3%	10.3%	15.8%	16.9%	16.2%	17.8%	15.9%
Dredge	-	68,890	-	-	49,450	36,453	25,799
% of Total	0.0%	26.2%	0.0%	0.0%	25.3%	20.6%	12.0%
Shaker Screen Waste as ADC	5,199	15,378	10,644	10,335	13,409	14,110	11,513
% of Total	3.0%	6.0%	8.0%	8.0%	7.0%	8.0%	6.7%
Roofing waste as roads	7,221	5,116	3,362	5,906	5,226	9,915	6,124
% of Total	3.9%	1.9%	2.5%	4.4%	2.7%	5.6%	3.5%
Sandblast Grit used as ADC	0	0	0	0	0	6799	1,133
% of Total	0.0%	0.0%	0.0%	0.0%	0.0%	3.8%	0.6%
Crushed Glass as Drainage	7,912	7,825	4,371	4,609	2,828	231	4,629
% of Total	4.0%	3.0%	3.0%	3.0%	1.0%	0.0%	2.3%
Filter press cake as ADC	-	157	282	172	226	248	181
% of Total	0.0%	0.1%	0.2%	0.1%	0.1%	0.1%	0.1%
Mullite/refractory brick as ADC	877	2,646	2,335	2,430	2,460	1,846	2,099
% of Total	0.5%	1.0%	1.7%	1.8%	1.3%	1.0%	1.2%
TOTAL	184,703	263,160	135,146	134,025	195,647	176,609	181,548

Available 2016 data covered only the first three quarters of the year and thus was not included in the analysis. However, the quarterly tonnage of useful exempted material in 2016 averaged 28,000 tons per quarter through the first three-quarters of the year. Based on the historic Metro trends, it would be reasonable to estimate 2016 total useful material exemptions to be below the average total and range in between 125,000 to 145,000 tons.

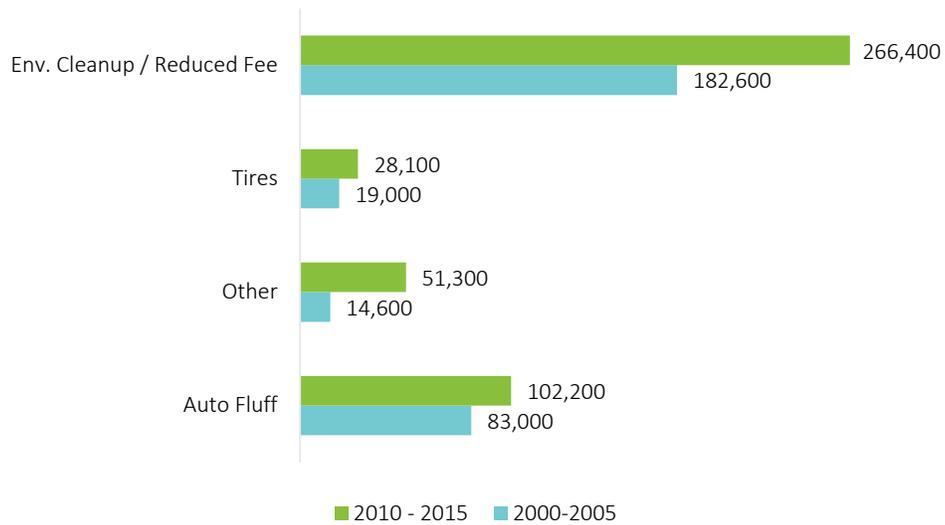
Comparison to 2006 Data

Six years of average annual totals covering from 2000 to 2005 (the 2006 URS Report Data) were compared to six years of average annual data from 2010 through 2015¹⁹. The comparison indicates that the average annual tons of exempted and reduced fee materials is greater over the last several years compared to the 2000 to 2005 time period. The largest increases were observed in the 'other' category

¹⁹ The average annual tonnage data for Reduced Fee materials only covers 4 years of data (2012-2015) as data from 2010 and 2011 were not available.

which includes useful materials exempted from fees and taxes other than auto fluff²⁰. Figure 1.14 compares the annual averages.

Figure 1.14: Annual Exempted and Reduced Fee Tons 2010 to 2015 compared to 2000 to 2005.



²⁰ The 2006 report only included these four categories in the report, thus more detailed comparisons of useful material classifications were not possible.



SECTION 2: STATE LEVEL REGULATIONS

RRS conducted an in-depth review of Oregon DEQ, CalRecycle, Idaho DEQ, and Washington Department of Ecology published policies and procedures as they relate to materials that may receive special consideration at a municipal solid waste landfill. In addition to document and policy review and summary, RRS conducted interviews with state regulators in the four states to gain insight into the underlying rationale, the outcomes of the designation, and the impacts that the designation has had on disposal and waste reduction in the state.

SUMMARY OF FINDINGS

Municipal solid waste landfills accept garbage, or solid waste, from households as well as some industrial and commercial nonhazardous wastes and construction and demolition wastes. They may also accept nonhazardous wastes and conditionally exempt small quantity generator wastes that are not regulated as hazardous waste under Subtitle C of the Resource Conservation and Recovery Act. In some states municipal solid waste may be given special consideration, such as beneficial or alternative daily cover (ADC).

Federal regulations 40 CFR 258 establishes a framework at the federal level for planning and implementing municipal solid waste landfill programs at the state and local levels. Federal regulations set minimum standards for protecting human health and the environment, while allowing states to develop more flexible municipal solid waste criteria. One of these set standards is that all municipal solid waste landfills must cover disposed solid waste with six inches of earthen material at the end of each operating day, or at more frequent intervals if necessary, to control disease vectors, fires, odors, blowing litter and scavenging. While the standard calls for six inches of earthen material, federal regulations allow alternative materials to be used if approved by the Director of an approved State. Alternative materials and their use vary, largely because of the state and local regulatory authority.

All four states, Oregon, California, Idaho and Washington, allow beneficial use determinations and the use of alternate materials for daily cover. However, each state has specific regulations or standards regarding use. In addition, all four states classify materials as beneficial use and three of the four states allow fee exemptions or discounts.

STATE OF OREGON

The State of Oregon assesses a per ton fee on solid waste disposed (state solid waste disposal fee) to fund Oregon DEQ services. The fee was last updated with the passage of SB-245 with an effective date for the increase in fees of July 2016. Beginning in July of 2017 the Environmental Quality Commission (EQC) may adjust the fees to meet revenue needs on a biennium basis. SB-245 extended the fee to cover C&D landfills and the state's only tire monofill (Kriger Construction Inc.). The state provides an annual rebate in the fees to Oregon's nine most economically-distressed counties.

Beneficial Use

State of Oregon regulations define beneficial use as productive use of solid waste in a manner that will not create adverse impact to public health. Beneficial use determination means approval of a solid waste either as a beneficial use or as a case-specific authorization.

Oregon has a standing list of identified beneficial use determinations²¹. The standing list includes both material type and beneficial use. ADC is not a standing list approved beneficial use. Oregon approves any other materials for beneficial use that are not on the list (case-specific).

Oregon regulations give authority to exempt beneficial use materials from state solid waste disposal fees.

Alternative Daily Cover

The State of Oregon regulations define ADC as a material that is operationally effective and protects the environment and public health. Municipal solid waste landfills wanting to use ADC materials must apply for permit approval. ADC materials permitted are subjective to "such factors as the volume and types of waste received, hydrogeologic setting of the facility, climate, proximity of residences or other occupied buildings, site screening, availability of equipment and cover material, any past operational problems and any other relevant factor". Oregon does not have a list of generally-approved ADC materials. Thus, approval of a material for use as ADC is based on the landfill, the generator, and the material.

In 2006, at about the same time of the URS Report, the Oregon DEQ clarified the ADC cover usage and reporting requirements. Oregon DEQ continued to monitor ADC material reporting and usage at landfills and in 2009 determined that several landfills in the region may have been claiming more ADC use than would be reasonably expected based on the landfill size and operations. As a result of these findings,

²¹ The standing list includes Asphalt pavement or asphalt grindings from road projects, asphalt shingle waste from roof tear-offs and manufacturer scrap, Dredged sediment approved by the department's water quality program for unconfined in-water placement based on chemical screening, Dredged sediment not approved by the department's water quality program for in-water placement, Foundry sand produced by iron, steel, or aluminum foundries, Foundry sand produced by iron, steel, or aluminum foundries, Soil from cleanup sites, Soil from petroleum cleanup sites, Steel slag, Street sweeping fines, Street sweeping sand from winter storm applications, and Wood-derived bottom ash, boiler rock, or clinkers, including rock, sand, dirt, and fused wood ash, from wood and wood waste fired boilers.

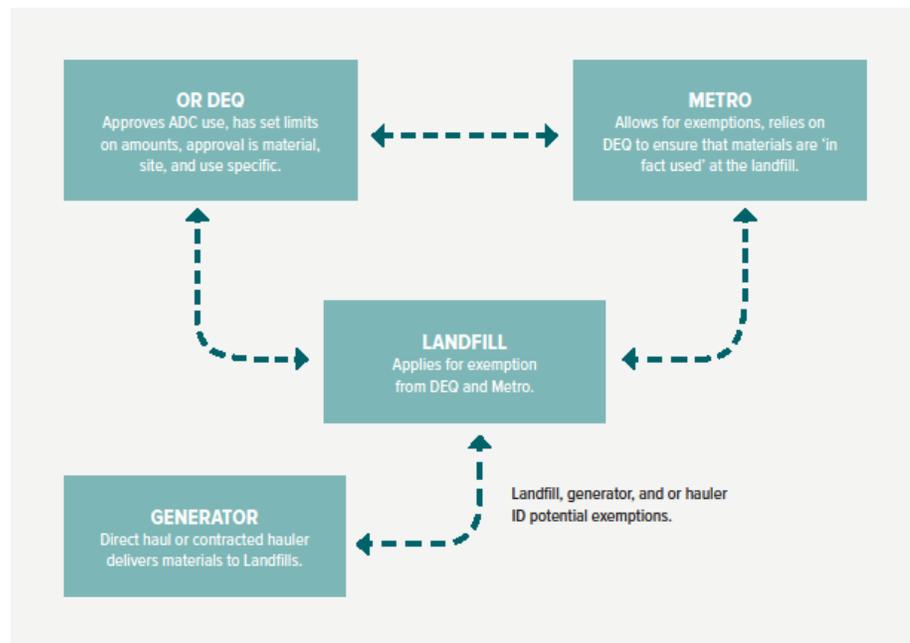
Oregon DEQ established ADC usage limits as 10% of total waste or 15% of counting waste. Due to the amount of Metro fees and taxes, Oregon DEQ believes that landfills will claim the maximum allowable tons as materials coming from Metro, even if those materials may not be the ones actually used as ADC.²²

Oregon imposes three per ton compliance fees on solid waste disposal (permit fees, tipping fees, and orphan site fees). Permit fees are \$0.58 per ton, tipping fees are \$1.11 per ton and will rise to \$1.18 per ton effective 4/1/19, and orphan site fees are \$0.13 per ton. Regulations allow fee exemptions on tipping fee and orphan site fee on certain materials; solid waste used as ADC is one of the exempted materials. Similar to Metro, the history behind exemptions for ADC came about from underground storage tank (UST) cleanups in the late 1980's and the need for a solution for the generated contaminated soils. Oregon DEQ believes that the fee exemptions help create a financial incentive to use alternative materials for ADC.

Noteworthy

In 2015, state legislation passed allowing a rise in rates and allowing rates to be adjusted over time, within limits. Legislation gave authority to collect fees on facilities that manage materials that are not being landfilled. Oregon DEQ has authority to collect fees on composting facilities if certain conditions are met. Similar to Metro, Oregon DEQ defines "cleanup materials contaminated by hazardous substances" (such as petroleum

contaminated soils) to include only those materials that are not hazardous wastes. It also sets forth a hierarchy for processing in which landfill disposal is lower than recovery or processing.



State and Jurisdiction Authority

²² Landfill often combine different ADC materials for future application as cover, thus it is very hard for a landfill to say which portion of the materials they are using for cover came from exactly which source. The high Metro fees and taxes provide an incentive to claim the use of Metro tons first.



Oregon Revised Statutes gives authority to Oregon DEQ to enforce statutes through rules and related programs. Numerous regulations dictate the proper management of solid and hazardous waste under ORS Chapter 459. Regulatory authority includes permitting and enforcing rules for disposal and waste handling facilities. A large part of Oregon DEQ's role is to provide technical and planning advisory services.

Cities and counties have primary responsibility for planning solid waste management, and both may grant franchises for solid waste collection. ORS chapter 268 provides Metro with solid and liquid waste disposal powers and gives authority to impose fees to pay for solid waste system costs.

STATE OF CALIFORNIA

Beneficial Use

Beneficial reuse of solid wastes at a solid waste landfill shall include, but not be limited to, the following: ADC, alternative intermediate cover, final cover foundation layer, liner operations layer, leachate and landfill gas collection system, construction fill, road base, wet weather operations pads and access roads, and soil amendments for erosion control and landscaping. Assembly Bill 939 requires fees be collected based on solid waste disposal at each disposal site. Beneficial reuse is not considered disposal under California Law (Public Resources Code 41781.3) so state fees are not collected on the beneficial reuse of solid waste.

Alternative Daily Cover/Alternative Immediate Cover

The State of California regulations define ADC as cover other than earthen material placed on the surface of the active face of a municipal solid waste landfill at the end of each operating day to control vectors, fires, odors, blowing litter, and scavenging. CalRecycle has approved 11 ADC types including auto shredder waste, shredded tires, and contaminated sediment²³. Other types of ADC materials may be approved by CalRecycle on a case-by-case basis. In California, ADC is not reported as disposal. Jurisdictions and regional agencies receive diversion credit for ADC use. A change in regulation, effective January 1, 2020, requires that ADC does not constitute diversion through recycling and shall be considered disposal²⁴.

California regulations give authority to impose fees on solid waste disposal. ADC materials are not subject to the state disposal fees because they are not reported as disposal. Though the regulation is changing for diversion, there will continue to be no disposal fee on green material used as ADC. Similar to Oregon, diversion credit and fee exemptions create incentive to use ADC.

²³ The full list of approved ADC materials includes: Ash and cement kiln dust, Treated auto shredder waste, Construction and demolition waste, Compost, Green material, Contaminated sediment, Sludge, Shredded tires, Foam products, Geosynthetic fabric or panel products, Spray-applied cement.

²⁴ Green material is defined by California Code of Regulations Title 14 as any plant material that is separated at the point of generation, contains no greater than 1.0 percent of physical contaminants by weight, and meets the requirements of Section 17868.5.

Noteworthy

Auto shredder waste identified as metal shredder residual is being re-evaluated by the California Department of Toxic Substances Control to determine whether it can continue to be used as ADC. Recommendation by the Department is expected in 2017²⁵.

State and Jurisdiction Authority

Public Resources Code authorizes CalRecycle (Department of Resources Recycling and Recovery of CalEPA) to put laws into effect by creating and enforcing rules. In California solid waste permitting, inspections and enforcement are provided primarily by local governments with oversight by the State. CalRecycle concurs or objects to local enforcement agency issuance of permit. When there is no local enforcement agency CalRecycle acts as the enforcement agency

Local Enforcement Agencies issue solid waste facility permits and conduct inspections. Local enforcement agencies are designated by the governing body of a county or city and, upon certification by CalRecycle, are empowered to implement delegated CalRecycle programs and locally designated activities. Local enforcement agencies have the primary responsibility for ensuring the correct operation and closure of solid waste facilities in the state. They also have responsibilities for guaranteeing the proper storage and transportation of solid wastes.

Assembly Bill 939 allows jurisdictions to collect funds to finance programs. Specifically, Public Resources Code Section 41901 permits cities, counties or city and counties to impose fees in amounts sufficient to pay the costs of preparing, adopting and implementing and integrated waste management plan prepared pursuant to AB 939.

STATE OF IDAHO

Beneficial Use

State of Idaho regulations define beneficial use as “various uses of ground water in Idaho including, but not limited to, domestic water supplies, industrial water supplies, industrial water supplies and agricultural water supplies. A beneficial use is defined as actual current and projected future uses of ground water. “

Alternative Daily Cover

The State of Idaho regulations mirror Federal Regulations and do not allow for less or more stringent regulations. ADC materials are allowed and are case-by-case and generally landfill specific. Municipal solid waste landfills that are soil poor typically seek ADC materials. Idaho does not have a list of approved ADC

²⁵ The CA regulations are very dynamic and the list of acceptable ADC is expected to be changing again before 2020. A significant portion of the state’s current reported diversion rate is achieved by fines as ADC generated by C&D processing facilities, the definition of diversion may be discussed and re-evaluated prior to 2020.



materials. Idaho regulations do not give authority to impose fees on solid waste disposal and there are no reduced fees for ADC. A soil poor landfill is the only incentive to use ADC.

State and Jurisdiction Authority

Idaho Administrative Code authorizes Idaho DEQ to put laws into effect by creating and enforcing rules. In addition, code authorizes Idaho DEQ to delegate authorities and responsibilities to the Public Health Districts and also authorizes Public Health Districts the power to do all those things delegated. To define roles and working arrangement, Idaho DEQ and the Public Health Districts operate under a Memorandum of Understanding. In general, DEQ is responsible for ensuring solid waste management facilities meet siting and design requirements, which includes reviewing siting and approving engineering and technical plans for solid waste management sites and other waste treatment and disposal facilities. Public Health Districts are responsible for ensuring solid waste management facilities comply with operational, closure, and post-closure requirements. In addition, the health districts are responsible for providing regulatory oversight, including conducting routine inspections, of municipal solid waste landfills and non-municipal solid waste landfills.

Idaho Administrative Code Title 31 Chapter 44 authorizes Board of County Commissioners to collect fees from users of solid waste disposal facilities in order to properly establish, maintain, and operate solid waste facilities. Counties may finance solid waste disposal facilities by user fees, taxes, or other appropriate charges.

STATE OF WASHINGTON

Beneficial Use

Washington regulations defines beneficial use of solid waste as an ingredient in a manufacturing process, or as an effective substitute for natural or commercial products, in a manner that does not pose a threat to human health or the environment. Avoidance of processing or disposal cost alone does not constitute beneficial use. Waste generators and others can ask for exemptions of solid waste permit requirements for use of a waste as a substitute feedstock in a manufacturing or other industrial process, or for use as a soil amendment. Only proposals that present no threat to human health or the environment are considered for approval.

Alternative Daily Cover

The State of Washington regulations give authority to jurisdictional health departments to enact ordinances equally as or more stringent than state regulations and to implement such ordinances through a permit system. State regulations mirror Federal Regulations but also allow for an alternative thickness if approved by the jurisdictional health departments. ADC materials are allowed and approved on a case-by-case and landfill specific. Similar to Oregon, Washington does not have a standing list of approved ADC materials. Washington regulations give authority to impose fees on solid waste disposal. ADC is considered solid waste



and is subject to state regulatory fees. There is no incentive to use ADC other than landfill negotiated reduced rates.

State and Jurisdiction Authority

Revised Code of Washington authorizes Washington Department of Ecology to put laws into effect by creating and enforcing rules. Revised Code of Washington requires Washington Department of Ecology to develop regulations for solid waste handling and disposal facilities, and a state plan. Jurisdictional health departments have primary oversight of solid waste facilities, issue permits, and enforce the standards. Department of Ecology has only review authority, however after permit issuance Department of Ecology can appeal.

Revised Code of Washington Chapter 82.18 imposes a solid waste tax on any private and commercial consumers. The tax rate is 3.6 percent collected by the provider. Exemptions are provided to the federal government and may apply to Indians and Indian tribes.

SECTION 3: JURISDICTIONAL RESEARCH

RRS conducted in-depth review of local jurisdictions in California, Idaho, and Washington to gain understanding of how Metro taxes, fees, and policies compare with those in other jurisdictions. Both regional (single and multiple county) and local (municipal) level solid waste management systems were contacted to complete the detailed jurisdictional interviews. RRS staff completed nine interviews with jurisdictions in the three states surrounding Oregon. The interviewed jurisdictions are displayed in Figure 3.1.

Figure 3.1: Researched Jurisdictions

State	Jurisdictions
California	Del Norte SWMA, San Francisco, Santa Barbara County
Idaho	Canyon County, Kootenai County, Southern Idaho Solid Waste District
Washington	Pierce County, Spokane County, Seattle, King County

The remainder of this section summarizes the findings of the jurisdiction interviews. The Appendix contains the complete results of the interviews.

SUMMARY OF FINDINGS

Local fees on disposal are common, exemptions and fee reductions are not. All jurisdictions interviewed except for two (San Francisco, CA and Canyon County, ID), reported that they charge fees on solid waste that originates within their jurisdiction and is disposed in a landfill. However, only three jurisdictions reduce or exempt fees, and all three make determinations based on the generator.

Although Local Jurisdictions in CA do not exempt fees, all materials listed as ADC and identified for beneficial reuse by CalRecycle are exempted at the state level. Jurisdictions in California reported giving no reductions or exemptions on jurisdictional fees. However, California state regulations determine 11 materials used as ADC at a landfill and beneficial reuse of solid wastes are not considered disposal. ADC and beneficial reuse used by the landfill are not included in the disposal tonnages. Although jurisdictions stated no reductions or exemptions, unless there are local ordinances, landfilled waste identified as ADC is exempt from fees. California allows green waste to be used as ADC (regulation changing in 2020 to identify green waste used as ADC as disposal). Interviews discovered two California jurisdictions impose tipping fees on recyclables

and organics and materials such as tires, asphalt, concrete, clean soil, and C&D (see Figure 3.2 materials are not consistent among jurisdictions). These tipping fees are lower than the landfill disposal fees.

Idaho jurisdictions do not give discounts or exemptions on jurisdictional fees and may charge more (not less) for contaminated soils, tires, and / or dredge. Differential tipping fees are given on wood waste, inerts, C&D, concrete, asphalt, bricks, soil, and clean rock (see Figure 3.2 materials are not consistent among jurisdictions). Petroleum contaminated soils, dredge, and tires are handled differently depending on the jurisdiction. At one jurisdictional landfill petroleum contaminated soils and dredge soils are not accepted, another charges higher tipping fees for petroleum-contaminated soils and recycling fees for tires.

Washington jurisdictions give discounts or exemptions to jurisdictional fees. One jurisdiction identified ADC, metal, VOC containing soils, mixed construction and land clearing debris, material recovery facility residuals and manufacturing by-product as off-spec materials exempt from jurisdictional fees. Another jurisdiction exempts contaminated soils and a few others but indicated the volumes were small, one jurisdiction incinerates all materials, and the final jurisdiction charges differential tipping fees.

Regional jurisdictions interviewed shared a thought that per ton fees are the costs of providing services, not surcharges or separate taxes. The majority of regional jurisdictions interviewed have per ton fees for program services, but the per ton fees are embedded into the total gate fee, or as most jurisdictions refer, tipping fee, thus, the customer typically sees one fee or charge. Local level jurisdictions have a broad spectrum of funding mechanisms and fee structures for managing their solid waste.

Figure 3.2 displays a summary of the fees, taxes, discounts, and exemptions at both the local and state level for the nine researched jurisdictions. Surcharges are additional charges added onto another fee or charge. In this context, state surcharges are additional charges imposed by a state authority. Jurisdiction surcharges are additional charges imposed by a jurisdictional authority. Surcharges that are reduced or exempt are identified as exempted/discounted surcharges. Tipping fees are charges levied on waste processing. Varying these charges according to the material is referred to as differential tip fees.

Figure 3.2: Summary of Findings

Jurisdiction	Transfer Station in Region	Landfill in Region	State Surcharge	Jurisdiction Surcharge	Exempted / Discounted Surcharge	Description of surcharges	Differential Tip Fees	Description of tip fees
Metro, Oregon	✓	✗	✓	✓	✓	Jurisdiction surcharges include per ton regional service fee and excise tax. Full rate and reduced rates are assessed at time of disposal and full exemption applies to materials that are not disposed and some materials sent to a landfill.	✓	Lowered rates are charged on organics.
Del Norte SWMA, CA	✓	✗	✓	✓	✗	Customers see one tipping fee. Tipping fee is a cost per ton on municipal solid waste disposed. Tipping fee revenue received is portioned between the contractor	✓	Reduced tip fees for source separated organics, recyclables,

Jurisdiction	Transfer Station in Region	Landfill in Region	State Surcharge	Jurisdiction Surcharge	Exempted / Discounted Surcharge	Description of surcharges	Differential Tip Fees	Description of tip fees
						and Authority. One component of contractor costs is landfill tipping and state disposal fees. Authority portion funds MSW management/program components. Do not consider fees separate tax or surcharges: it is the cost for services.		tires, asphalt, concrete, and clean soil.
San Francisco, CA	✓	✗	✓	✗	✗	Customers see one tipping fee. Tipping fee is a cost per ton on municipal solid waste disposed. Tipping fee revenue funds MSW management/program costs. San Francisco does not collect surcharges, and therefore there are no exemptions.	✓	No tip fees on recyclables, or HHW such as batteries and fluorescent tubes and bulbs, or computers.
Santa Barbara, CA	✓	✓	✓	✓	✗	Historically charge a surcharge on commercial commingled recycling. When recycling commodity markets declined imposed a surcharge on franchised residential commingled recycling.	✓	Reduced tip fees for recyclables and compostables. Reduced tip fees for C&D tailings when used for ADC.
Canyon County, ID	✓	✓	✗	✗	✗	There are no taxes or surcharges associated with the tip fee.	✓	Reduced tip fees for clean wood waste. No tip fees for recyclables and hazardous household waste.
Kootenai County, ID	✓	✓	✗	✓	✗	Residents see a flat rate on property taxes. Commercial businesses are charged an annual fee. Property tax assessments fund several MSW management/program components.	✓	Reduced tip fees for wood waste and inert fill such as clean rock, bricks, soil, and concrete.
Southern Idaho Solid Waste District, ID	✓	✓	✗	✓	✗	Each county uses various funding mechanisms to fund MSW management/program components. Each county pays the District for infrastructure and operations of MSW management/programs and includes disposal, operation, and transportation of MSW. District charges counties a per ton fee.	✓	Reduced tipping fee on inerts, C&D with less than 10% organics, concrete and asphalt and any materials found useful. For example, clean wood waste and fly ash. Higher tipping fee on petroleum contaminated soils.
Pierce County, WA	✓	✓	✓	✓	✓	Customers see one tipping fee. Tipping fee is a cost per ton on municipal solid waste disposed. Tipping fee revenue funds MSW management/program costs. State charges a state refuse tax in addition to Pierce County's tipping fee. Pierce County waives a component of the tipping fee for self-hauled residential waste, may waive a component of the tipping fee for court ordered abatement, and has authority to waive the transfer fee if a generator direct hauls (rare instances.)	✗	County does not offer differential tipping fees but landfill may. Any waste off contract is considered special waste and is not included in the Pierce County waste management system funded by the gate fee.
Spokane County, WA	✓	✓	✓	✓	✓	Customer sees one tipping fee. Tipping fee is a cost per ton on municipal solid waste disposed. Tipping fee revenue funds MSW management/program costs and includes city and state fees. Do not consider fees separate taxes or surcharges; it is the cost for services. Non-profits pay 2/3 of disposal costs. Litter Control program waste is exempted the gate fee.	✗	N/A

Jurisdiction	Transfer Station in Region	Landfill in Region	State Surcharge	Jurisdiction Surcharge	Exempted / Discounted / Surcharge	Description of surcharges	Differential Tip Fees	Description of tip fees
Seattle, WA	✓	✓ use out of region landfill	✓	✓	✓	Solid waste management system is funded through taxes. Funding is received from residential rates, commercial rates, self-hauling tipping fees, and a general solid waste tonnage fee. Low-Income Assistance is available to qualified customers. Contaminated soils and a few others are exempt but these materials are not a large volume. Garbage, clean yard waste, and clean wood waste delivered to the transfer stations are charged tipping fees.	✓	Clean yard waste and clean wood waste are charged lower tipping fees at the transfer stations.
King County, WA	✓	✓	✓	✓	✗	Customers see one tipping fee. Tipping fee is a cost per ton on municipal solid waste disposed. Tipping fee revenue funds MSW management/program costs and includes King County's basic fee, moderate risk surcharge, and State of Washington Refuse Tax.	✓	Self-haulers and charitable organizations are charged a lower per ton rate. Special waste is charged a higher per ton rate. Flat rate recycling fees are applied to refrigerant appliances, non-refrigerant large appliances, clean wood, and yard waste.

FINDINGS BY JURISDICTION

The remainder of this section summarizes the findings by jurisdiction.

CALIFORNIA JURISDICTIONS

Del Norte Solid Waste Management Authority, CA: The Del Norte County Solid Waste Management Authority (SWMA) contracts with private companies for their solid waste management system. The SWMA receives franchise fees as well as one-third of the gate fees collected on solid waste disposed for programming and administration of the solid waste system. The remaining two-thirds are directed to the operator of the transfer station. The operator covers the operation costs of the transfer stations and landfill disposal. No materials are locally exempted from fees. However, the gate fees (\$144/ton of MSW) are reduced for source separated organics, recyclables, tires, asphalt, concrete, and clean soil as a way to encourage diversion.

San Francisco, CA: The City of San Francisco funds their zero waste and collection programs entirely through monthly garbage bills to residents, and contracts all waste collection to a private company Recology. Recology collects 100% of the solid waste tip fee for material brought to the San Francisco transfer station (which are in turn hauled to a Recology landfill). There are no local exemptions or discounts to the gate fee for disposed materials. The City has a long term, mutually beneficial agreement with Recology in which the city regulates the rates Recology charges, while the guarantee of business allows Recology to invest in

waste diversion programs. As a result, the City has achieved the highest waste diversion rate of any major US city.

Santa Barbara County, CA: The Santa Barbara Resource Recovery and Waste Management Division encourages diversion through the use of differential tip fees at their landfill and four transfer stations. The city charges \$35 per ton for clean green and wood waste versus \$87 per ton for MSW. The City does provide a slightly discounted rate (\$84/ton) on inert construction and demolition debris tailings used as ADC. In FY 2015-2016 11% of the incoming tons at the landfill were C&D debris used as ADC. Santa Barbara is considering adding fees on disposed tons in the future to cover the costs of new facilities. In the past the City has levied surcharges on disposed tons to cover downturns in income from recyclables. Santa Barbara does levy a surcharge on commingled recyclables delivered to their transfer stations, the surcharge is used to offset the costs of delivering the recyclables to the MRF.

IDAHO JURISDICTIONS

Canyon County Solid Waste Department, ID: The County owned and operated landfill charges a tip fee per ton of \$14 for all waste disposed of in the landfill, which is one of the lowest tip fees in the state. The fee includes no taxes or surcharges. Clean wood waste is accepted at \$12 per ton, mulched, and sold as cattle bedding. The landfill uses clean dirt from on-site for ADC and does not offer discounted rates for potential ADC materials.

Kootenai County MSW Department, ID: There are no local or state taxes or surcharges assessed on the \$67 per ton tip fee at the Kootenai County transfer stations or landfill. County residents are assessed \$93 annually and commercial entities are charged \$350 annually on their property tax to fund the MSW programs in Kootenai. Inert fill is accepted at a significantly reduced rate (\$11/ton) as the inert materials are disposed in an unlined inert pit. Wood waste, which is chipped and diverted, is accepted at \$54 per ton. Recyclables are accepted at no charge at the landfill. There is no discounted fee for ADC or for tires. The County does not accept PCS or dredge materials for disposal.

Southern Idaho Solid Waste District, ID: The Southern Idaho Solid Waste (SISW) District is the only solid waste district in the state of Idaho. The District encompasses seven counties and serves 67,396 households spread over more than 10,000 square miles. Disposal rates differ between counties depending on the fee structure worked out between the transfer stations, the landfill, and the local county government but in general the tipping fee is \$16 per ton. The district does not charge fees, taxes, or surcharges on disposed materials. Petroleum contaminated soils (PCS) are charged a tip fee based on the total petroleum hydrocarbons (TPH) in the soil, the greater the concentration, the higher the tip fee. All PCS tip fees are greater than the MSW rate. Certain materials that are considered beneficial to the landfill are accepted at a reduced rate including wood waste (\$4/ton) and fly ash (\$12/ton). Tires are accepted for a fee and recycled by the landfill. Inerts, C&D with less than 10% organics, concrete, and asphalt can be disposed of



in an unlined dry waste landfill at a significantly reduced fee. The landfill uses on-site soil for ADC and does not use incoming materials for daily cover.

WASHINGTON JURISDICTIONS

Pierce County, WA: In general, Pierce County handles solid waste management in all unincorporated and incorporated areas of Pierce County. A gate fee is charged on all MSW landfilled and includes per ton fees to operate all components of the waste management system. Pierce County contracts with private sector to provide waste, recycling, and composting collection services. The County only collects the gate fee on contracted MSW and has authority to offer fee exemptions. Most fee exemptions are generator based, not material based and are offered to self-haul customers. Alternative daily cover, metal, VOC containing soils, mixed construction and land clearing debris, material recovery facility residuals and manufacturing by-product are off-spec materials and are not directly managed as part of the Pierce County solid waste system.

Seattle, WA: Seattle opted out of King County's solid waste management system choosing to contract and manage a solid waste management system. Seattle contracts with the private sector for hauling and processing of garbage, recycling, and food and yard waste and manages the following contracts: organics processing, solid waste collection (garbage, recycling, food and yard waste), recyclable processing, food and yard waste processing, and long haul disposal. Seattle uses taxes to fund the waste management system. Seattle revenue sources come from residential rates, commercial rates, self-haul tipping fees, and a general solid waste tonnage fee. Components of the residential monthly garbage rate includes: garbage collection and processing fees, transportation fees, transfer station operation fees, landfill and waste reduction fees, planning, program and administration fees, and customer service fees. Contaminated soils and a few other materials are exempt but these materials constitute on a small portion of the City's overall waste volume. The transfer stations charge a per ton rate, \$145, for garbage. Rates for clean yard waste and wood waste are lower at \$110 per ton. In order to get the lower rates, materials must be separate before arriving at the transfer stations. A flat rate vehicle fee is available for sedans, station wagons, and sport utility vehicles (all without trailers) for garbage, clean yard waste and wood waste.

King County, WA: King County manages a solid waste management system that includes all of King County except for Seattle and Milton. King County's system includes managing 8 transfer stations, 2 drop-offs and a landfill. The Cedar Hills Regional Landfill is the only active landfill in the Puget Sound region. It is closed to the general public receiving all waste from the transfer facilities. The County relies on private haulers to collect garbage waste and transport to transfer facilities or self-hauled directly to the transfer facilities. A per ton rate of \$144.34 is charged for garbage. This rate includes the King County basic fee, a moderate risk waste surcharge and the State of Washington Refuse Tax. The King County basic fee funds operating costs, administrative costs, debt service and fund transfers. The surcharge is set by the King County Board of Health which funds hazardous waste programs throughout the county. No materials are exempt from



fees. Differential fees are applied to self-haulers (lower per ton rate), charitable organizations (lower per ton rate), and special waste (higher per ton rate). Flat rate recycling fees are applied to refrigerant appliances, non-refrigerant large appliances, clean wood, and yard waste.

Spokane County Regional Solid Waste System: Spokane County Regional Solid Waste System manages the solid waste for Spokane County, City of Spokane and other regional cities and jurisdictions. A gate fee is charged on all MSW and yard waste. The disposal fee consists of several components: tipping fee, City of Spokane fee, State Fee, contract fee, and program costs. Gate fee discounts are provided to non-profit organizations and to the Litter Control Program. All fees are waived on recyclables, and organics are afforded approximately 50% discount. Waste materials are processed at a Waste-to-Energy facility and thus, ADC is not required. Additional discounts or exemptions are not available.

SECTION 4: INTERVIEWS

In order to provide Metro with a deeper understanding of stakeholder concerns, derived benefits, and opinions, RRS staff conducted a series of interviews with Landfill operators, Exempted parties, and Eligible parties. A total of 24 detailed interviews, ranging in time from 20 minutes to 2 hours, were conducted between November 29, 2016 and January 16, 2017. The total counts, by category, and a full listing of the parties interviewed for the project can be seen in Figure 4.1²⁶.

Figure 4.1: Stakeholder Interview Summary (Note: all proprietary information has been removed from the interview summaries and write-ups)

	Landfill	Exempted Party	Eligible Party
Description	Landfills receiving and processing materials	Generators receiving RSF and ET exemptions	Generators potentially eligible to receive exemptions
Counts	8/8 complete (100%)	12/14 complete (86%)	3/4 complete (75%)
Complete	Coffin Butte, Columbia Ridge, Cowlitz County Headquarters, Finley Buttes, Hillsboro, Riverbend, Roosevelt, Wasco County	Calbag, ESCO, Greenway Recycling RB Recycling Inc., Port of Portland, Schnitzer Steel, Siltronics, Suttle Road Recovery (Recology), Tire Disposal & Recycling, TVWR (WM), Vigor Industries, WRI (Republic)	Core, ECR, KB Recycling
Non-Responsive / Refused	None	Arrow Sanitary, Oregon Steel Mills / EVRAZ,	Pride

The remainder of this section summarizes the findings of the stakeholder interviews, the full results of the interviews can be read in the Appendix

SUMMARY OF STAKEHOLDER INTERVIEWS

The following section summarizes the findings and implications of the stakeholder interview process. The interview findings do not reflect the opinions of Metro or the consultant team and are included to reflect the opinion, recommendations, and insights reported by the stakeholders during the interview process.

²⁶ All parties were requested to conduct an interview a minimum of 5 times by RRS staff. After 5 contacts, the interviewee was deemed to be non-responsive and was not contacted further.



LANDFILL FINDINGS

The market has been relatively stable and most perceive that it will not change much in the future. Overall, the landfill operators reported that the number of exempted and reduced fee tons has been relatively stable in the past several years, and while there may be some small increases in exempted tonnages in the future, they do not expect there to be significant changes (this of course depends on the market and Metro's policy decisions)

The exemptions provide a positive impact for landfills. All of the interviewed operators believed that the exemptions provided a positive impact on their business operations. The positive impacts included helping to reduce costs by providing a cheaper alternative to virgin materials for ADC, reducing trucking costs, increasing revenues, and helping the landfills be better stewards of the environment.

Removing the exemptions on ADC would hurt landfills in the Region. All but one of the landfill operators reported that if Metro were to remove the exemptions that it would have at least a small negative impact on their business due to increased costs and lower amounts of diversion. However, most of the landfill operators believed the negative impact would be manageable and is a 'pass through' costs to customers, if it were enforced and applied to everyone. There was one operator, managing multiple landfills in the Region, that believe pulling the exemptions would not only impact the landfill and the generators, but would also slow growth in the region due to the increased costs of disposal.

The current Metro Code and policy are generally clear, understandable, and equitable. All of the landfill operators reported that they understood the Metro Code language and for the most part, there was not much confusion around the policies for exemptions and reductions. Likewise, most landfill operators believed the policy was equitable for all.

Metro should examine the acceptance of shaker fines as ADC. One operator, managing multiple facilities, believed the acceptance of shaker fines as ADC results in inequities to the system. The operator reported that its company has looked at shaker fines for ADC but believes the health risks are too great and thus has a company policy to never use the material as ADC. This policy, based on scientific publications and health and safety, combined with the Metro exemptions, puts the landfill at a competitive disadvantage.

The exemptions and reductions provide a public and environmental benefit to the region. All of the landfill operators reported that the exemptions and reduced fees provide benefits to Metro and the region including; replacing virgin materials as ADC in a landfill operations, conserving clean material that would have to be source elsewhere, reduced truck traffic (less trucks needed to transport ADC), reduced pollution, driving environmental clean-up, and helping to keep materials out of the landfill. Overall, the use of the materials in landfills have not changed since the 2006 URS report.



Most landfills support no changes to the Metro Code: The majority of respondents (63%) reported that they would like Metro to not change anything. One suggestion for potential change was for Metro to remove the exemption for shaker screen fines as they pose a health risk to landfill staff **when used as ADC.**

EXEMPTED PARTY FINDINGS

Material amounts are relatively stable with a small potential for increasing in the future. Slightly half of the exempted parties believed the amount of exempted materials they would be producing in the future would either not change or that it would decrease slightly. The other half thought that the amount may increase slightly in the future, but it depends on the regional market conditions.

The RSF and ET exemptions help businesses in the Region: All of the companies currently receiving exemptions believed that they had a positive impact on their business. Interviewees reported that the exemptions reduce processing and / or operational costs, help local businesses compete in the regional, national and international marketplace, and by keeping disposal costs down allow businesses to invest in improved recycling operations and equipment as well as other environmental programs. The exemptions reportedly also help to increase recycling rates for materials with ‘significant intrinsic value, such as scrap metal’.

Eliminating the exemptions would hurt local business that currently receive the exemptions, and for some the negative impact would be significant. The potential negative impacts ranged from ‘It would increase costs at the gate for processing and hurt our business’ to ‘it would shut us down’ and ‘we may not be able to operate in the Portland’. One respondent felt that without the exemptions there ‘would be very little recycling in the Metro area’. The businesses that reported they would potentially face regional closures without the exemptions were the tire processors, some of the dry waste processors, and some of the industrial generators.

Not all dry waste processors thought eliminating the exemptions for shaker screen fines as ADC would have a negative impact. While most dry waste processors were against any changes to the exemptions around shaker screen fines, one dry waste processor reported that although they were getting exemptions for shaker screen fines in the past they recently chose to discontinue the activity. They felt that collecting shaker screen fines was ‘not a good investment for us’ and that ‘we don't really care if Metro stops the exemptions on the shaker screen fines as long as Metro makes it a fair level playing field for all actors.’

The current Metro Code and policy are generally clear, understandable, and equitable. Nearly all of the exempted parties agreed that they did not have any confusion around the ET and RSF policy. Likewise, nearly all thought that the Metro Code was equitable. As with the landfills, the one area of potential inequity highlighted was around the acceptance of shaker screen fines as ADC due to concerns around health and safety when using shaker screen fines as ADC.



The RSF and ET exemptions provide both a positive environmental and public benefit to Metro and the Region. The generators believed that the exemptions help to drive waste diversion in the region by providing a useful material at the landfill and by keeping the costs down to process mixed dry waste. The exemptions reportedly also help to support the overall recycling and diversion infrastructure in the Region. Stakeholders reported that the exemptions have significantly impacted the tire processing market helping to keep tires from becoming an environmental and health hazard in the region. Some of the other benefits included allowing companies to invest their savings in other environmental programs and providing a viable outlet for materials with no other option other than landfilling.

Dry waste processors reported they believe ADC exemptions are necessary to meet Metro's EDWRP requirement. There was agreement among most (not all) of the dry waste processors that exemptions are integral in supporting the regional infrastructure for dry waste processing. These processors reported that without the exemptions the low commodity values, slim margins, and Metro's low gate rates, make it very hard to operate in the region.

Metro would face strong opposition from some exempted parties if they were to change the policy around ADC exemptions. While some exempted parties (i.e. tire processors, captive landfills) would not be strongly opposed to changing the exemptions around ADC, several others, including some dry waste processors and industrial generators, reported they would strongly oppose any efforts by Metro to change the Code. One generator reported that 'if Metro changes the Code, we will sue them, and we will win'.

Generators have made investments based on Metro's current policies, rates, and fees, and changing the policies will hurt return on those investments. Several of the exempted parties reported that they had invested significant time and money to take advantage of the exemptions and reductions in the Metro Code (in one case the estimate was \$1M). A change to the Metro Code would render these investments useless and is a cause for concern among some generators.

There is a perception among some generators that the only reason Metro is considering changing the Metro Code is to increase revenue: Interviewees reported 'there is not an issue with clarity or equity' and 'the only reason Metro is considering the change is to increase revenue'. The perception among generators is that Metro has been successful in diverting waste from disposal, and thus is losing revenue. In order to recoup some of these losses Metro is looking at expanding the tons they can charge fees and taxes on.

ELIGIBLE PARTY FINDINGS

Several dry waste processors in the region that could get exemptions on useful materials managed as ADC but choose not to do so. Although all the eligible parties acknowledge the exemptions could help their businesses by reducing costs, they still chose not to apply for them. They tended to think that using shaker screen fines as ADC did not really constitute recycling. They reported that that 'there are other ways to



make your business work without getting the exemptions’ and that their competitors that get the exemptions ‘are skirting the system’ and ‘not paying the taxes and fees they should be paying.’

There are issues both around the clarity and the equity of the current policies around RSF and ET exemptions and reductions. The eligible parties question whether or not shaker screen fines used as ADC should really qualify as a ‘useful material’ as they are ‘are still being landfilled’ and are ‘really just smaller pieces of trash’. The eligible parties also reported that the current policy administration allows certain generators to take advantage of the system by qualifying for the ADC exemptions.

The exemptions do not help to improve the environment or meet the missions of Metro. None of the eligible parties thought that the exemptions helped to drive waste diversion, protect the environment, or support residents of the region. They believed that shaker screen fines used as ADC is not recycling, and it does not help Metro meet their goals.

Operating a profitable dry waste MRF without the exemptions is indeed possible in the Metro region. All three of the eligible parties reported that they operate profitable dry waste processing facilities and none of them get exemptions for shaker screen fines as ADC. They all reported that limiting the exemptions to no longer include ADC would not harm the recycling infrastructure in the region and that ‘if a company cannot make their business model work without claiming the exemptions, they should just get out of the business and let other do it.’

SECTION 5: RECOMMENDATIONS

As discussed in earlier sections of the report, the current policies surrounding the RSF and ET exemptions and reduced rates have evolved over time, and while the system is not ‘broken’, there is room for improvement and even alternative policies. The recommendations are written with the presumption that Metro does have the proper legal authority to manage the RSF and ET system. RRS did not undertake an evaluation of the regulatory authority of Metro.

Since the publication of the 2006 URS report the Oregon DEQ has adopted policies to address the issue of landfills accepting more ADC or beneficial use materials than they can use. The data since the adoption of the new policy indicates that while reduced and exempted materials still make up a significant portion of disposed material (about 28% of total Metro materials on average) it is not the majority of landfilled material as discussed in 2006.

In the last decade, Metro has taken little action to address the RSF and ET policy issues raised in the 2006 report. During that time, the types of materials qualifying for exemptions has broadened and the total annual amount of exempted and reduced material has increased (based on annual averages). The average annual amount of auto-fluff receiving exemptions has increased as has the annual average amount of reduced rate (called environmental clean-up in the 2006 report)²⁷. The same issues discussed in 2006 regarding data tracking, private disposal companies or generators maximizing exempted materials to reduce costs, and mixed economic incentives remain today. The interviews and evaluation of the Metro Code found that the code and language is complex and in some places confusing, that there are materials that are exempt by practice but not in code, and some stakeholders raised concerns regarding the equity of the current system. The exemptions and discounts do help to support diversion and provide an environmental benefit in the region. Yet it is unclear whether Metro is sending the right economic signals to the marketplace to maximize private efforts for diversion.

ALTERNATIVE OPTIONS TO RSF AND ET

The review of the current policy found that while it is doing well in some areas (for example, the current code scores well in equity) there is room for improvement. Public benefit and waste reduction impacts both received grades of ‘C’ in the evaluation). The reasons for considering changes to the policy include increasing clarity and equity of the RSF and ET administration, increasing the public benefit to the residents

²⁷ Based on comparison of annual average tons from 2000 to 2005 versus annual average tons from 2010 to 2015. During the same time periods the total amount of disposed materials in Metro has been increasing. Thus, while the 2006 report data did not include an analysis of total disposed tons, it is possible the proportion of reduced or exempted fee materials may not have changed significantly.



and businesses in the region, and increasing waste reduction and diversion through improved incentives or economic signals.

RRS evaluated the different material types, Metro's policy justifications, benefits, and current economic signals to determine which changes were justified. The materials evaluated and the justification for potential changes are discussed below:

Recyclables and Organics: Increased diversion of recyclables and organics (including yard waste, food scraps, and food soiled paper) from disposal are directly in-line with Metro's overall mission. The current policy provides an incentive for diversion by not applying fees or taxes to recyclables or compostables which helps to decrease processing costs. The full RSF and ET *are* charged on residue from the processors, thus the policy also incentivizes increased recovery rates by processors. RRS does not recommend any changes to the policies around exemptions for these materials.

Tire Processing: Disposing of whole tires in landfills is illegal in Oregon and Washington. Waste tires and tire piles present significant health, environmental, and safety hazards if not managed properly. It is in the best interest of Metro to support tire processing as it directly improves the regional environment and benefits the residents and businesses in Metro. Even the most efficient tire processing results in some amount of residuals and there is little potential profit margin for tire processors in the region. By exempting tire residuals from RSF and ET, Metro helps tire processors keep gate fees low and continue to operate competitively in the region, thus providing an economically viable alternative to illegal dumping or disposal. These facts, coupled with direct statements from tire processors in the region that they would not be able to operate without the exemptions and would potentially be forced to close if the policies change, lead RRS to recommend no changes that increase the RSF or ET on tire processors.

Captive Landfill: There is only one captive landfill in the Metro region and the likelihood of a second one being built is minimal. The captive landfill only handles waste from a single generator that transports waste directly to the landfill and owns the landfill. They are not using Metro's system or benefiting from the system. Thus, RRS recommends that any potential policy changes do not result in charging RSF or ET on the materials going to the captive landfill.

Useful Material: Useful material is a broad category in Metro code and the materials themselves are not well defined. The approval of some useful material designations depends on a secondary regulatory authority (Oregon DEQ or Washington counties). The secondary approval is based on physical properties, not benefits or 'use' to Metro or the environment. The type of material eligible for useful material exemptions has grown over time and the number of tons have also grown over time. The current code and policy does not always result in a highest and best use incentive for useful materials. Stakeholders interviewed for this report question the equity of



some useful material exemptions. Research into other states and jurisdictions show that Metro's system is unique to the region. The research also identified potential concerns about health and safety related to some of the approved material. Thus, RRS evaluated and recommends several potential alternatives around the useful material exemptions. The recommendations have the potential to increase equity, simplify the code language, and increase environmental benefit of the RSF and ET exemptions.

Auto Shredder Residue 'auto fluff': Auto Shredder Residue is a subset of 'useful material'. Due to the long history of auto shredder residue exemptions in Metro, the unique physical characteristics of the material, its common use as ADC throughout the US, and the fact that it is consistently the majority of the exempted materials, RRS examined the justification for continued exemptions around the material separately. Auto fluff has been exempted from fees and taxes for more than two-decades in Metro. The residue is used throughout the region and country as alternative daily cover and provides a use for a material that cannot be otherwise recycled or re-used. There is only one significant processor in the region, who also competes on national basis for materials. The long-time historical relationship, the clear definition of the material, the competitive nature of the business, and the beneficial use it provides to landfills support continuing the RSF and ET exemptions for the material. While RRS is not recommending significantly changing the exemptions around auto shredder residue, RRS provides an analysis of potential alternatives that would impact the policies around auto fluff.

Incentive Discussion

RRS conducted an evaluation of two alternative policies (commodity based and recovery rate based exemptions) directly aimed at changing the incentive structure to support increased recovery.

Under the current system Metro uses the RSF and ET exemptions and reductions as a tool to provide economic incentives for diversion and reduced disposal. For recyclables and organics processors, the incentives help to keep the gate fees down while simultaneously encouraging increased recovery rates. For these processors, lower recovery results in higher residuals which are subject to the full fees and taxes. Among dry waste processors, auto shredders, and tire processors, the policies also help to keep gate fees down which encourages diversion and supports the processors. However, the exemptions do not directly encourage increased recovery rates as residuals (auto fluff, shaker screen fines, and tire processing residual) are all exempted from fees.

It could be argued that the current exemptions provide a reverse incentive to recovery for these processors and a *higher* fee on residuals could help to drive recovery. At the same time, materials that are useful at a landfill, and are not disposed in a landfill, could be discounted by landfill operators, maintaining at least a

small incentive for processors²⁸. RRS does not recommend levying a higher than full rate fee on residuals. Although the increased rate could provide an incentive for recovery, it would increase overall processing costs and potentially hurt businesses in the region. Under the current system there is a cost to residuals (transportation, handling fees at the landfill) that acts as a small economic incentive for recovery. And of course, any recovered materials that can be sold as commodities are incentivized by the commodity markets themselves.

TOP 4 OPTIONS

RRS evaluated a total of nine potential alternatives to the RSF and ET exemptions and reductions. The range of options covered a spectrum of possibilities from ‘do nothing’ all the way to removing the exemptions and reductions on all materials. Each of the options was designed to improve upon the challenges of the current system in some way or another and each has trade-offs that must be considered. Under the evaluation, the alternatives were scored on five criteria; public benefit, waste reduction / diversion, simple and transparent, equity, and industry acceptance. RRS ‘weighted’ each scoring category in the evaluation and calculated the total weighted score²⁹. The higher the weighted score, the more beneficial the policy was deemed to be overall to the region. While the scores were used to help identify which option rose to the top of the evaluation, RRS also relied on data gathered during the project research along with industry experience to make a final recommendation for Metro. The evaluation criteria and a brief description of each are included in Figure 5.1.

Figure 5.1: Evaluation Criteria

Category	Description
Public Benefit	To what extent does the policy provide a benefit to the residents and businesses located in Metro
Waste Redux / Diversion	To what extent does the policy lead to increased recycling and waste reduction
Simple and Transparent	Is the code and administration of the code and policy easy to understand and transparent for actors in the region (does not evaluate the ease with which Metro can administer the policy)
Equity	Does the policy create a level playing field for all actors in the Region

²⁸ For example, if a landfill operator accepts auto fluff that will be used as ADC, the landfill operator has an operational incentive to keep rates for the material down. The lower gate rates would be used to drive more targeted materials through the gate. The same could be said for crushed glass as drainage or other materials used productively in landfill operations.

²⁹ Changing the weights will significantly change the ranking of the recommendations. For instance, if the scores are weighted heavily toward industry acceptance, then the Status Quo option scores higher. If they are weighted more toward Waste Reduction / Diversion, incentive based exemptions rises toward the top. RRS recommends the current weights, ranks, and recommendations as a starting point for future Metro policy discussions.

**Industry
Acceptance**

What is the potential acceptance (or rejection) by the regulated industries in the region

All nine alternatives, their evaluation, and scores are included in the appendix of this report. The top four recommendations, in ranked order, are discussed in detail below.

Option 1: *Two Tier System (Full and Reduced Rates) with Exemptions for Tire Processing Residuals and Auto Fluff.*

Option 1 balances the aim of increased clarity and equity in the code with a policy that has the potential to increase waste reduction and diversion and maximize public benefit. Under this option Metro would allow only two narrowly defined materials: Automobile Shredder Residual and Tire Processing Residual, to be exempt from RSF and ET. Both materials have historically been exempt in the region, and the current code allowing the exemptions was written with the specific materials in mind. The exemption would be based on the material type, not material use at the landfill. This change would help to increase the clarity of the code and reduce issues with verification that the materials are ‘in fact’ being used productively at the landfill. By exempting these specific materials Metro would continue to support infrastructure around diversion, benefit the public. The two material classifications make up approximately 74% of the total exempted materials (on an annual average basis) and continuing the exemption would limit market disruption.

All other ‘useful materials’ would be eligible for *reduced* rates (not exempted from RSF and ET). Similar to the current reduced rate code language, the reductions would be based on the incoming material type. The reduced RSF and ET would be assessed regardless of material use on site. This change would remove the need for verification that materials are ‘in fact used’ productively at the landfill. Landfills would be allowed to charge gate fees on the materials as they see fit. The standing list based on incoming material type would eliminate the reliance on an unaffiliated agency’s approval for exemption, and make it clear to generators and landfill operators which materials do and do not qualify for reduced fees. It is recommended that the standing list materials are clearly and narrowly defined to avoid ‘free riders’. Also, in order for an eligible standing list material to review the reduced rate, the disposal site would need to gain Metro approval to charge the reduced rate.

Under this recommendation, RRS suggests that the standing material list includes all materials that currently receive exceptions: sandblast grit, filter cakes, refractory brick, crushed glass, roofing waste, and shaker screen fines. Each material in the standing list would need to be defined in the code. The code would be written to require that Metro revisits the list on a regular basis³⁰. Metro would have the authority to modify the list, but any modification adding or removing a material would need to go through a public

³⁰ RRS recommends that Metro work with the regional stakeholders to identify an appropriate duration for the standing list review. A stakeholder suggested duration is 5 years as it would allow enough time for the private sector to re-coup costs on investments while allowing Metro reasonable flexibility in changing the list.



process. The process of approval for the standing list will help to avoid additional material types from receiving the reduced fee rates without working through Metro's process. The reduced rate level will continue to provide an incentive for processors, as well as an incentive for diversion for generators. It will also, to a lesser extent, provide a small incentive for increased recovery rates among dry waste processor and MRFs that generate crushed glass (residuals would now cost slightly more to dispose of, encouraging increased recovery). The reduced rate, as opposed to full fee, will avoid major economic impacts to generators currently receiving exemptions.

The final change includes modifying the code to define captive Landfill and Dredge and clarifying the fee status on dredge spoils and captive landfill materials.

Option 2: *Limited Exemptions based on Incoming Material (Standing list).*

Option 2 continues three tiers of rates (full, reduced, and exempted) but undertakes changes to the code to simplify the language and reduce issues related to approval of materials by an unaffiliated agency (Oregon DEQ ADC approval). Under the option, Metro would define a standing list of materials that can receive exemptions. The exemptions would no longer be based on material use but instead be based on material type. The material types on the defined list are set by Metro. As in Recommendation 1, the standing list would be revisited on a regular basis and would be subject to potential changes in the future. Basing the exemptions on material type, not use, is similar to the policies in other states and jurisdictions and helps to simplify and increase clarity of the code. It is up to Metro to evaluate the standing list to ensure that there is a reasonable justification for exemptions (public benefit, environmental protection, waste diversion).

The initial standing list materials would include only three materials: Tire processing residual, auto shredder fluff, and dredge. Both auto fluff and tire processing residuals have historically been exempt in the region, and the current code allowing exemptions has been written with the materials in mind. As written earlier in this chapter, RRS believes there is a justification for continuing these exemptions in the future. Other materials currently exempted for use as ADC including crushed glass, shaker screen fines, roofing waste, and filter cake materials, would no longer be exempted from Metro fees and taxes. The policy change would not prohibit landfills from using these materials productively in landfill operations. If the landfill chooses to do so they could provide a gate fee incentive to the generator or hauler for the selected material. The gate fee incentive would help landfills use economic incentives to drive desirable materials through their gates. Under this scenario, it is anticipated that Metro would face significant opposition from some generators and perhaps by some landfill operators as well.

Option 3: *Commodity Based Exemptions.*

Unlike the first two options, the commodity based exemption policy would not address issues around the clarity of the code. It would however, be a fully equitable, market based solution, in which Metro Council

would not ‘pick’ who gets exemptions and discounts. The policy would increase the public benefit to the region through increased waste reduction and diversion. Most significant, the commodity based exemptions would transition Metro to incentives that support highest and best use diversion of commodities. It would also remove the outside parties (Oregon DEQ and counties in Washington) from the determination of what is approved. The challenge with the commodity based exemption arises in that it is a major departure from past Metro practices and would be an innovative approach requiring significant build-up, planning, and monitoring to ensure success.

Under this option, Metro would no longer base the exemptions on material use. Instead Metro would provide exemptions if:

- D. The processor (i.e. MRF, auto shredder) *pays* the generator for the material they receive / process, or;
- E. The processor can sell the recovered commodity for a value above \$0.00, or;
- F. The disposed materials are tire processing residuals.

Conversely, if the processor charges a gate fee for processing, then the non-saleable residuals *cannot* be exempted from the RSF and ET. As with recommendations 1 and 2, the code would be modified to define Captive Landfill materials and Dredge and clarify the fee status on both.

Option 4: Status Quo with improvements

The fourth highest scoring option is to keep the status quo and implement the improvements to the current policy recommended in the next section of this report. The policy justification for the option is that while the current system is not perfect, it has been in place in some form or other for multiple decades and is helping to support diversion and improve the environment in the region. Metro has the option to adopt several of the modifications suggested in this chapter to improve the administration and clarity of the policy. Issues related to oversight, growing tonnages and types of exempted materials, lack of equity for dry waste processors, and mixed incentives would not be addressed.

Impact on Exempted Materials

Although Metro’s current codes and policies are based around the concept of material use, not material type, each of the proposed changes has the potential to impact materials that are currently receiving exemptions. Figure 5.2 lists the materials that are currently receiving exemptions and how the different scenarios would impact the materials. A ✓ means the material could continue to be exempted, an ✗ means the material would no longer be eligible for exemptions. The figure displays the total tons of each material that received exemptions in 2015, and the portion of the total exempted tons attributed to each material.

Figure 5.2: Material and Tonnage Impacts of Potential Scenarios

	Auto shred residual (adc)	Captive landfill	Crushed glass (drainage)	Dredge (adc)	Filter cake waste (adc)	Mulite / refractory brick (adc)	Roofing waste (roads / landings)	Sandblast grit (adc)	Shaker Screen Waste	Tire residual
<i>Total Tons in 2015 (% total)</i>	75,846 (43%)	N/A	231 (<1%)	36,453 (21%)	248 (<1%)	1,846 (1%)	9,915 (6%)	4% (6,799)	14,110 (8%)	31,409 (18%)
Two Tier rates w/ tire processing residual / auto fluff exemptions	✓	✓	Reduced	Reduced	Reduced	Reduced	Reduced	Reduced	Reduced	✓
Exemptions based on Incoming Material	✓	✓	X	✓	X	X	X	X	X	✓
Commodity based exemptions	✓	✓	Depends	Depends	Depends	Depends	Depends	Depends	Depends	✓
Status Quo (with improvements)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

RECOMMENDATIONS

Based upon the research and evaluation of options, RRS recommends that Metro consider adopting Option 1, the two-tiered rate system with exemptions for auto fluff and tire processing residuals. RRS recognizes that each of the proposed options have both benefits to the region as well as drawbacks and that any change will have repercussions throughout the region. It is the opinion of RRS that Option 1 best meets Metro’s mission of benefiting the people and environment of the region, while simultaneously creating a code that is transparent, equitable, and easy to understand. Option 1 will minimize negative impacts by allowing many of the currently exempted generators to benefit from reduced fees, it will also create a standing list based on material type, not use, and will help to reduce confusion over what materials are (or are not) used productively in the operation of a landfill moving forward.

Limiting the number of exempted materials to a standing list of three materials (auto fluff, tire residual, dredge) in Option 2 significantly simplifies the code and increases the clarity of the code. However, it would have negative impacts on many of the currently exempted generators. RRS believes that Option 1 achieves many of the same goals as Option 2 with a smaller negative impact on the market and a slightly larger environmental benefit to the public. Option 2 puts Metro squarely in the position of picking ‘winners’ and ‘losers’ in the marketplace, and some of those choices would be vociferously opposed by currently eligible generators and perhaps some landfill operators as well.



Option 3 benefits the region and Metro by implementing an equitable system that relies on the market place to determine which generators can benefit from the exemptions (as opposed to Metro staff) . It also transitions Metro toward a system of incentives based on higher and best use. However, the challenges in managing and verifying the exemptions, as well as the potential confusion around how the code is implemented, led RRS to score the Option lower than Option 1 or 2.

Finally, the fourth highest ranked option, Status Quo, offers benefits to Metro in that the current system *does* encourage diversion and benefit the region. The benefits are countered with the fact that it would not ameliorate any of the issues outlined in the 2006 report or in this report. If Metro prefers Option 4 and chooses to maintain the status quo, RRS recommends several improvements to the current code and policy. Please note that RRS recommends that Metro consider adopting the improvements to the system under any chosen option.

HIGH IMPORTANCE

Add New Definitions to the Code: To reduce confusion around the terminology in the code and to clarify overlaps with state regulations and statues in Oregon and Washington, RRS recommends including additional definitions in Metro code. The recommended terms are:

Alternative Daily Cover: Specify what alternative daily cover is, in general, and relate the definition to approval by OR DEQ and Washington health departments. An example of a potential definition is ‘A cover material placed on the surface of the active face of a municipal solid waste landfill at the end of each operating day to control vectors, fires, odors, blowing litter, and scavenging. Materials accepted for ADC must be approved by the appropriate state agency, for example; OR DEQ in Oregon or jurisdictional health departments in Washington state.’

Beneficial Use: Oregon and the three states surrounding Oregon (WA, ID, CA) all have beneficial use determinations, allowances, or definitions. Locally, Metro’s exemptions are based around ‘useful material’ not ‘beneficial use’. This slight difference in language has the potential to cause confusion for generators and landfills. RRS recommends that Metro include a definition for ‘Beneficial Use’ materials that clearly delineates it from ‘useful materials’ and highlights the importance of the two designations.

RRS recommends that Metro consider adding definitions for *Auto Shredder Residue* (Auto fluff) and *Shaker Screen Fines* into code.

Codify Historic Exemptions: In practice, Metro exempts dredge spoils from RSF and ET as they are generally dewatered outside of the Region. Additionally, Metro exempts materials from Captive Landfills as the materials never enter the Metro system. Neither exemption is referenced in code. RRS recommends amending the Metro code to define Captive Landfills and to clarify the fee status on dredge spoils and captive landfill materials.

Increase Transparency: In addition to several states and local jurisdictions stressing the importance of transparency in effective regulation, some of the interviewed stakeholders had perception issues that could potentially be allayed through increased transparency. Thus, RRS recommends that Metro undertake efforts to share the details of the fee and tax rate setting process with the regional stakeholders, and improve the overall transparency of the program. This includes publishing information such as tonnage data on exemptions and discounts once a year. Also, paper trails documenting decisions can be shared with stakeholders supporting transparency. This will maintain creditability and trust³¹.

MEDIUM IMPORTANCE

Review management and transportation fees charged by landfills on ‘useful’ material: Under the current code landfills are prohibited from charging a disposal fee for useful materials that are ‘in fact used’ in the operations of the landfill. However, in practice landfills do charge transportation or management fees on the materials as a way to recoup their costs. By working with their partner landfills Metro would be able to gain a greater understanding of what the management fees and charges are, how they are assessed, and how they relate to the exemptions and discounts.

Increased Reporting on Reduced Fee Materials: RRS recommends that Metro increase the data collection and data review surrounding materials that are getting reduced fees. More than one-sixth of the disposed materials in the Region are reduced fee, however data on the materials (types and sources) is limited. By working with landfill operators to obtain and review data on reduced fee materials Metro can work to ensure that the original intent of materials from one-time non-recurring events are all that qualify for the reduced fees.

Establish a working group to evaluate the allowance of wall board and gypsum fines in Alternative Daily Cover: Several landfills in the region have approval from OR DEQ to use shaker screen fines containing gypsum and wall board particles as ADC. However, local stakeholders, national companies, other states, and the US EPA³² have noted concerns about potential health and safety

³¹ For example, several stakeholders expressed their belief that the reason Metro is interested in adjusting the code is to increase revenue. However, from Metro’s perspective any change would be revenue neutral. By openly sharing information about the revenue and rate process, posting information about the process and inviting stakeholders to be observers, and clearly highlighting the impacts of changes, Metro can help to reduce concerns about the motivation behind their activities. Alternatively, if there is a revenue issue at Metro, Metro should be upfront with the regional stakeholder to share the concerns and openly discuss all potential options for increasing revenue and charges.

³² For example, the *Policy Options White Paper - Promoting Greater Recycling of Gypsum Wallboard from Construction and Demolition (C&D) Projects in the Northeast, September 2010* study undertaken by Northeast Waste Management Officials’ Association (NEWMOA) and the U.S. Environmental Protection Agency reported that ‘Residuals containing gypsum



risks resulting from the use of these materials as ADC. RRS recommends that Metro convene a working group to discuss the science around the issue and determine whether or not shaker screen fines with wall board and gypsum should continue to be allowable as exempted ADC. The working group could include OR DEQ representatives, regional landfill representatives, experts in ADC, and dry waste processors from the region that do and do not collect shaker screen fines for ‘useful material’ exemptions³³.

Promote the availability of exemptions and discounts: In order to ensure that the current (and any future changes) are equitable and fair for all actors in the region, RRS recommends actively promoting the availability and qualifications for the exemptions and discounts to all eligible entities. By sharing the information about the exemptions and discounts, Metro can help create a level playing field for all actors in the region and improve the equity of the current system³⁴.

LOW IMPORTANCE

Investigate an ISO 14001 Environmental Management System (EMS). An EMS is a regulatory framework for solid waste management providing a culture of continuous improvement and new approaches to managing waste and recyclables. Metro could use EMS to help cost-effectively address environmental issues and concerns in operations. EMS would adopt a plan, do, check, and act management cycle, which would help Metro evaluate environmental impacts specific to programs and operations, prioritize them, and assign objectives and actions to address them.

Adopt new administrative procedures for promulgating rules. Metro recently adopted changes to the code clarifying the adoption and issuance of administrative procedures and performance standards would help to increase clarity of the code. The changes included an increase in transparency by requiring Metro to provide public notice comment on any substantial amendments to administrative procedures. RRS recommends that Metro continue moving forward with the proposed changes and develop and share their process explaining how they implement their fees and tax exemptions and reductions

wallboard fines combined with conditions inside a landfill can create hydrogen sulfide gas. All of the NEWMOA states have experienced public health and/or nuisance problems with hydrogen sulfide gas at landfills that use C&D residuals.’

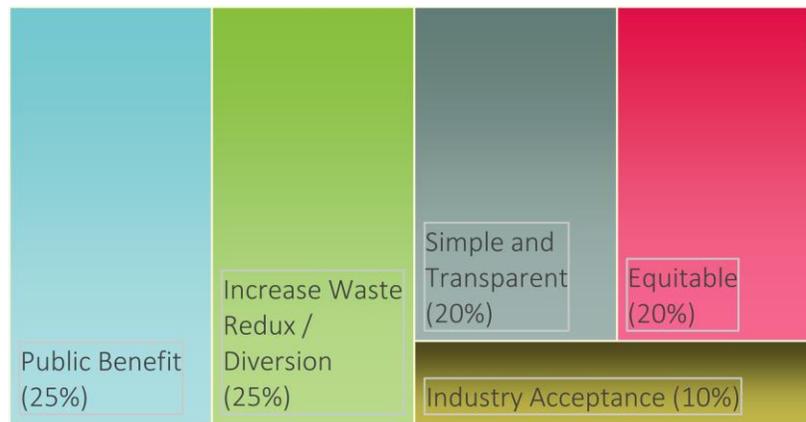
³³ This working group could potentially be a sub-committee of the SWAC tasked with reviewing the RSF and ET policies.

³⁴ If an eligible entity generator is aware of the RSF and ET exemptions but chooses not to apply for them, that is an equitable system. Likewise, Metro can help keep the competition between landfills for waste contracts fair by ensuring that all actors know about the fees and charges as well as the potential for exemptions and discounts.

APPENDIX 1: ALTERNATIVE OPTIONS

Prior to adopting a change in policy, it is important for Metro and the SWAAC to clearly identify the aim of the new policy. The RRS evaluation assumed that the goals of Metro are relatively evenly divided between the main evaluation criteria (Public Benefit, Increase Waste Reduction / Diversion, Simple and Transparent, Equitable)³⁵ with less of an emphasis on industry acceptance. The top four options were based on the relatively equal weighting of the policy criteria. The weights represent RRS’s opinion on the relative value of different scoring criteria to Metro based on Metro’s mission statement and published reports. The weights and scores were developed by RRS staff without input from Metro. The scores and ranking were one tool used by RRS to develop a final recommendation. RRS also relied on the data gathered during the project and the project team’s industry experience to make a final recommendation to Metro. Figure A.1 displays the ‘weights’ used by RRS in the criteria ranking.

Figure A.1: Evaluation Criteria



If Metro decides that Waste Reduction and Diversion is the primary aim of the of the policy change, then Metro would be best served by adopting a policy alternative that incentivizes recovery despite. On the other hand, if a simple and transparent code is most important to Metro, the organization should adopt a policy that moves the region in that direction. Figure A.2 displays the ranked comparisons, the individual scores, and the total average weighted scores for all nine of the alternative options.

Figure A.2: Ranked and Scored Policy Options (1 lowest score, 5 highest score)

³⁵ With the exception of Industry Acceptance which while significant, is assumed to not be the major driver in Metro policy decisions.

Option	Public Benefit	Waste Redux / Diversion	Simple and Transparent	Equitable	Industry Acceptance	Total score
Two tier rates with tire processing residual and auto fluff exemptions	3	4	4	3	4	3.55
Exemptions based on incoming material (standing list)	4	3	4	3	3	3.45
Commodity based exemptions	5	4	1	4	2	3.45
Status quo	3	3	3	4	5	3.40
Recovery rate based exemptions	4	5	1	3	3	3.35
Two-tier rates	3	3	4	4	2	3.30
Limited exemption categories for ADC	4	3	3	3	3	3.25
Remove all exemptions and reductions on disposal	2	2	5	5	1	3.10
Remove exemptions on disposal except for tire processing residuals	3	3	4	2	2	2.90

Although Metro’s current codes and policies are based around the concept of material use, not material type, each of the proposed changes has the potential to impact materials that are currently receiving exemptions. Figure A.3 lists the current materials that are receiving exemptions and how the different scenarios would impact the materials. A ✓ means the material could continue to be exempted, an X means the material would no longer be eligible for exemptions. The figure displays the total tons of each material that received exemptions in 2015, and the portion of the total exempted tons attributed to each material.

Figure A.3: Material and Tonnage Impacts of Potential Scenarios

	Auto shred residual (adc)	Captive landfill	Crushed glass (drainage)	Dredge (adc)	Filter cake waste (adc)	Mulite / refractory brick (adc)	Roofing waste (roads / landings)	Sandblast grit (adc)	Shaker Screen Waste	Tire residual
<i>Total Tons in 2015 (% total)</i>	75,850 (43%)	N/A	230 (<1%)	36,450 (21%)	250 (<1%)	1,850 (1%)	9,920 (6%)	4% (6,800)	14,110 (8%)	31,410 (18%)
Two tier rates with tire processing residual and auto fluff exemptions	✓	✓	Reduced	Reduced	Reduced	Reduced	Reduced	Reduced	Reduced	✓
Exemptions based on incoming material	✓	✓	X	✓	X	X	X	X	X	✓
Commodity based exemptions	✓	✓	Depends	Depends	Depends	Depends	Depends	Depends	Depends	✓
Status Quo	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Recovery rate based exemptions	Depends	✓	Depends	Depends	Depends	Depends	Depends	Depends	Depends	✓

Two-tier rates	Reduced	✓	Reduced							
Limited exemption categories for ADC	✓	✓	✓	✓	✓	✓	✓	✓	X	✓
Remove all exemptions and reductions on disposal	X	✓	✓	X	X	X	✓	X	X	X
Remove exemptions and reductions on disposal except for tire processing residuals	X	✓	✓	X	X	X	✓	X	X	✓

The remainder of this section discusses each of the nine evaluated options, their scored criteria, benefits, and concerns.

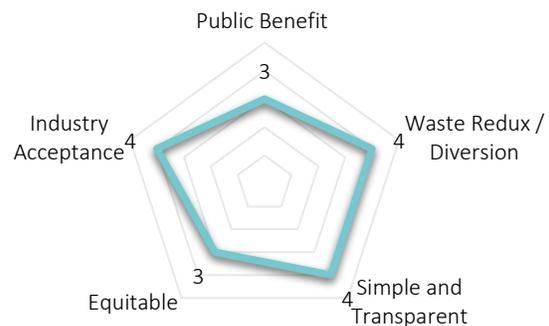
Two Tier Rates with Tire Processing and Auto Fluff Exemptions

Score: 3.55

Description: Metro removes all exemptions for 'useful materials' other than exemptions on disposed tire processing residuals and auto fluff. At the same time, Metro expands the reduced fee and tax materials to include the 'useful materials' (those currently getting exemptions), reduced material are based on a standing list and not 'use' at the landfill.

Benefits:

- Metro does not need to verify if materials are in fact used at the landfill
- Increases clarity of code by adopting the standing list
- Reduces reliance on unaffiliated agency for approval of use
- Continues Metro's long standing support of tire processors and auto shredders
- Allows other currently exempted generators to get reduced fees and keep operating costs down
- Allows for flexibility by re-visiting standing list on a regular basis



Challenges:

- Does not significantly increase waste reduction or diversion over current system

- Would increase costs for some currently exempted parties
- Could be met by industry resistance

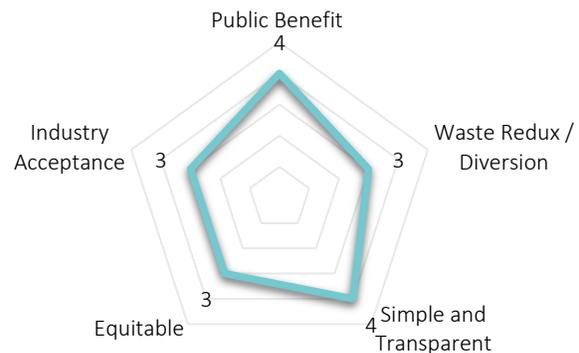
Exemptions Based on Incoming Material (Standing List)

Score: 3.45

Description: Metro establishes a standing list of 'useful materials' that is based upon incoming material type, not use at the landfill. Exemptions in the near term are provided for auto fluff, tire processing residual, and dredge material. The standing list can be updated in the future to accommodate the changing waste stream, support the environment and the region, and to meet industry and generator needs.

Benefits:

- Simplifies current system
- Does not rely on use at the landfill making it easier for Metro to monitor
- Reduces reliance on unaffiliated agency for approval of use
- Allows for changes to the list of exempted materials and code
- Can be updated to reflect changing industry and waste stream
- Continues Metro's long standing support of tire processors and auto shredders



Challenges:

- Exempted generators that would no longer get exemptions would see their operating costs increase
- These same generators would actively oppose Metro on the proposed changes
- Could negatively impact jobs and businesses in the Region
- Perception of Metro picking winners and loser in the market place
- Does not directly increase waste reduction or diversion over current levels

Commodity Based Exemptions

Score: 3.45

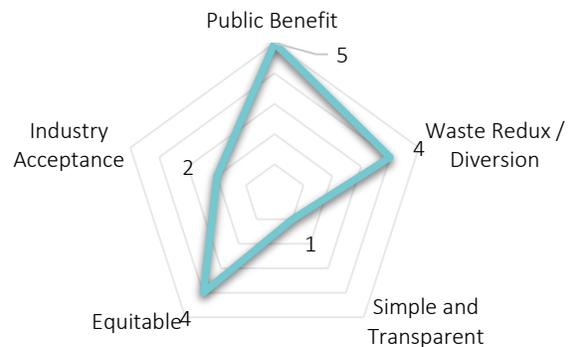
Brief Description: Under this policy option Metro would move away from material based exemptions and instead base exemptions around commodity values. Metro would provide approval for exemptions if **a)** The processor (i.e. MRF, auto shredder) pays for the material or **b)** The processor is able to sell the recovered material for a value above \$0.00. **c)** The disposed materials are tire processing residuals. Conversely, if the processor charges a gate fee for processing, then the non-saleable residuals cannot be exempted from the RSF and ET.

Benefits:

- System has the potential to help drive recovery and diversion through changing how incentives are used
- Market based solution
- Supports processors that are creating value and recovered commodities
- Creates a level playing field for all actors
- Would allow many of the current exempted generators to maintain the status quo
- Innovative system that could position Metro as a leader
- Results in a transparent process (if administered properly)

Challenges:

- Could be challenging to administer
- Would require significant re-writes of the code
- Currently exempted parties that would no longer qualify would see their operating costs increase
- The same parties would potentially oppose the change
- No, or very few, working models to copy
- Would require more reporting from exempted parties to verify commodity values / receipts



Statue Quo

Score: 3.40

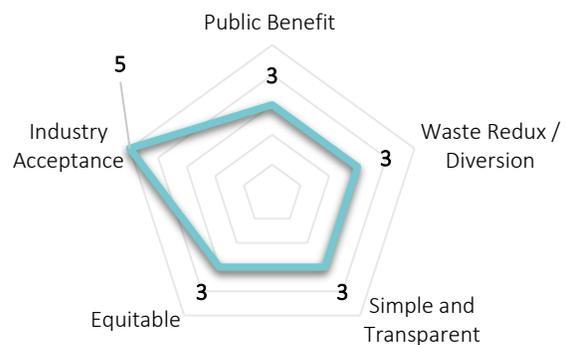
Description: Adopt recommended improvements to existing code. Does not impact the material types or amounts receiving exemptions or discounts.

Benefits:

- Easy to implement
- Many stakeholders favor this option
- Continues to support use of recovered materials for ADC and the existing recycling infrastructure in the Region
- Improvements to code can increase clarity and equity over current situation

Challenges:

- Does not address concerns around secondary party approval
- Relies on determination of 'use' at the landfill, not incoming material qualities, for approval
- Does not address concerns that current code allows for certain generators to game the system
- Does not improve the current system help to the region meet its diversion or environmental goals



Recovery Rate Based Exemptions

Score: 3.35

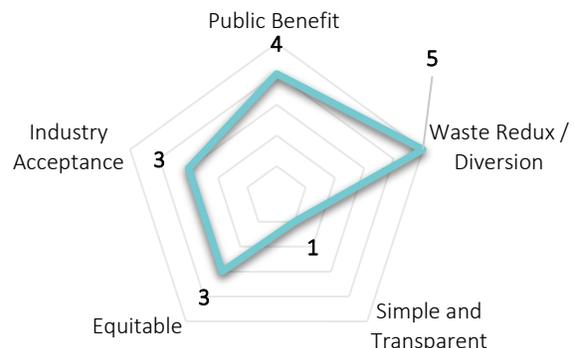
Brief Description: Exemptions and discounts are based on recovery rates at the processor, not material type or use. The system would be accompanied by a long-term phase out of the current exemption system. Metro would set the discounts and exemptions around recovery goals by processor type. For example, if a dry waste processor hits an agreed upon average recovery rate target for a set time period (for example 80% average over a month), the residuals for that month are subject to reduced fees and taxes. If the same processor hits a high recover rate (for example, a 90% recovery rate), all residuals are reduced, not just discounted. This policy would be a significant departure from the current code and would require a long development and ramp up period along with major changes in administration and verification. Tire residuals would continue to be exempt from fees and taxes.

Benefits:

- Potential to have the largest impact on waste reduction and diversion
- Transitions to an incentive system that encourages increased recovery
- Rewards companies for helping Metro to meet its regional goal
- Creates a level playing field for all processors

Challenges:

- Not a fully developed system yet, Metro would need time to develop the details
- Long implementation and ramp-up period needed
- Potential variations in annual exempted / discounted tonnages increase difficulty of budgeting process
- Would require major changes to code and administration of the code
- Potentially challenging to verify and monitor



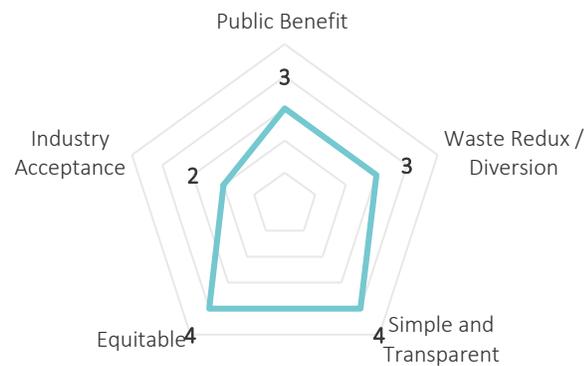
Two-Tier Rates

Score: 3.30

Brief Description: Reduce from three rate categories to two, full fees and taxes and reduced fees and taxes. All materials currently exempted are eligible for reduced rates and would be included in a standing list. RSF and ET reductions are material based, not usage based.

Benefits:

- Metro does not need to verify if materials are in fact used at the landfill
- Increases clarity of code by adopting the standing list
- Reduces reliance on unaffiliated agency for approval of use
- Allows currently exempted generators to get reduced fees and keep operating costs down
- Allows for flexibility by re-visiting standing list on a regular basis



Challenges:

- Does not significantly increase waste reduction or diversion over current system
- Would increase costs for currently exempted parties
- Could have significant negative impact on some generators depending on the level of reduced rate
- Could be met by industry resistance

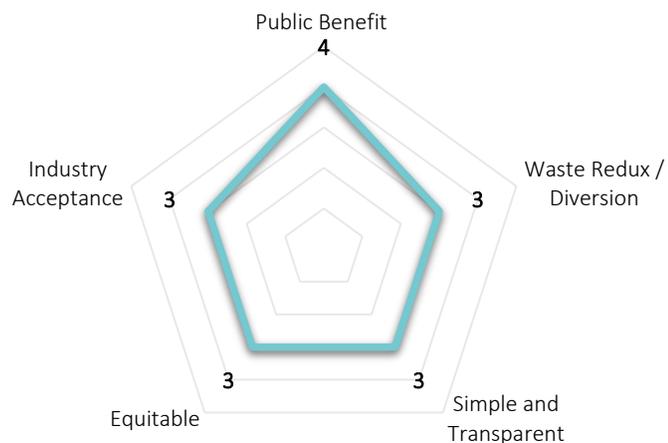
Limited Exemption Categories for ADC

Score: 3.25

Description: Depending upon the outcome of Wall Board / Gypsum working group suggested in the Improvements portion of the report, Metro would remove the allowance for shaker screen fines from dry waste processing to be used as ADC. Other materials used as ADC or managed as 'useful materials' at the landfill would continue to be exempted.

Policy Justification:

- Eliminates potential health and safety concerns around hydrogen sulfide and ADC
- Reduces concern that ET and RSF exemptions are encouraging lower rates of dry waste recovery and higher proportion of shaker screen fines.
- Multiple dry waste facilities successfully operate in the region without taking advantage of the exemptions demonstrating infrastructure can exist without the exemptions
- Does not impact majority of exempted materials (tons) and generators (businesses)



Challenges:

- Will be met with strong industry opposition
- Negatively impacts generators of shaker screen fines by increasing their processing costs
- Does not significantly increase clarity or equity of codes
- Perception that Metro is picking winners and loser in the marketplace and it is not a level playing field
- Would go against DEQ approval of shaker screen fines as ADC

Remove All Exemptions on Disposal

Score: 3.1

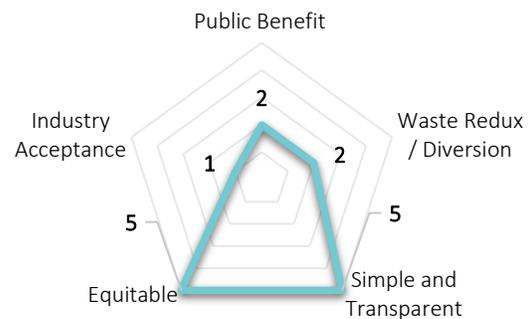
Brief Description: Metro defines disposal as 'permanently placing a material in the active cell of a landfill'. Under this scenario Metro does not allow for any exemptions on disposed materials (including tire residual) or ADC. Metro would continue to allow for exemptions on materials used as drainage and road base at the landfill. The scenario would include a long term phase in to allow industry to adjust to the fee and tax rate changes.

Opportunities:

- Creates an equitable system
- Code and language around it is clear
- Encourages processors in the region to maximize recovery and minimize residuals

Challenges:

- Would be opposed by all parties currently receiving exemptions
- Would disrupt the tire processing infrastructure in the region
- Does not encourage the use of non-virgin materials for daily cover
- Requires Metro to monitor material use at landfills



Remove All Exemptions on Disposal except for Tire Processing Residuals

Score: 2.9

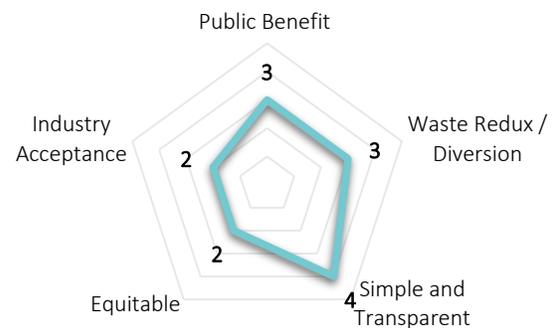
Brief Description: Metro defines disposal as 'permanently placing a material in the active cell of a landfill' and under this definition Metro does not allow for exemptions to RSF and ET for ADC. The policy would allow for materials used as drainage and road base at the landfill to qualify for exemptions. Under this scenario Metro would allow for exemptions on disposed tire processing residuals.

Benefits:

- Creates clear and concise code language
- Continues Metro's support of tire processing
- Encourages processors in the region to maximize recovery and minimize residuals
- Allows generators of materials used at a landfill but outside the active cell footprint to continue to get exemptions

Challenges:

- Would be strongly opposed by industries in the Region
- Could hurt certain processors or industries that rely on the exemptions
- Metro policy would not encourage the use of non-virgin materials for daily cover
- Requires Metro to monitor material use at landfills



APPENDIX 2: INTERVIEW FINDINGS

The following appendix contains the findings of the landfill, exempted party, and eligible party interviews. Figure A.1 displays the interview counts.

Figure A.1: Stakeholder Interview Summary

	Landfill	Exempted Party	Eligible Party
Counts	8 completed	12 completed	3 completed

The remainder of this appendix shared the interview findings.

LANDFILL INTERVIEWS

RRS staff conducted interviews with all eight regional landfills between November 30, 2016 and December 19, 2016. The interviews ranged in length from 20 minutes to just under 60 minutes. In some cases, the interviewee company had multiple attendees on the phone. The summary findings are shared below.

BACKGROUND

Materials accepted: The exempted materials accepted by the interviewed landfills included shaker fines, auto fluff, dredge, tire residuals, sandblast grit, asphalt singles, crushed glass and filter press cake. The most commonly exempted materials were auto fluff followed by shaker fines. One landfill reported that although they have accepted exempted materials in the past, they currently do not accept any materials that are receiving Metro exemptions.

Generators: The exempted materials came from dry waste MRFs (shaker fines and asphalt shingles), auto processors (auto fluff), industrial customers (sandblast grit, filter press cake residuals), MRFs (crushed glass), and dredge companies.

Use: Landfills reported using the exempted materials mainly for alternative daily cover. Other, less common uses, included landfill pad, road bed, and to improve soil drainage. One company (managing three landfills) reported that they have a strict policy not to accept or utilize shaker fines as ADC.

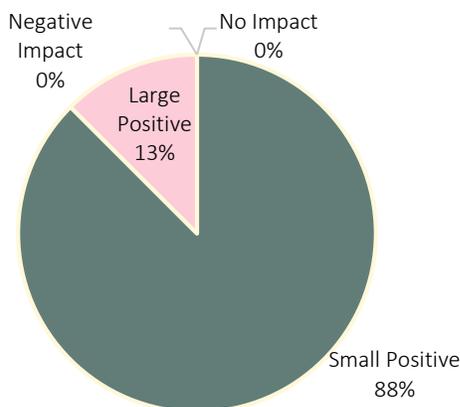
MARKETPLACE

The next portion of the interview asked respondents about the marketplace and the impact of the exemptions on their business.

Trends: The majority of landfill operators reported that they have not seen significant changes in the total tons of exempted materials accepted over the past several years, and they do not expect there to be significant increases in the near future. None of the landfill operators expected that the number of tons of exempted materials would be decreasing in the future. Half of the landfills reported that they receive more materials that could potentially qualify for exemptions than they are able to claim.

Impact of Exemptions: All of the landfills interviewed reported that the exemptions have a positive impact on their business, the one landfill that currently did not get exemptions reported that the exemptions have the potential to provide a positive impact in the future. Figure A.2 displays the distribution of responses.

Figure A.2: Impact of Exemptions on Landfill Business Operations



In general, the exemptions help keep costs down for the non-MSW materials that landfills need to manage their site. Other benefits included increasing revenues and helping the environment. Figure A.3 displays how the landfill operators reported that the exemptions help their businesses

Figure A.3: Benefits of the Exemptions

Reduce cost for ADC or other materials needed to manage site	63%
Reduce trucking impact	25%
Increase revenue	13%
Improve environmental stewardship	13%

An example of a response on the benefits of the exemption is provided below:

“The exemptions help reduce costs and truck traffic. Landfills are highly engineered and require materials that are not trash to operate, having the exemptions allow the operators to keep costs down for the beneficial use materials the landfills need to operate.”

Impact of Removing Exemptions: Conversely, all but one of the landfill operators (the one who is not receiving any exempted materials) reported that if Metro were to remove the exemptions that it would have at least a small negative impact on their business. While most interviewees reported that although it would hurt operations they could continue to operate in the region, one interviewee (representing two landfills) reported that the negative impact would be severe and cautioned Metro about removing the exemptions. The following quotes show the range of responses:

Example of ‘Small’ Negative Impact

“It would certainly hurt the customer and it could hurt the landfill operations. If the playing field is kept level, the landfill could handle the changes but they need to be equal for all actors.”

Example of ‘Medium’ Negative Impact

“It would put us at a competitive disadvantage and increase costs. It would turn into an additional tax. Without the exemptions there would be no incentive to keep stuff out of the landfill, we would need to use clean soil or other alternatives for ADC, and it would hurt diversion overall. However, it’s a pass through and there would be an adjustment period but we could weather the change.”

Example of ‘Large’ Negative Impact

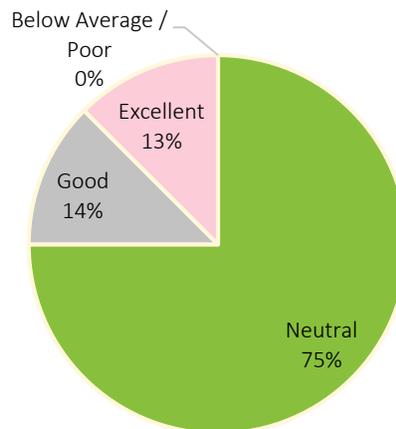
“It would hurt the business. We would get less materials that we could use as ADC through the gate and would need to go and get clean dirt mined from elsewhere, at a cost, to use as cover. It would slow down projects in the Region because generator costs would increase and it would decrease volumes at the landfills. Also, if the exemptions were removed we believe some businesses would move out of the Metro region to avoid paying the fees and taxes. It would stifle growth of businesses because growth with more tons would cost more money. We are convinced these negative results would happen because we have seen it happen in other markets, Metro needs to be aware of this.”

PROGRAM ADMINISTRATION

During the next portion of the interviews RRS asked the landfill operators to provide Metro with feedback about the administration of the RSF and ET policies.

Administration: The majority of landfills (63%) reported that they did not have any challenges or issues with Metro’s administration of the RSF and ET policy. One interviewee (representing multiple landfills) reported that it would improve the program administration to allow a particular material that is exempted at one landfill to be exempted at other landfills as well. They felt that this could potential also help with issues around equity. Figure A.4 displays the overall ratings of Metro’s policy administration.

Figure A.4: Overall rating of Metro’s Policy Administration



Clarity and Equity: All but one of the interviewees reported that the language and Metro Code around the RSF and ET exemptions and reductions were clear and understandable. The one landfill that reported they had confusion said that if they do run into issues they “can reach out to Metro to help clarify any confusion.” When it came to whether or not the exemptions and reductions were equitable, most respondents either reported that they thought they were equitable or that they assumed that they were. However, one interviewee that represented multiple landfills had concerns about equity. Their concern was based around the use of shaker fines as ADC. Their response is included below:

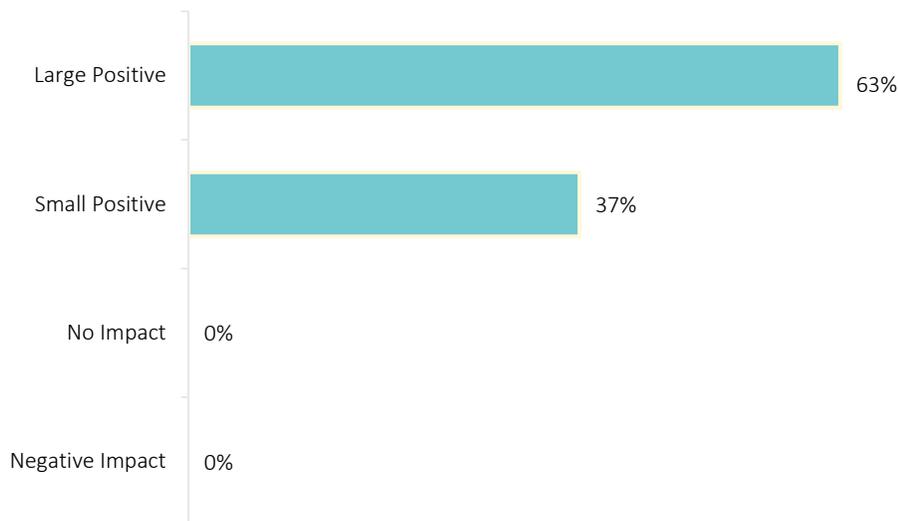
“Our company has a policy not to accept dry waste MRF fines (shaker fines) for ADC due to safety issues. There are multiple scientific studies showing the MRF fines have lots of hydrogen sulfide, when they get wet it can turn into a deadly gas and can kill

landfill employees, thus we do not allow MRF fines to be used as ADC. Other companies that are using these fines have a competitive advantage because they are not paying attention to health and safety like they should.”

OPEN-ENDED OPINION

The final portion of the interview asked respondents to weigh in on whether or not they thought the exemptions and reductions helped Metro provide benefits to the public, increase waste diversion, and improve the environmental quality of the region. All of the landfill operators believed that yes, the exemptions and reductions do have a positive impact on the region, the distribution of responses can be seen in figure A.5.

Figure A.5: Impact of Reductions and Exemptions on Region



The most common benefit the exemptions provide to the region was in replacing virgin materials as ADC in a landfills operation. By incentivizing generators to provide source separated useful materials landfills are able to conserve clean material that they would have to source elsewhere. Additionally, the landfills reported that the exemptions help to keep truck traffic down (less trucks needed to transport ADC), reduce pollution, drive environmental clean-up, and help keep materials out of the landfill. A few examples of responses include:

“The exemptions help us to beneficially use a material that would otherwise end up in the landfill. Also, without the exemptions we would need to bring two truckloads a day of ADC into the facility which would have a negative environmental impact from both a clean materials and truck pollution standpoint.”

“Shredder fluff helps to replace other sources of ADC. Fluff also is also better than soil alone, we get tons of rain and the shredder fluff helps improve the soil's draining ability.”

“Without the exemptions and discounts there would be less clean-up of contaminated soils, companies would not bring the soils to a landfill, they would just cap and leave it in place because it would be too expensive to landfill.”

Proposed Changes: Respondents were asked if they thought the changes to the Metro Code proposed by Metro in 2015 would help to improve clarity, equity, and relevance of the Code and help to meet Metro’s overall goals. The majority of landfills (63%) thought that the changes would not improve the administration of the Metro Code. One company, representing multiple landfills, did not fully support the proposed changes but thought that Metro should examine what qualifies as ADC and ensure that only materials that are safe can be used. Materials that are safe for use as ADC should continue to be exempted.

Finally, respondents were asked to provide Metro with their recommendation on what they should do about the fee and tax policy in the future. The majority of respondents supported the status quo and did not want to see Metro make significant changes to the language around the exemptions and reductions. Some of the open ended responses are included below:

“The spirit of the exemption should be to help drive waste diversion and keep stuff out of the landfill, the exemption should be utilized to benefit the Region and diversion, we believe the current exemptions on ADC are helping to do that.”

“Metro should not encourage non-best management practices by allowing facilities to use dry waste shaker fines as ADC, these materials can be toxic and are not safe. If a material can be beneficially used and is safe it should get an exemption or a discount

“If Metro wants to make changes, they should consider lowering the fees and taxes in general.”

EXEMPTED PARTY INTERVIEWS

RRS staff conducted detailed interviews with 12 of the 14 generators receiving exemptions to Metro’s RSF and ET. The interviews were conducted between December 7 2016 and January 16 2017. As with the landfills, in some cases, the interviewee company had multiple attendees on the phone. The summary findings are shared below.



BACKGROUND

Major Business Activities: The exempted parties' business activities included dry waste MRFs (4), tire processors (2), processor and exporter of recycled metal products, and industrial operations including ship building / repair, non-ferrous metal processor, steel foundry, computer chip manufacturing, and port and terminal (air and water) operations.

Materials Exempted: In addition to the recyclable and organics materials generated and diverted by the interviewees, the exempted materials generated included shaker fines, dredge, tire residuals, shredder residue or auto shredder residue, sandblast grit, asphalt singles, filter press cake, insulation-type material, foundry sand and castings. One company reported that they had been receiving exemptions for over two decades, the newest exemption was about 4 years old. One generator (a dry waste MRF) reported that they received exemptions for shaker fines for about 3 years but are no longer generating the material.

Use: Landfills are using the exempted materials mainly for alternative daily cover, road base, or back fill. One party receives the exemption on the materials they are sending to a 'captive landfill' and the materials are disposed in the landfill, they are not managed as a 'useful material'.

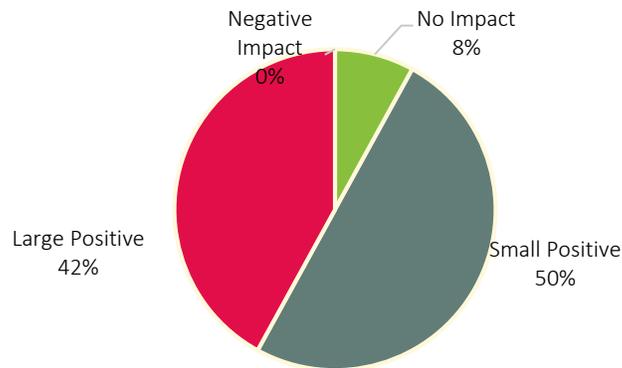
MARKETPLACE

The next portion of the interview asked respondents about the marketplace and the impact of the exemptions on their business.

Trends: About half (45%) of the generators thought that the amount of materials they generate that qualify for exemptions would be increasing a little bit in the future. On the other hand, 45% thought there would not be any change in the amount of materials they generate and 9% thought that the amount of materials they generate would actually be decreasing in the future. A number of interviewees reported that the generation of exempted materials depends on the market conditions in the region.

Impact of Exemptions: Only one interviewee reported that the exemptions did not have an impact on their business, this was the same interviewee that stopped getting exemptions on shaker fines a few years ago and no longer collects the exempted material. In total, 92% of the exempted parties thought that the exemptions had at least a small positive impact on their business. Figure A.6 displays the distribution of responses.

Figure A.6: Impact of Exemptions and Reductions on Exempted Party Business Activities



The most important impact of the exemptions on the businesses was that they help to reduce processing and / or operational costs. Other benefits mentioned included helping local businesses compete on a regional, national or even international marketplace, keeping gate fees down, allowing for investments in improved recycling processes and equipment, and allowing businesses to invest in other environmental programs. Some of the ways that the exemptions help support business activities in the region are highlighted below:

“They reduce the overall processing costs for a material that has no other value as a commodity, we looked to recycle it elsewhere but couldn’t find an outlet, the exemptions help us compete.”

“There really isn’t any value for wood or for the asphalt shingles we pull from the stream, without the exemption the cost to process the dry waste would be well above disposal and the exemptions help to drive diversion.”

“The current exemptions have a large, positive impact on our business and provide a significant benefit to the Metro region by increasing recycling rates and reducing the volume of materials disposed in landfills.”

The exemptions were especially impactful for the tire processors in the region, both tire processors reported that without the exemptions in place, it would be challenging to maintain their operations:

“It keeps costs down - there would not be a single tire processor left in the region without the exemptions, there is very little money to be made in the industry and margins are extremely tight, without the exemptions we couldn’t survive.”



Conversely, if Metro were to eliminate the exemptions, all of the parties currently receiving exemptions believed the action would have a negative impact on their business. The potential impact ranged from ‘It would increase costs at the gate for processing and hurt our business’ to ‘It would shut us down’ and ‘we may not be able to operate in the Portland.’ One of the dry waste processors believed pulling the exemptions could increase their gate fees by as much as 50-70%, and another dry waste MRF reported that they would have to re-evaluate whether or not they continue to operate their facility in the Region without the exemptions. A third dry waste processor reported that changing the exemptions around ADC would be a ‘huge problem for our company’ and that without the exemptions there ‘would be very little recycling in the Metro area’. It is worth noting however, that one dry waste processor reported that they were getting exemptions for shaker screen fines and discontinued the activity as they found that running the materials over a shaker screen and collecting the fines was ‘not a good investment for us.’ The same company said it would not be an issue if Metro discontinued the exemptions on ADC and said ‘We don’t really care if Metro stops the exemptions on the shaker screen fines as long as Metro makes it a fair level playing field for all actors.’

A brief synopsis of the responses to what the impact of eliminating the exemptions for their materials is provided below:

- *It would increase costs at the gate for processing and hurt our business.*
- *It would definitely negatively impact our bottom line; it would make it harder to compete in the market.*
- *Removal of the current exemptions would result in significantly increased operating costs for our firm and similarly situated recyclers*
- *It would shut us down.*
- *It would have a small negative impact.*
- *It would have a large negative impact on revenue, costs, and diversion.*
- *It would severely hurt business.*
- *We may not be able to operate in the Portland.*
- *It would have a significant negative impact and we are adamantly opposed to any changes.*
- *It would not impact the business.*
- *Without the exemptions we would close.*
- *The rates would go up and we would have less money to spend on other diversion programs.*

PROGRAM ADMINISTRATION

During the next portion of the interviews RRS asked the exempted parties to provide Metro with feedback about the policy’s administration.



Administration: All of the exempted parties reported that the policy reporting and administration were working fine with them and that there were no major challenges or issues with Metro. Some entities reported that they ‘do not deal directly with Metro’ so they had no input, while others reported that either they had ‘no issues at all’ and that ‘there are no major challenges’. One respondent reported that there were ‘no surprises and it’s pretty good’, the only complaints reported were ‘the recent discussion about dropping the exemptions’ and ‘trying to get the ADC certified is a very long process’.

Clarity and Equity: All but one of the interviewees reported that the language and Metro Code around the RSF and ET exemptions and reductions were clear and understandable. The interviewees generally reported that the policy is ‘clear and easy to understand from a generator’s perspective and it is well-understood by landfill operators’. The majority of generators believed that the system was equitable, however 17% of the respondents thought that there were some issues with equity. One issue reported was around the acceptance of shaker screens as ADC, the second was around whether or not all actors in the market place were aware of the exemptions, potentially giving advantages to certain actors. The issue surrounding shaker screens accepted in ADC is summarized in the quote below:

“Our company does not claim exemptions for shaker fines due to issues with hydrogen sulfide gas and safety. Not everyone is playing by the same rules and some companies claim these exemptions for a material that should not be used as ADC.”

Finally, the exempted generators were asked if they had any recommendations for Metro around the policy administration. While most respondents were content with the current policy administration, a few suggestions were provided including:

“Metro staff are trying to interject their own personal opinions and beliefs into the administration of the policies, they should not be doing this.”

“Metro could be more proactive in explaining the Metro Code, policies, and administration around them.”

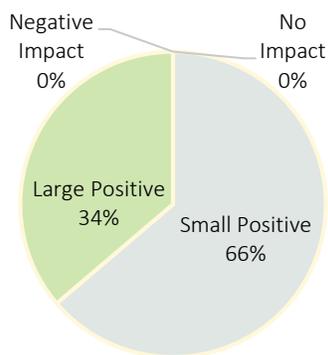
“Our firm encourages Metro not to make any changes to the exemption that would make it more cumbersome for generators or landfill operators.”

“Metro should do an audit at the landfill to make sure the materials are being used like they are supposed to.”

OPEN-ENDED OPINION

The final portion of the interview asked respondents to weigh in on whether or not they thought the exemptions and reductions helped Metro provide benefits to the public, increase waste diversion, and improve the environmental quality of the region. All of the respondents reported that the exemptions had a positive impact on the Region, and 34% reported that it had a large positive impact on the Region. The distribution of responses is shown in figure A.7.

Figure A.7: Impact of Reductions and Exemptions on Region



The generators believed that the exemptions help to drive waste diversion in the region both by providing a useful material at the landfill and also by keeping the costs down to process mixed dry waste. The exemptions reportedly help to support the overall recycling and diversion infrastructure in the Region, not just dry waste recovery. Additionally, the exemptions have significantly impacted the tire processing market helping to keep tires from becoming an environmental and health hazard in the region. Some of the other benefits included allowing companies to invest their savings in other environmental programs and providing a viable outlet for materials with no other option other than landfilling. Some of the input received included:

“Because the cost to landfill materials is so high in the Region due to the fees and taxes, the exemptions and discounts act as an incentive to drive diversion”

“If the exemptions were not there we would need to charge a lot more and the tires would not come to us, they would end up in the environment and there would be unsafe tire piles in the Region.”

“It helps to off-set the costs for processing the other materials and leads to more diversion overall, not just for the ADC.”



“Should be cut and dry and simple, the exemptions are encouraging landfills to replace a new clean material with one (shaker fines) that can beneficially use.”

Proposed Changes: Respondents were asked whether or not they thought the changes to the Metro Code proposed by Metro in 2015 would help to improve clarity, equity, and relevance of the Code and help to meet Metro’s overall goals. Just over half (55%) of the exempted generators thought that the proposed changes would not help meet Metro’s goals. Among those that believed the changes would help Metro meet their goals, the reasons included ‘it would help level the playing field for processors’ and ‘they did not impact us.’ One generator reported that:

It would be great if dredge and street sweeping qualified for more exemptions. This would help keep their costs down.

Among the parties that were opposed to the changes, the feelings of opposition were generally strong. Some of these generators believed that ‘There is not an issue with clarity or equity, the only reason Metro is considering the change is to increase revenue’. There is a perception among generators that Metro has been successful in diverting waste from disposal, and thus is losing revenue. In order to recoup some of these losses Metro is looking at expanding the tons they can charge RSF and ET on. One generator believes that the proposed changes not allowable due to OR state statues and reported that ‘the changes are illegal and should be stopped.’ And ‘Metro needs to look at the state law and interpret it correctly. If Metro changes the Metro Code, we will sue them, and we will win’. Another concern raised was that the exemptions and reductions are integral to Metro’s overall recycling and recovery infrastructure and that changing the policy could decrease overall recycling rates in the region.

Lastly, respondents were asked to provide Metro with their recommendation on what they should do about the fee and tax policy in the future. As with the landfills, the majority of respondents supported the status quo. However, one party believed that Metro should remove the exemption around shaker fines for ADC because of safety reasons and another wanted dredge and street sweeping allowed under exempted materials. A number of exempted parties thought that Metro needed to evaluate their program, fees, and taxes, and look for ways to reduce costs, not increase revenues. Two other parties suggested that Metro begin to look at other ways to incentive diversion, perhaps even considering adopting progressive fee and tax rates that are based around recovery rates, the higher the recovery rate, the lower the RSF and ET . Additionally, one party reported that any changes to the policy should only occur as part of Metro’s Regional Solid Waste Management Plan. Multiple respondents reported that Metro should continue the discussions with stakeholders prior to making any decisions. Examples of input shared by the parties that suggested Metro not change anything include:

“Leave as is, do not change. If Metro raises the fees, and we in turn have to raise the fee at the gate, it will devastate us.”

“if Metro wants to see dry waste processed, the incentive needs to remain in place until there are markets for other recovered materials.”

“Do not change anything - the exemptions help local businesses compete on a global market. The fees and taxes, if applied, would put Metro businesses at a disadvantage.”

“The RSWMP update process is the appropriate forum to analyze proposals to significantly alter longstanding policies related to recyclable materials because it provides predictability to regulated entities. Without long-term predictability, recyclers are less likely to invest in equipment and process upgrades. The result is reduced public benefits that would result from improved efficiency in recycling processes. The 10-year RSWMP time horizon and update process provide regulated entities with the predictability and transparency necessary to make investment decisions.”

ELIGIBLE PARTY INTERVIEWS

In addition to conducting interviews with landfills and exempted parties, RRS staff also spoke with generators that are eligible to receive exemptions but are not doing so. RRS completed interviews with 3 eligible parties between December 20 2016 and December 28 2016. The summary findings are shared below.

BACKGROUND

Major Business Activities: All three of the interviewees were dry waste processors. In addition to processing materials, two of the three eligible parties also run hauling operations.

Materials Exempted: All of the interviewees currently receive exemptions on recovered recyclables. All three could potentially receive the exemptions on shaker screen fines used as ADC, however none have chosen to do so. Two of the parties reported that they have not considered applying for exemptions and do not plan to do so, one reported that they have considered it but most likely will not do so. When asked to report on why they have not applied for exemptions, the responses included:

“We see both pros and cons of trying to get the exemption but the cons probably outweigh the positives. A company is either going to follow the rules or not, we have chosen to follow the rules and pay the fees and taxes.”

“Will never apply for exemptions on shaker screen fines, shaker screen fines are just garbage and should be subject to fees and taxes.”



MARKETPLACE

Impact of Exemptions: Similar to the Landfills and Exempted Parties, the Eligible Parties also believed that if they took advantage of the exemptions, they would have a positive impact on their businesses. The respondents believed that the exemptions could decrease costs and increase revenues. Despite this potential advantage, the parties still chose not to apply for exemptions, when asked to elucidate on why, the responses included:

“It could increase our profit margin slightly. However, we can operate without the exemptions and still make a profit. If a company cannot make their business model work without claiming the exemptions, they should just get out of the business and let other do it.”

“We could get the benefit but is it 'crap'³⁶.”

At the same time, all of the eligible parties also felt that their competitors were gaining a business advantage by getting the exemptions but that ‘there are other ways to make your business work without getting the exemptions for a material that isn't really being recycled’ and that the other businesses ‘are skirting the system’ and ‘not paying the taxes and fees they should be paying.’

PROGRAM ADMINISTRATION

During the next portion of the interviews RRS asked the exempted parties to provide Metro with feedback about the policy’s administration.

Clarity and Equity: Unlike the landfills and exempted parties, the eligible parties do believe there are issues around both the clarity and equity of the current Metro Code. They reported that they question whether or not shaker screen fines used as ADC should really qualify as a ‘useful material’ as they are ‘are still being landfilled’ or are ‘really just smaller pieces of trash that should be landfilled’. When it came to equity, the eligible parties believed that the current policy administration allows certain generators to take advantage of the system. Some of the input provided included:

³⁶ Response edited for language

“The current system needs to be stopped, the shaker fines are garbage and need to be charged, anyone not paying is cheating.”

“Some companies that are getting the exemptions are just running materials over a belt quickly not to get more recycling, but to reduce their fees and taxes and they are not recycling, they are just working the system.”

OPEN-ENDED OPINION

The final portion of the interview once again asked respondents to weigh in on whether or not they thought the exemptions and reductions helped Metro provide benefits to the public, increase waste diversion, and improve the environmental quality of the region. Unlike the exempted parties and the landfills, none of the eligible parties believed that the exemptions and reductions help Metro to meet their goals. They reported that shaker screen fines are ‘not really recycling and that ‘real recovery is what you pull from a mixed load and sell as a commodity, not what you pull from a load and use as ADC.’

Proposed Changes: All of the eligible parties thought the changes to the Metro Code proposed by Metro in 2015 would help to improve clarity, equity, and relevance of the Code. Unlike the exempted parties, the eligible parties did not believe that the changes would hurt the recycling infrastructure or businesses in the Region and that operating without the exemptions in place is possible. The eligible parties recommend that Metro should look at other ways beyond the exemptions and reduced RSF and ET to incentive diversion. Some of the recommended actions include:

“We respect Metro and think overall Metro's mission is good as are the staff, however, the staff has grown tremendously in the past several years and Metro needs to be more transparent about why funds are needed and what staff are doing for the Region.”

“Metro should pull the exemptions around shaker screen fines, it is garbage and should be charged.... if a material, once processed, can be sold for any amount above \$0.00, it should not be charged.”

“Metro should look to base incentive on recovery rates, perhaps the more a company recovers / recycles, the lower the fees / taxes on the residuals? This would encourage companies to increase efficiency and not just run more materials over the shaker screens.”

APPENDIX 3: INTERVIEW RESULTS

LANDFILL INTERVIEWS

Landfill 1 Interview

12/7/2016

Background	
Exempted and Reduced Materials	Shaker fines
Who Generates the materials	Dry waste MRFs
How are materials used at landfill	Used as ADC
Changes in Tonnages Over time	No, they are relatively stable
Other Materials That Should Qualify	Not sure, it seems like incentivizing certain materials does make sense though.
Are there going to be more materials qualifying for exemptions in the future?	No change
Do you receive more than can qualify?	Annually, we are under the cap for allowable usage
Marketplace	
What is the impact of the reduced / exempted RSF and ET on your business?	Large positive. The exempted material provides a low cost option for ADC, without the exemption we would still need to get ADC but we would need to pay to truck in the material.
What would be the impact of eliminating the ET and RSF reductions and exemptions on your business?	It would put us at a competitive disadvantage and increase costs. It would turn into an additional tax. Without the exemptions there would be no incentive to keep stuff out of the landfill, we would need to use clean soil or other alternatives for ADC, and it would hurt diversion overall. However, it's a pass through and there would be an adjustment period but we could weather the change.
Program Administration	
Challenges in the ET and RSF program administration?	No challenges
Are the ET and RSF exemptions and reductions clearly defined and understandable?	Easy to understand and clear, no issues
Are the RSF and ET exemptions and reductions equitable?	Assume so
Any recommendations for improving the program administration?	Only advice is a better map of Metro area boundaries that is easy to access.

Overall rating for Metro's administration of the policies	Excellent
Open-Ended Opinions	
Does the ET and RSF exemptions and reductions help to drive waste diversion, waste reduction, or improved environmental quality for the Region?	Large positive. The exemptions help us to beneficially use a material that would otherwise end up in the landfill. Also, without the exemptions we would need to bring two truckloads a day of ADC into the facility which would have a negative environmental impact from both a clean materials and truck pollution standpoint.
Do the 2015 proposed changes help to increase the clarity, equity, and transparency of the Code?	No. There are no issues with the current system that need to be addressed.
Any recommendations to improve the policies around ET and RSF?	The spirit of the exemption should be to help drive waste diversion and keep stuff out of the landfill, the exemption should be utilized to benefit the Region and diversion, we believe the current exemptions on ADC are helping to do that.

Landfill 2 Interview³⁷

11/29/2016

Background	
Exempted and Reduced Materials	Shaker fines, auto shred, sandblast grit, mulite, dredge, tire residuals
Who Generates the materials	Dry waste MRFs, auto processors, still mills, and dredge companies
How are materials used at landfill	Used as ADC and landfill cover - all uses are directed at meeting Oregon DEQ regulations and depth and mix depends on Oregon DEQ standards
Changes in Tonnages Over time	Maybe a slight increase but not much.
Other Materials That Should Qualify	No
Are there going to be more materials qualifying for exemptions in the future?	Depends on economy
Do you receive more than can qualify?	Yes
Marketplace	
What is the impact of the reduced / exempted RSF and ET on your business?	Small positive. Helps to save money and increase revenue, also helps to improve diversion and environmental stewardship.
What would be the impact of eliminating the ET and RSF	It would hurt the business. We would get less materials that we could use as ADC through the gate and would need to go and get clean dirt mined from elsewhere, at a cost, to use as cover. It would slow down projects in the Region because

³⁷ Interview included multiple participants and represents more than one landfill operated by the same company.

reductions and exemptions on your business?	generator costs would increase, it would decrease volumes at the landfills. Also, if the exemptions were removed we believe some businesses would move out of the Metro region to avoid paying the fees and taxes. It would also stifle growth of businesses because growth with more tons would cost more money. We are convinced these negative results would happen because we have seen it happen in other markets, Metro needs to be aware of this.
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Program Administration

Challenges in the ET and RSF program administration?	No, Metro has always been responsive to questions.
Are the ET and RSF exemptions and reductions clearly defined and understandable?	The taxes and fee language is clear.
Are the RSF and ET exemptions and reductions equitable?	Not sure what others are doing
Any recommendations for improving the program administration?	No changes, the reporting and administration works well as is, its understandable and relatively easy to complete
Overall rating for Metro's administration of the policies	Neutral

Open-Ended Opinions

Does the ET and RSF exemptions and reductions help to drive waste diversion, waste reduction, or improved environmental quality for the Region?	Large positive. It conserves clean material by eliminating the need to dig up clean dirt from elsewhere and use it for cover, also without the exemptions and discounts there would be less clean-up of contaminated soils, companies would not bring the soils to a landfill, they would just cap and leave it in place because it would be too expensive to landfill.
Do the 2015 proposed changes help to increase the clarity, equity, and transparency of the Code?	No. It would hurt the environment to change the policies, they are already clear and understandable. We operate in a very highly regulated industry and have designation agreements in place with Metro. Metro can come and go from the landfill as they please and can observe what is being done with the ADC if they choose to do so. If Metro cannot trust the landfill to use the materials beneficially, why are we issued a designated facility agreement? Metro should trust the landfills to act in compliance. The bigger issue is companies potentially bringing in Metro Region materials and not indicating that the materials are from the Metro Region, this should not necessarily be the role of the landfill operator to police and monitor drivers, the drivers need to tell the truth.
Any recommendations to improve the policies around ET and RSF?	Status quo is good, do not change it. If a company wants to site a recycling facility in the Region, and recycling has already been deemed by Metro to be a net positive to the region, Metro should continue to use the progressive rate structures to encourage these businesses to succeed.

Landfill 3 Interview

11/30/2016

Background	
Exempted and Reduced Materials	Auto fluff, sandblast grit
Who Generates the materials	Auto processors, ship yard
How are materials used at landfill	Use mostly as ADC, some used for landfill pad
Changes in Tonnages Over time	It depends on the market and the industry activity, have picked up some more auto fluff recently because we are capturing a larger percentage of total in the marketplace, not because there has been a lot more generated.
Other Materials That Should Qualify	Not sure
Are there going to be more materials qualifying for exemptions in the future?	Slight increase
Do you receive more than can qualify?	Yes, use about 20-25% - some other materials like border ash and newsprint ash that we receive are blended and not used.
Marketplace	
What is the impact of the reduced / exempted RSF and ET on your business?	Small positive. Exemptions in certain situations provide a small positive impact on overall operations and help reduce costs.
What would be the impact of eliminating the ET and RSF discounts and exemptions on your business?	It would certainly hurt the customer and it could hurt the landfill operations. If the playing field is kept level, the landfill could handle the changes but they need to be equal for all actors.
Program Administration	
Challenges in the ET and RSF program administration?	No problems or challenges - Metro is always easy to deal with
Are the ET and RSF exemptions and reductions clearly defined and understandable?	Occasionally have confusion but they can reach out to Metro to help clarify any confusion
Are the RSF and ET exemptions and reductions equitable?	Not sure, wouldn't expect that anyone is getting an unfair advantage
Any recommendations for improving the program administration?	No
Overall rating for Metro's administration of the policies	Good
Open-Ended Opinions	

Does the ET and RSF exemptions and reductions help to drive waste diversion, waste reduction, or improved environmental quality for the Region?	Small positive. Shredder fluff helps to replace other sources of ADC. Fluff also is also better than soil alone, we get tons of rain and the shredder fluff helps improve the soil's draining ability.
Do the 2015 proposed changes help to increase the clarity, equity, and transparency of the Code?	No. Have two sandblast grit customers currently, if the Code was changed this could impact these customers. We already went through the long process with OregonDEQ to get the exemption and would like to see them stay in place.
Any recommendations to improve the policies around ET and RSF?	Likes the status quo, there is no reason to deny the use of sandblast grit as ADC. If Metro wants to make changes, they should consider lowering the fees and taxes in general.

Landfill 4 Interview

12/1/2016

Background	
Exempted and Reductions Materials	Currently not accepting any exempted materials
Who Generates the materials	N/A
How are materials used at landfill	N/A
Changes in Tonnages Over time	N/A
Other Materials That Should Qualify	No
Are there going to be more materials qualifying for exemptions in the future?	Not sure
Do you receive more than can qualify?	N/A
Marketplace	
What is the impact of the reduced / exempted RSF and ET on your business?	Potential for Small Positive. When you look at ADC it consumes airspace in the landfill, would rather use a material for a beneficial use rather than landfilling it or getting clean inerts for ADC that we need to pay for.
What would be the impact of eliminating the ET and RSF reductions and exemptions on your business?	It wouldn't impact the landfill but it would hurt generators. Changes would not impact the landfill very much because the exempted materials need to get landfilled anyways and we would still get the materials. It would hurt generators because it would increase their project costs, it could potentially reduce the number of projects generating materials.
Program Administration	
Challenges in the ET and RSF program administration?	N/A

Are the ET and RSF exemptions and reductions clearly defined and understandable?	Yes
Are the RSF and ET exemptions and reductions equitable?	Yes
Any recommendations for improving the program administration?	No recommendations, good as is.
Overall rating for Metro's administration of the policies	Neutral
Open-Ended Opinions	
Does the ET and RSF exemptions and reductions help to drive waste diversion, waste reduction, or improved environmental quality for the Region?	Small positive. The exemptions do help to drive the market and help the region meet their goals.
Do the 2015 proposed changes help to increase the clarity, equity, and transparency of the Code?	No. Understand where Metro is going with the changes and why, but it may not be necessary, landfill operators already base pricing on material type to drive activity.
Any recommendations to improve the policies around ET and RSF?	Not sure

Landfill 5 Interview³⁸

12/19/2016

Background	
Exempted and Discounted Materials	Filter press cake, asphalt shingles, auto fluff, crushed glass
Who Generates the materials	Auto processors, asphalt shingle processors, manufacturers
How are materials used at landfill	Road base and ADC
Changes in Tonnages Over time	Has not changed significantly since 2009
Other Materials That Should Qualify	No
Are there going to be more materials qualifying for exemptions in the future?	No
Do you receive more than can qualify?	Depends on year and facility
Marketplace	
What is the impact of the reduced / exempted RSF and ET on your business?	Small positive. The exemptions help reduce costs and truck traffic. Landfills are highly engineered and require materials that are not trash to operate, having the exemptions allow the operators to keep costs down for the beneficial use materials the landfills need to operate.
What would be the impact of eliminating the ET and RSF reductions and exemptions on your business?	It would impact generators and processors negatively, would increase costs slightly in landfill operations. Changing the exemptions alters the operational costs, the exemptions can't go away without a financial impact somewhere in the supply chain. However, the exemptions for shaker fines should be changed. When Metro set up the mandate for dry waste recyclers the interpretation of the exemptions became problematic. We believe certain actors are taking advantage of the Code to get the shaker fines exempted and they should not be.
Program Administration	
Challenges in the ET and RSF program administration?	Challenge is that is you get an exemption at one site for a certain material, the same material at another site does not have the exemption, it would be easier if a material, once exempted at once site, could be exempted at all sites, this would also help equity issues.
Are the ET and RSF exemptions and reductions clearly defined and understandable?	Yes

³⁸ Interview included multiple participants and represents more than one landfill operated by the same company.

Are the RSF and ET exemptions and reductions equitable?	No - Our company has a policy not to accept dry waste MRF fines (shaker fines) for ADC due to safety issues. There are multiple scientific studies showing the MRF fines have lots of hydrogen sulfide, when they get wet it can turn into a deadly gas and can kill landfill employees, thus we do not allow MRF fines to be used as ADC. Other companies that are using these fines have a competitive advantage because they are not paying attention to health and safety like they should.
Any recommendations for improving the program administration?	The Code is fair but it is not always administered equally. Metro should look at how some landfills bid jobs, not all of them include the fees and taxes on their bids, and then when they win the bids they add them, this is not a level playing field for all actors. Also, for example, some small landfills take lots and lots of auto fluff and it is ending up in the landfill - it is not being beneficially used. Metro's arguments are not all consistent and some actors are taking advantage of the policy administration.
Overall rating for Metro's administration of the policies	Neutral

Open-Ended Opinions

Does the ET and RSF exemptions and reductions help to drive waste diversion, waste reduction, or improved environmental quality for the Region?	Small positive. The incentives help the landfills beneficially use materials that would otherwise just end up in the landfill as trash.
Do the 2015 proposed changes help to increase the clarity, equity, and transparency of the Code?	Some of it does. Any material that Metro wants to see diverted should be incentivized. ADC should continue to be exempted if it is safe.
Any recommendations to improve the policies around ET and RSF?	Metro should not encourage non-best management practices by allowing facilities to use dry waste shaker fines as ADC, these materials can be toxic and are not safe. If a material can be beneficially used and is safe it should get an exemption or a discount. Other materials like shaker fines should not qualify as ADC. The activities that Metro wants to see happen should be encouraged financially.

EXEMPTED PARTY INTERVIEWS

Exempted Party 1 Interview³⁹

12/19/2016

Background	
Major business activities	Dry Waste C&D MRF
Materials processed in Region	Dry waste recovery pulling plastic, wood, metal, OCC, paper, and asphalt shingles
Materials receiving exemptions and reductions	Asphalt shingles as well as all recycled materials pulled from the dry waste stream
Years qualifying for exemptions	Since 2009
How are materials used at landfill	Road base
Portion of total materials that qualify for exemptions	N/A
Suggestions for other materials that should qualify	None
Are there going to be more materials qualifying for exemptions in the future?	About the same
The Marketplace	
What is the impact of the reduced / exempted RSF and ET on your business?	Small positive. There really isn't any value for wood or for the asphalt shingles we pull from the stream, without the exemption the cost to process the dry waste would be well above disposal and the exemptions help to drive diversion. When Metro decided that all dry waste should be processed and materials recovered from the stream so they set up an incentive for every ton that goes to beneficial use or recycling. The incentive helps to keep costs competitive and drive diversion.
How are materials that could qualify identified?	Looked at waste stream to see what could qualify.
How is the landfill chosen?	We are a vertically integrated company - look to our own facilities first.
What would be the impact of eliminating the ET and RSF reductions and exemptions on your business?	It would increase costs at the gate for processing and hurt our business. Pulling the exemptions and discounts could increase gate fees by perhaps as much as 50-70% higher than the market rate to landfill.
Program Administration	
Challenges in the ET and RSF program administration?	None

³⁹ Interview included multiple participants.

Are the ET and RSF exemptions and reductions clearly defined and understandable?	Yes, no concerns or issues
Are the RSF and ET exemptions and reductions equitable?	No - Our company does not claim exemptions for shaker fines due to issues with hydrogen sulfide gas and safety. Not everyone is playing by the same rules and some companies claim these exemptions for a material that should not be used as ADC. State of OR does not seem to care about the safety issues around hydrogen sulfide but they should. Also, facilities located outside the Metro region do not need to pay the fees and taxes on residuals and thus have a competitive advantage over the Metro located facilities.
Any recommendations for improving the program administration?	Reporting was more challenging before because they we separate out materials that didn't originate in Metro from having to pay the fees and taxes. Although the processing facility is just outside the Metro boundary, Metro requires all of the materials we process that are not recycled to pay the fees and taxes, even those that do not originate in the Region.
Overall rating for Metro's administration of the ET and RSF policies.	Neutral

Open-Ended Opinions

Does the ET and RSF exemptions and reductions help to drive waste diversion, waste reduction, or improved environmental quality for the Region?	Small positive. If you believe that if Metro were to remove the exemption from shingles that the markets would somehow change and there would be another outlet to beneficially use the shingles you would be wrong, it just isn't true. If Metro takes away the incentives the landfills would need to get other materials for road base, increasing their costs, and we wouldn't have an outlet for the shingles. Under the current system, we can continue to pull shingles and keep them separate, and if a new market does open up that is better than road base at the landfill, we will be able to take advantage of it.
Do the 2015 proposed changes help to increase the clarity, equity, and transparency of the Code?	Somewhat. It is one step closer as shaker fines should not be counted as ADC, it would help level the playing field for processors
Any recommendations to improve the policies around ET and RSF?	Do not count shaker fines as ADC as exempted, keep the other exemptions. If Metro pulls the other exemptions it would hurt the dry waste processing infrastructure that is already in place in the Region - costs to process are high and if Metro wants to see dry waste processed, the incentive needs to remain in place until there are markets for other recovered materials.

Exempted Party 2 Interview

12/21/2016

Background	
Major business activities	Ship building, ship repair, ship fabrication
Materials processed in Region	Paint, metals, sandblast grit
Materials receiving exemptions and reductions	Sandblast grit and traditional recyclables (metal, OCC, etc.)
Years qualifying for exemptions	4 or 5 years
How are materials used at landfill	ADC
Portion of total materials that qualify for exemptions	4,000 tons a year, not sure what percent of total
Suggestions for other materials that should qualify	No
Are there going to be more materials qualifying for exemptions in the future?	No change
The Marketplace	
What is the impact of the reduced / exempted RSF and ET on your business?	Large Positive. They reduce the overall processing costs for a material that has no other value as a commodity, we looked to recycle it elsewhere but couldn't find an outlet, the exemptions help us compete.
How are materials that could qualify identified?	Solid waste vendor came to us and developed some options to help reduce waste and costs, this was one of the options.
How is the landfill chosen?	Vendor chose the landfill to work with, we are a step removed as the generator.
What would be the impact of eliminating the ET and RSF reductions and exemptions on your business?	It would definitely negatively impact our bottom line; it would make it harder to compete in the market. Our competitors are not in OR so if we have to pay a cost at the Portland facility that our competitors do not have to pay it would make it challenging to stay in the Region. Companies in the Region have put in systems around trying to recover materials that can be exempted, often times these systems are expensive, if Metro changes the fee and tax structure it could make these systems obsolete.
Program Administration	
Challenges in the ET and RSF program administration?	Do not deal with directly with Metro.
Are the ET and RSF exemptions and reductions clearly defined and understandable?	Yes -they are clear and make sense.
Are the RSF and ET exemptions and reductions equitable?	Yes, they are currently equitable and any changes would unnecessarily raise fees.

Any recommendations for improving the program administration?	No
Overall rating for Metro's administration of the ET and RSF policies	Neutral
Open-Ended Opinions	
Does the ET and RSF exemptions and reductions help to drive waste diversion, waste reduction, or improved environmental quality for the Region?	Small Positive. Because the cost to landfill materials is so high in the Region due to the fees and taxes, the exemptions and discounts act as an incentive to drive diversion, this is an industrial material without a common market and without the exemption it wouldn't be diverted.
Do the 2015 proposed changes help to increase the clarity, equity, and transparency of the Code?	No. Metro solid waste fees and taxes overall are too high, Metro and Portland have been pushing recycling so hard that now that the amount of solid waste disposed and taxed is going down and Metro is looking for ways to backfill their lost revenue, that is the only reason they want to tax the exempted materials.
Any recommendations to improve the policies around ET and RSF?	Leave it alone and look at ways to reduce fees and taxes across the board.

Exempted Party 3 Interview

12/21/2016

Background	
Major business activities	Tire processing and hauling - commercial vehicles, cars, trucks, oversize tires
Materials processed in Region	Tire residual and tire shred
Materials receiving exemptions and reductions	Tire residuals
Years qualifying for exemptions	Not sure
How are materials used at landfill	Daily cover, backfill
Portion of total materials that qualify for exemptions	
Suggestions for other materials that should qualify	No
Are there going to be more materials qualifying for exemptions in the future?	Increase a little
The Marketplace	
What is the impact of the reduced / exempted RSF and ET on your business?	Large Positive. It keeps costs down - there would not be a single tire processor left in the region without the exemptions, there is very little money to be made in the industry and margins are extremely tight, without the exemptions we couldn't survive.
How are materials that could qualify identified?	Worked with Metro years ago on the exemptions.
How is the landfill chosen?	
What would be the impact of eliminating the ET and RSF reductions and exemptions on your business?	It would shut us down. Any change that would increase the fees to above \$4 or \$5 per tons (residuals) would result in tires piling up again in the region, at that price, we would need to charge too much at the gate and couldn't make a profit and would need to shut down. Our company has 30 FTEs and 14 temps, they would all lose their jobs if the exemptions went away, there are perhaps 300 to 400 jobs supported by tire recycling in their region and they would all be at risk without the exemptions.
Program Administration	
Challenges in the ET and RSF program administration?	No issues but we do not work very closely with Metro.
Are the ET and RSF exemptions and reductions clearly defined and understandable?	Yes
Are the RSF and ET exemptions and reductions equitable?	Yes

Any recommendations for improving the program administration?	There is lots of redundancy in the waste tire reporting forms, Oregon DEQ forms are the hardest, Metro's are the easiest to complete.
Overall rating for Metro's administration of the ET and RSF policies	Neutral
Open-Ended Opinions	
Does the ET and RSF exemptions and reductions help to drive waste diversion, waste reduction, or improved environmental quality for the Region?	Large Positive. Exemptions are critical to keeping tires out of ditches and piles. We have been in business for over 40 years and while at one point we could actually pay for tires, now the markets are not as strong and we need to charge a gate fee. If the exemptions were not there we would need to charge a lot more and the tires would not come to us, they would end up in the environment and there would be unsafe tire piles in the Region. We have cleaned up millions and millions of tires because of the exemptions.
Do the 2015 proposed changes help to increase the clarity, equity, and transparency of the Code?	They were OK. Did not impact us.
Any recommendations to improve the policies around ET and RSF?	Leave as is, do not change. If Metro raises the fees, and we in turn have to raise the fee at the gate, it will devastate us. We are also concerned about DEQ raising the fees.

Exempted Party 4 Interview

12/16/2016

Background	
Major business activities	Non-ferrous recycler, processing non-ferrous metals into a form suitable for melting
Materials processed in Region	All non-ferrous metals
Materials receiving exemptions and reductions	Generate a residual insulation type material that qualifies as ADC
Years qualifying for exemptions	8 years
How are materials used at landfill	The materials are handled by a third party so not sure how they are actually used.
Portion of total materials that qualify for exemptions	Well in excess of 98% of all materials we get are recycled, the only material that is residual is the insulation and it is very small portion of total.
Suggestions for other materials that should qualify	No
Are there going to be more materials qualifying for exemptions in the future?	Increase a little
The Marketplace	
What is the impact of the reduced / exempted RSF and ET on your business?	Small positive. It helps to reduce costs.
How are materials that could qualify identified?	It's the only material that can't get recycled as a commodity.
How is the landfill chosen?	We worked with a 3rd party vendor for hauling who identified the landfill.
What would be the impact of eliminating the ET and RSF reductions and exemptions on your business?	It would have a small negative impact. Thinking about the total cost for handling the residual exempted materials, the big cost for our company is the hauling, not the disposal. The changes in the fees and taxes would only marginally increase our total cost to handle the material. The challenge for us is the overall commodity market for everything we process. The markets fluctuate, and when the commodity values are high, a change in the fees / taxes is not an issue because profit margins are good, however, when markets sink, a small change in the costs of dealing with the residuals will have a larger impact on the revenue.
Program Administration	
Challenges in the ET and RSF program administration?	Trying to get the ADC certified is a very long process, would like to see it streamlined - for us there are no changes in the material / waste stream over time so testing period should be shorter.
Are the ET and RSF exemptions and reductions clearly defined and understandable?	Neutral

Are the RSF and ET exemptions and reductions equitable?	Somewhat - the exemptions are not well advertised or communicated so not everyone knows about the options to get them, it makes sense that the companies that get the exemptions do not want their competitors to get them or know about them, but that is how business works.
Any recommendations for improving the program administration?	Metro should do an audit at the landfill to make sure the materials are being used like they are supposed to, also, the invoicing from the hauler does not line item the reductions / exemptions so as a rate payer, it is hard to see where the exemptions show up and what the savings are from them.
Overall rating for Metro's administration of the ET and RSF policies	Neutral

Open-Ended Opinions

Does the ET and RSF exemptions and reductions help to drive waste diversion, waste reduction, or improved environmental quality for the Region?	Small positive. Its seems to have a positive impact but it is hard to distinguish Metro's role on diversion versus companies that are optimizing their manufacturing processes. Smart companies are looking for more opportunities for energy and material recovery.
Do the 2015 proposed changes help to increase the clarity, equity, and transparency of the Code?	No
Any recommendations to improve the policies around ET and RSF?	Metro should start to look at other ways to set incentives for waste reduction and diversion. For example - if a company or processor reaches a certain recycling rate or an absolute reduction they should get the incentive or not have to pay the fees and taxes. In early stages of waste diversion, the incentive to reduce waste around tons disposed makes sense, but in later stages where a manufacturer has reached high rates of diversion or reduction the incentive means little. Perhaps consider recovery goals around energy savings or BTUs? Also, Metro should work to improve visibility and transparency of their programs, if some materials is better suited as ADC then others they should make it known.

Exempted Party 5 Interview

12/19/2016

Background	
Major business activities	Dry waste MRF operator, also do hauling and landfilling in the region
Materials processed in Region	Wide variety of materials pulled from the dry waste stream
Materials receiving exemptions and reductions	Shaker fines used as ADC
Years qualifying for exemptions	21 years
How are materials used at landfill	ADC
Portion of total materials that qualify for exemptions	Small portion of total residuals, less than 10%
Suggestions for other materials that should qualify	Look at food scraps and organics and see if there are ways to support the market around their recovery.
Are there going to be more materials qualifying for exemptions in the future?	Increase a little (as long as exemption stays in place)
The Marketplace	
What is the impact of the reduced / exempted RSF and ET on your business?	Small positive. It is a cost control tool, without it costs would increase, it also helps keep gate rates down at the MRF and a way to distinguish our facility in the market.
How are materials that could qualify identified?	Follow market lead - it's been around for years so not sure how we first heard about it.
How is the landfill chosen?	We are vertically integrated.
What would be the impact of eliminating the ET and RSF reductions and exemptions on your business?	It would have a large negative impact on revenue, costs, and diversion. Without the exemptions the low value commodities (for example wood) may end up in the waste stream. The exemptions have been in place so long that we have built a business model around the exemptions - it is now in the business operating plan and pulling it would cause a big issue. Worst case scenario is that depending on the impacts and the cost changes, we would have to evaluate whether or not it would make sense to keep the operation going, if the gate fees became too high, we may need to reevaluate what we do around dry waste.
Program Administration	
Challenges in the ET and RSF program administration?	No surprises and its pretty good, the only challenge has been the recent discussion about dropping the exemptions.
Are the ET and RSF exemptions and reductions clearly defined and understandable?	There is a little bit of ambiguity but overall they make sense.
Are the RSF and ET exemptions and reductions equitable?	Yes, it's a business choice and opportunity to take advantage of the exemptions, it is fair.

Any recommendations for improving the program administration?	Metro could be more proactive in explaining the Code, policies, and administration around them.
Overall rating for Metro's administration of the ET and RSF policies	Good
Open-Ended Opinions	
Does the ET and RSF exemptions and reductions help to drive waste diversion, waste reduction, or improved environmental quality for the Region?	Large positive. It helps to offset the costs for processing the other materials and leads to more diversion overall, not just for the ADC.
Do the 2015 proposed changes help to increase the clarity, equity, and transparency of the Code?	No. The proposed changes were not good and should not go forward.
Any recommendations to improve the policies around ET and RSF?	Keep the status quo. Shaker fines as ADC is the biggest potential impact to us, pulling ADC from the exemptions would not help the region meet their goals. Metro should look at other ways to help diversion and other incentive opportunities. How can Metro pass through any costs savings to actors in the region?

Exempted Party 6 Interview

12/19/2016

Background	
Major business activities	Tire processor
Materials processed in Region	Tire shred
Materials receiving exemptions and reductions	Tire residual
Years qualifying for exemptions	Have worked with Metro for years, not sure first year.
How are materials used at landfill	Mostly as backfill.
Portion of total materials that qualify for exemptions	Depends on year, when market is good very small portion, some years could be as high as 80%.
Suggestions for other materials that should qualify	Not sure
Are there going to be more materials qualifying for exemptions in the future?	Increase a little (depends on markets)
The Marketplace	
What is the impact of the reduced / exempted RSF and ET on your business?	Large Positive. It allows our company to remain whole and process tires.
How are materials that could qualify identified?	We have a historical relationship that goes back to the 1980s with Metro, worked together to increase tire processing for a long time.
How is the landfill chosen?	N/A
What would be the impact of eliminating the ET and RSF reductions and exemptions on your business?	It would severely hurt business. If we had to pay the \$30 fees / taxes it would more than double disposal costs, we would immediately and significantly increase the fee charged to generators, and all of our competitors outside the Metro region would take our business. The majority (about 80%) of the tires we process are from outside the region and they wouldn't be able to compete for these with the fees and taxes. We would have to consider moving operations to Vancouver but because we own the facility and land, moving is not easy. It could ruin the business. The change could cost 80 FTEs in the Metro Region.
Details	If we had to pay the \$30 fees / taxes it would more than double disposal costs, we would immediately and significantly increase the fee charged to generators, and all of our competitors outside the Metro region would take our business. The majority (about 80%) of the tires we process are from outside the region and they wouldn't be able to compete for these with the fees and taxes. We would have to consider moving operations to Vancouver but because we own the facility and land, moving is not easy. It could ruin the business. The change could cost 80 FTEs in the Metro Region.
Program Administration	

Challenges in the ET and RSF program administration?	No issues at all
Are the ET and RSF exemptions and reductions clearly defined and understandable?	Yes at least for tires, not sure about the others.
Are the RSF and ET exemptions and reductions equitable?	Yes, in fact without the exemptions it would not be fair as our competitors out of the Region wouldn't be paying the fees and taxes, making us more expensive.
Any recommendations for improving the program administration?	No
Overall rating for Metro's administration of the ET and RSF policies	Good
Open-Ended Opinions	
Does the ET and RSF exemptions and reductions help to drive waste diversion, waste reduction, or improved environmental quality for the Region?	Small Positive. It keeps tire processing viable in the region, we have processed over a quarter billion tires, without the processing and the exemptions, who knows what would have become of the tires.
Do the 2015 proposed changes help to increase the clarity, equity, and transparency of the Code?	No opinion. The regulations are clear and equitable already, they work, the changes didn't really impact tires.
Any recommendations to improve the policies around ET and RSF?	Would prefer that Metro leaves them alone and doesn't make any changes. Although we understand that Metro wants to evaluate and look at other materials we are very concerned about any changes to the tire exemptions. Most of the materials that we process are not generated in Metro so it wouldn't be fair to have to change the fees and taxes and increase their gate rate.

Exempted Party 7 Interview

12/20/2016

Background	
Major business activities	Steel foundry
Materials processed in Region	Foundry sand, castings
Materials receiving exemptions and reductions	Have our own landfill, exemption is given on materials that we haul and disposes in our own landfill, no other materials are accepted at the landfill.
Years qualifying for exemptions	Always been exempt - there was some back and forth with Metro years ago but we came to a mutual agreement over the materials, fees, and taxes.
How are materials used at landfill	Disposal
Portion of total materials that qualify for exemptions	Only taking the non-putrescible waste to the landfill.
Suggestions for other materials that should qualify	No opinion
Are there going to be more materials qualifying for exemptions in the future?	Decrease a little, we still have lots of life left in the landfill.
The Marketplace	
What is the impact of the reduced / exempted RSF and ET on your business?	Large Positive. If we had to pay taxes on the loads sent to the landfill it would significantly hurt operational viability.
How are materials that could qualify identified?	All non-putrescible waste.
How is the landfill chosen?	N/A
What would be the impact of eliminating the ET and RSF reductions and exemptions on your business?	We may not be able to operate in the Portland. We have about 800+ staff in the Portland region, if the fees and taxes were removed it would really impact overall profitability and it would make it difficult to continue operating.
Program Administration	
Challenges in the ET and RSF program administration?	No issues recently, had some challenges 10 years ago when Metro wanted to charge them fees and taxes but not recently.
Are the ET and RSF exemptions and reductions clearly defined and understandable?	Yes
Are the RSF and ET exemptions and reductions equitable?	Yes
Any recommendations for improving the program administration?	None

Overall rating for Metro's administration of the ET and RSF policies	Neutral
Open-Ended Opinions	
Does the ET and RSF exemptions and reductions help to drive waste diversion, waste reduction, or improved environmental quality for the Region?	Large Positive. The exemptions allow our facility to continue to operate in Portland - we purchase clean plate scrap steel and the majority of what is melted down at their facility is recycled content (80- 90%), only a small portion is virgin. Without the exemptions the market for steel would be hurt in the region and recycling would go down.
Do the 2015 proposed changes help to increase the clarity, equity, and transparency of the Code?	No issues because it did not impact us.
Any recommendations to improve the policies around ET and RSF?	Do not change the exemptions around the landfill - no one else is using the facility and we are not taking away materials from the Metro system. We are not using the Metro system so we should not have to pay for it.

Exempted Party 8 Interview⁴⁰

12/20/2016

Background	
Major business activities	Silicon wafer (computer chip) manufacturer
Materials processed in Region	Make substrate for computer chips - silicon wafers that are highly purified.
Materials receiving exemptions and reductions	Precipitate from the water purification process.
Years qualifying for exemptions	About 5 years
How are materials used at landfill	ADC
Portion of total materials that qualify for exemptions	All of the precipitate from waste water, not sure what percent of total.
Suggestions for other materials that should qualify	No opinion
Are there going to be more materials qualifying for exemptions in the future?	No change
The Marketplace	
What is the impact of the reduced / exempted RSF and ET on your business?	Large Positive. Helps to increase overall revenues for the company - it is also good for the environment
How are materials that could qualify identified?	Worked with the landfill, the landfill in turn assisted in getting the exemptions set up.
How is the landfill chosen?	It took two years to set up with the landfill, they approached us and we do not want to re-do the process.
What would be the impact of eliminating the ET and RSF reductions and exemptions on your business?	It would have a significant negative impact and we are adamantly opposed to any changes. It would increase operating costs. We are in an international marketplace that is highly competitive, if waste costs went up we would need to look at options to cut costs elsewhere, labor would obviously be a target and we may be forced to cut jobs in the Region. We worked hard to find a way to divert the precipitate from the waste stream and Metro would be negating all that effort with a change.
Program Administration	
Challenges in the ET and RSF program administration?	The hauler handles it.
Are the ET and RSF exemptions and reductions clearly defined and understandable?	It is clear, no confusion.

⁴⁰ Interview included multiple participants.

Are the RSF and ET exemptions and reductions equitable?	Currently it is fair, the changes proposed in 2015 would make it less fair.
Any recommendations for improving the program administration?	None
Overall rating for Metro's administration of the ET and RSF policies	No opinion
Open-Ended Opinions	
Does the ET and RSF exemptions and reductions help to drive waste diversion, waste reduction, or improved environmental quality for the Region?	Small positive. The exemption not only helps reduce our costs, it also provides a beneficial use for the precipitate. We explored other possibilities and options for the material but they do not exist, it is either this or they end up in a landfill as garbage.
Do the 2015 proposed changes help to increase the clarity, equity, and transparency of the Code?	No, the Region would be going backwards, it just seems like a money grab to make changes. The proposed changes seemed to have carve out for certain industries and would make the regulations less equitable, also, if we lost the exemption is would reduce the amount of waste that is used beneficially while also hurting local business.
Any recommendations to improve the policies around ET and RSF?	Do not change anything - the exemptions help local businesses compete on a global market. The fees and taxes, if applied, would put Metro businesses at a disadvantage. In general, we would like Metro it has more sensitivity to the regulated industries in the Region. They (Metro) have been moving to increase business taxes and regulations and they are just making it more difficult for businesses to stay in the state and the Region. Our company has won 40 environmental awards and believe strongly in sustainability, it does not make sense to impose fees and taxes that would make it harder to divert waste. We are against any fee or tax increase. Suggest that Metro look at ways internally to cut costs as opposed to looking outside for ways to increase revenue.

Exempted Party 9 Interview⁴¹

12/20/2016

Background	
Major business activities	Operate commercial and residential hauling, multiple compost processing facilities, and 2 dry waste MRFs
Materials processed in Region	All types including MSW, Dry waste, and organics
Materials receiving exemptions and reductions	Recyclables, organics, and not doing any shaker screen fines at this time
Years qualifying for exemptions	Did shaker fines for about 3 years, not doing so anymore
How are materials used at landfill	N/A
Portion of total materials that qualify for exemptions	60-70% of the material coming out of the dry waste MRF is residual, none of it is qualifying
Suggestions for other materials that should qualify	None
Are there going to be more materials qualifying for exemptions in the future?	No change
The Marketplace	
What is the impact of the reduced / exempted RSF and ET on your business?	No Impact. We no longer collect shaker screen fines to get an exemption so the exemptions have no impact. We had issues with the line and for practical reasons, chose to stop collecting the fines. After experimenting we found that running the materials across the shaker screens was not a good investment.
How are materials that could qualify identified?	N/A
How is the landfill chosen?	N/A
What would be the impact of eliminating the ET and RSF reductions and exemptions on your business?	It would not impact the business. We don't really care if Metro stops the exemptions on the shaker screen fines as long as Metro makes it a fair level playing field for all actors.
Program Administration	
Challenges in the ET and RSF program administration?	No
Are the ET and RSF exemptions and reductions clearly defined and understandable?	Yes
Are the RSF and ET exemptions and reductions equitable?	Inequity is not an issue.

⁴¹ Interview included multiple participants.

Any recommendations for improving the program administration?	None
Overall rating for Metro's administration of the ET and RSF policies	No Opinion
Open-Ended Opinions	
Does the ET and RSF exemptions and reductions help to drive waste diversion, waste reduction, or improved environmental quality for the Region?	Small positive. They can help support some of the dry waste MRFs and keep clean fill from being used as ADC, but it's not a large impact.
Do the 2015 proposed changes help to increase the clarity, equity, and transparency of the Code?	No. There is not an issue with clarity or equity, the only reason Metro is considering the change is to increase revenue. As long as it's a level playing field we do not care.
Any recommendations to improve the policies around ET and RSF?	Metro should look at their internal rates that they charge at the transfer stations. Right now there is very little to no value in the dry waste stream. Metro is able to subsidize their own processing with the solid waste fees that they charge. This allows Metro's facilities to keep the gate fees for dry waste artificially low and it puts downward pressure on all the other facilities in the region. This means that the other facilities can't raise the rates to where they should really be in the free market.

Exempted Party 10 Interview

12/7/2016

Background	
Major business activities	Dry waste MRF
Materials processed in Region	Process C&D materials including metal, wood, cardboard, concrete, ceiling tile, sheetrock, asphalt shingles, and others
Materials receiving exemptions and reductions	Shaker fines
Years qualifying for exemptions	More than 5
How are materials used at landfill	Alternative daily cover
Portion of total materials that qualify for exemptions	Metro has their own opinion about disposal and thinks that anything that goes to the landfill is disposal, in terms of processing, about 12% of the materials are residuals.
Suggestions for other materials that should qualify	No
Are there going to be more materials qualifying for exemptions in the future?	No change, but it depends on the overall market and the economy
The Marketplace	
What is the impact of the reduced / exempted RSF and ET on your business?	Large positive. Lowers operating costs and helps to increase revenues.
How are materials that could qualify identified?	Read the rules to see what could qualify.
How is the landfill chosen?	Found landfills that we could work with to get the needed approval.
What would be the impact of eliminating the ET and RSF reductions and exemptions on your business?	Without the exemptions we would close. Our company spent over a million dollars setting up a system to capture shaker fines based around Metro's fee and tax structure. Now that they are set up and Metro is considering taking it away, it would be a huge problem for the company. The fee and tax policy created a subsidized structure for recycling in the Region, if the fee and tax system wasn't in place, what would get recycled? All the low value commodities would end up getting landfilled and the only things that would be recycled would be metals. There would be very little recycling in Metro.
Program Administration	
Challenges in the ET and RSF program administration?	No major challenges
Are the ET and RSF exemptions and reductions clearly defined and understandable?	Yes

Are the RSF and ET exemptions and reductions equitable?	Yes. The rules are fair; however, Metro's administration of the rules is questionable. Metro makes it very hard for someone to get the exemptions and they do not always follow their own rules as written.
Any recommendations for improving the program administration?	Metro staff are trying to interject their own personal opinions and beliefs into the administration of the policies, they should not be doing this.
Overall rating for Metro's administration of the ET and RSF policies	Neutral
Open-Ended Opinions	
Does the ET and RSF exemptions and reductions help to drive waste diversion, waste reduction, or improved environmental quality for the Region?	Very large positive. Should be cut and dry and simple, the exemptions are encouraging landfills to replace a new clean material with one (shaker fines) that can beneficially used. The exemptions make sense. Just because it is going to a landfill, it does not mean the material is being disposed. It is being beneficially used and the exemptions help. Look at using asphalt shingles for road base, why does that count as 'beneficial use' and using shaker fines as road base at the landfill may not count? That just doesn't make sense.
Do the 2015 proposed changes help to increase the clarity, equity, and transparency of the Code?	No, the changes are illegal and should be stopped. Years ago Metro started incentivizing recycling and diversion by putting high surcharges on trash. They found out that the more they raised garbage taxes the more revenue they got, so they continued to raise the taxes and fees. Now they have reached a point where they can't raise the fees and taxes anymore. They have also gotten to the point where there is more recycling occurring and less garbage being disposed, so they are in a bind. To get out of it, Metro staff want to take away the exemptions and to bring in more money into their system. Not fair.
Any recommendations to improve the policies around ET and RSF?	Do not change the Code. Metro needs to look at the state law and interpret it correctly. If Metro changes the Code, we will sue them, and we will win. The state law says Metro cannot charge fees on ADC, this is state level, and Metro can't charge the fees locally. We are in a home rule state. Look at ORS 268.31 and ORS 459.235. They say Metro can't charge a fee on ADC. Try to change the Code and policy and we will sue.

Exempted Party 11 Interview⁴²

1/4/2017

Background

Major business activities

Providing efficient cargo and air passenger access to Region, own marine terminals, own and operate airport

⁴² Interview included multiple participants.

Materials processed in Region	Wide range of materials from C&D and contaminated soils to commercial and retail waste and airline passenger waste
Materials receiving exemptions and reductions	Not totally sure - the 3rd party hauler is helping, we think that we will be receiving exemptions on sweeper debris and storm clean-up this year. We are getting exemptions on a portion of the contaminated soils
Years qualifying for exemptions	Not sure
How are materials used at landfill	A portion of the contaminated soils are used as ADC
Portion of total materials that qualify for exemptions	Unsure
Suggestions for other materials that should qualify	Dredge, More exemptions around C&D and organics, more exemptions for contaminated soils
Are there going to be more materials qualifying for exemptions in the future?	Estimate that the amount of contaminated soils generated will continue to grow

The Marketplace

What is the impact of the reduced / exempted RSF and ET on your business?	Small positive
Details	We work with a third party hauler and the exemptions are passed through in the rates they charge, this saves us money and resources
How are materials that could qualify identified?	The landfills and their hauler adjust how the materials are invoiced and charged and identify which portion of the contaminated soils qualify - it is not totally clear what percentage of the contaminated soils are used for ADC and what the exemptions versus handling fees are on the invoices. We know that our hauler and landfill play around with the amounts qualify in order to stay under their cap and make it work.
How is the landfill chosen?	The hauler chooses
What would be the impact of eliminating the ET and RSF reductions and exemptions on your business?	Small negative. The rates would go up and we would have less money to spend on other diversion programs.
Details	The rates would go up and we would have less money to spend on other diversion programs.

Program Administration

Challenges in the ET and RSF program administration?	N/A
Are the ET and RSF exemptions and reductions clearly defined and understandable?	No, they are not clear

Are the RSF and ET exemptions and reductions equitable?	Not sure
Any recommendations for improving the program administration?	No, do not deal directly with Metro
Overall rating for Metro's administration of the ET and RSF policies	No opinion
Open-Ended Opinions	
Does the ET and RSF exemptions and reductions help to drive waste diversion, waste reduction, or improved environmental quality for the Region?	Small positive. It definitely helps because the more money we have to pay more for disposal means the lower the amount of money we have to invest in other waste diversion programs and activities.
Do the 2015 proposed changes help to increase the clarity, equity, and transparency of the Code?	Yes. It would be great if dredge and street sweeping qualified for more exemptions. This would help keep costs down.
Any recommendations to improve the policies around ET and RSF?	Exempt dredge. Look at other options for contaminated soils. Consider a governmental exemption or discount for all materials. We spend hundreds of thousands of dollars on our own recycling and waste minimization programs and do not use the Metro programs so we shouldn't be fully taxed to support the Metro programs we don't use. Also, the Oregon DEQ rules around 'clean fill' are going to become an issue. We generate lots of contaminated soil as pretty much any soil we dig up or is dug on our leased properties will not pass the stringent requirements for 'clean fill'. If its only lightly contaminated but can't be used as clean fill, we are not sure what will happen. Maybe companies will spend all their resources on managing the 'contained soils' and will not be able to invest in development. It is possible that the soils that are only lightly contaminated, will take up the volume allotted for ADC at the landfills, and then the materials that really need to be processed and are highly contaminated may not ever be cleaned up or sent to a landfill because the costs are too high.

Exempted Party 12 Interview⁴³

1/16/2017

Background

⁴³ Responses to interview questions were provided to RRS in a written document.

Major business activities	One of the largest processors and exporters of recycled metal products in the United States, with operating facilities in 23 states, Puerto Rico and Western Canada. The facility in the Metro region collects and processes end-of-life scrap metal items and ships the processed metal to domestic and foreign steel mills to be melted down and manufactured into new products. Scrap metal processing consists of resizing scrap items by shredding, shearing and torch-cutting, and separating ferrous and non-ferrous metals from non-metallic residues
Materials processed in Region	Predominantly consist of non-metallic residues from scrap shredding operations, commonly called Shredder Residue (SR) or Automobile Shredder Residue (ASR). SR/ASR consists of plastics, fabric, insulation, carpeting, glass and other materials commonly found in end-of-life vehicles, appliances and other scrap metal items.
Materials receiving exemptions and reductions	Shredder residue, auto shredder residue used as ADC at solid waste landfills.
Years qualifying for exemptions	SR/ASR was among the first (if not the first) materials exempted from Metro fees and taxes. The exemption was enacted because of the potential for SR/ASR to be put to beneficial use in landfills, the benefit of reducing the use of non-waste material (e.g., clean soil) as ADC, and the benefit of keeping recyclable materials out of landfills by promoting scrap metal recycling. We could not determine the year in which we first qualified for the exemption, but it is likely that we have relied on the exemption since it was originally enacted.
How are materials used at landfill	SR/ASR is applied as ADC over the working face of the disposal areas at solid waste landfills. SR/ASR is ideally suited for landfill applications. Landfill operators using SR/ASR as ADC note that it performs very well as cover material. The relatively high water absorbency of SR/ASR makes it easier to handle in wet conditions, as compared to soil. SR/ASR is also more compressible than soil and many other ADC materials, which reduces loss of landfill airspace due to the placement of six-inch layers of daily cover. The use of SR/ASR as ADC, often displacing clean soil for this purpose, satisfies the Resource Conservation and Recovery Act (RCRA) mandate to recover/reuse materials and to conserve resources. The use of SR/ASR as ADC also aligns with Metro’s solid waste policies, as reflected in Title V of the Metro Code. One of the purposes of Title V is “to reduce the volume of solid waste disposal through source reduction, recycling, reuse and resource recovery.” Metro Code § 5.01.020. Metro liberally construes Title V to accomplish this purpose. Id.
Suggestions for other materials that should qualify	Consistent with Metro’s policies and goals promoting sustainable practices and the highest and best use of potential waste materials, all materials that are beneficially used or re-used, whether at landfills, or in manufacturing, industrial and construction processes, should qualify for exemptions from Metro’s fees and taxes.

<p>Are there going to be more materials qualifying for exemptions in the future?</p>	<p>The amount of SR/ASR generated is dependent on multiple variables, including shredder feed composition, equipment capabilities, and market forces. Some factors will tend to increase the amount of SR/ASR that we will generate in the future, such as the increasing fractions of non-metallic materials (e.g., plastics, fiberglass and composites) that are being used to construct lighter weight automobiles. On the other hand, development of efficient plastics separation and sorting equipment, along with robust plastics recycling markets, may lead to decreased amounts of SR/ASR destined for landfill. Although it is difficult to predict whether the amount of SR/ASR generated will increase or decrease in the future, we anticipate that the SR/ASR it generates will continue to provide a comparatively stable source of material to be used as ADC, absent dramatic changes in the economics associated with its operations (including any proposal to eliminate the existing exemption for SR/ASR used as ADC).</p>
<p>The Marketplace</p>	
<p>What is the impact of the reduced / exempted RSF and ET on your business?</p>	<p>The current exemptions have a large, positive impact on our business and provide a significant benefit to the Metro region by increasing recycling rates and reducing the volume of materials disposed in landfills.</p>
<p>Details</p>	<p>SR/ASR is by far the largest volume of waste material generated by our firm in the Metro region. The opportunity to put the material to beneficial use—incentivized by exemptions from fees and taxes and reductions in waste management costs—allows our firm to offer competitive prices when purchasing scrap items. This increases the recycling rate, which helps keep recyclable materials out of landfills. The reduced waste management costs also allow the firm to periodically invest in more efficient equipment that allows better sorting and separating of recyclable metals from SR/ASR bound for the landfill, reducing the volume of materials disposed in landfills.</p>
<p>How are materials that could qualify identified?</p>	<p>The exemption on which our firm relies is based on the productive use of SR/ASR in the operation of landfills, which is a long-standing, well-recognized industry standard practice across the country.</p>
<p>What would be the impact of eliminating the ET and RSF reductions and exemptions on your business?</p>	<p>Removal of the current exemptions would result in significantly increased operating costs for our firm and similarly situated recyclers, which would very likely translate to lower prices paid for scrap metal and reduced recycling rates as scrap metal becomes less valuable for the end users of the items. Increased uncertainty associated with the costs of recycling (such as eliminating a longstanding exemption from fees and taxes) would likely reduce the incentive for our firm and similarly situated recyclers to invest in equipment and process upgrades. This will have a long-term, detrimental impact on recycling rates in the Metro region.</p>
<p>Program Administration</p>	
<p>Challenges in the ET and RSF program administration?</p>	<p>None of which I am aware. The exemption applicable to SR/ASR used as ADC is clear and easy to understand from a generator’s perspective and it is well-understood by landfill operators. Our firm encourages Metro not to make any changes to the exemption that would make it more cumbersome for generators or landfill operators.</p>

Are the ET and RSF exemptions and reductions clearly defined and understandable?	Yes. As noted above, the exemption applicable to SR/ASR used as ADC is clear and easy to understand from a generator’s perspective and it is well-understood by landfill operators. This allows generators and landfill operators to comply with the exemption with minimal administrative costs. Any change that would make the exemption more cumbersome would add administrative costs for generators and landfill operators, without any corresponding public benefit (and a potential to reduce public benefits by decreasing recycling rates).
Are the RSF and ET exemptions and reductions equitable?	Yes. The exemption or discount associated with each type of material is based on different public policy considerations. Our firm's experience with the exemptions and reductions has been generally limited to the exemption for SR/ASR used as ADC. This exemption is somewhat unique because of the significant public benefits that arise out of the exemption. These benefits include reducing the amount of non-waste material (e.g., clean soil) used in landfills as ADC and increasing recycling rates for materials with significant intrinsic value, such as scrap metal. These public benefits justify treating SR/ASR (and other materials than provide similar public benefits) differently from other types of materials.
Any recommendations for improving the program administration?	None
Overall rating for Metro’s administration of the ET and RSF policies	Neutral

Open-Ended Opinions

Does the ET and RSF exemptions and reductions help to drive waste diversion, waste reduction, or improved environmental quality for the Region?	<p>Yes, the exemption for SR/ASR drives waste diversion and reduction and improves environmental quality in the Metro region, which has significant benefits to the public.</p> <p>Any proposal to remove or significantly modify the exemption would remove a major incentive for using SR/ASR as ADC. Instead of beneficial reuse, more SR/ASR would likely be disposed of as waste, contrary to Metro’s policy goals for highest and best use of materials. More non-waste material (e.g., clean soil) would be used in landfills as ADC, which is also contrary to Metro’s goal to reduce the volume of material disposed of in landfills. In addition, by increasing operating costs for recyclers, any proposal to remove or significantly modify the exemption could actually decrease the recycling rate by negatively impacting the economics of scrap sales and purchases.</p>
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Do the 2015 proposed changes help to increase the clarity, equity, and transparency of the Code?

Any potential change to policies related to RSF and ET must be preceded by significant opportunities for stakeholder engagement. In 2015, Metro proposed a suite of changes to Title V of the Metro Code, which would have dramatically altered existing exemptions and reductions. The changes represented a dramatic departure from Metro's longstanding commitment to promote recycling, consistent with state statutes. The changes would have made recycling more expensive and discouraged innovative approaches to increase recycling and beneficial reuse of materials. Fortunately, in response to requests from stakeholders, Metro withdrew most of the proposed substantive changes from consideration and, instead, created opportunities for greater stakeholder engagement in the process of recommending changes to Title V of the Metro Code. Our firm urges Metro to continue providing opportunities for stakeholders to engage in discussions about any potential changes to exemptions and reductions.

Any recommendations to improve the policies around ET and RSF?

Proposals to significantly alter longstanding policies related to recyclable materials should occur only in connection with updates to Metro's Regional Solid Waste Management Plan (RSWMP). The purpose of the RSWMP is to establish long-term policies and program direction related to solid waste and recyclable materials. The current RSWMP covers a 10-year period from 2008 to 2018. The process of updating the RSWMP for the next 10-year period began in 2016. That process is the appropriate forum for Metro to evaluate potential changes to its regulation of recyclable materials. The RSWMP review process provides Metro the opportunity to engage stakeholders in reviewing and, if necessary, revising the region's goals and objectives related to managing and regulating solid waste and recyclable materials. Once these goals and objectives are established, then Metro can determine whether amendments are necessary to align the Metro Code with the updated RSWMP. The RSWMP update process is the appropriate forum to analyze proposals to significantly alter longstanding policies related to recyclable materials because it provides predictability to regulated entities. Without long-term predictability, recyclers are less likely to invest in equipment and process upgrades. The result is reduced public benefits that would result from improved efficiency in recycling processes. The 10-year RSWMP time horizon and update process provide regulated entities with the predictability and transparency necessary to make investment decisions. Our firm urges Metro to provide further opportunities for stakeholder engagement in the process of analyzing Metro's existing fee/tax exemptions and reductions, including an opportunity to submit comments on any report produced by Resource Recycling Systems (RRS).

ELIGIBLE PARTY INTERVIEWS

Eligible Party 1 Interview

12/28/2016

Background	
Major business activities	Dirty MRF processing dry waste, also do residential and commercial hauling
Materials generated in Region	Process C&D dry waste, mainly roll-offs of mixed dry waste
Potential exempted and reduced materials	Shaker screen fines could qualify, currently get exemptions for all the recyclables we pull from the stream
Would you consider getting / applying for an exemption?	Not really. We have thought about it but we do not have a shaker screen, we see both pros and cons of trying to get the exemption but the cons probably outweigh the positives. A company is either going to follow the rules or not, we have chosen to follow the rules and pay the fees and taxes.
Portion of total that could qualify for exemptions?	Would guess between 1 - 5% of residual tons.
Marketplace	
If you received the reduced / exempted RSF and ET, what would be the impact to your business?	Small positive. It could increase our profit margin slightly. However, we can operate without the exemptions and still make a profit. If a company cannot make their business model work without claiming the exemptions, they should just get out of the business and let other do it.
Are competitors getting an advantage if they qualify for exemptions?	Yes, they are.
Program Administration	
Are the ET and RSF exemptions and reductions clearly defined and understandable?	Somewhat. There is some gray area around whether the materials used as ADC should really be allowable. Is it really just smaller pieces of trash that should be landfilled anyways? Not sure that ADC should qualify.
Are the RSF and ET exemptions and reductions equitable?	No, someone always seems to take advantage of the Metro Codes, it has gotten better recently but the recyclers getting the ADC exemption seem to just be exploiting a loop hole, the fairness is questionable.
Open-Ended Opinion	
Do the ET and RSF exemptions and reductions help to drive waste diversion, waste reduction, or improved environmental quality for the Region?	No impact. Shaker screens are not really recycling, they are just making garbage smaller, it may be substituting for another material for ADC, but that other material is inert and wouldn't be paying fees and taxes either, ultimately the ADC is ending up in a landfill and is not being recycled.

Do the 2015 proposed changes help to increase the clarity, equity, and transparency of the Code?

Yes. Government should not be subsidizing businesses with the exemptions for ADC. Sounds like there are currently processors taking advantage of Metro and the proposed changes would help reduce this.

Any recommendations to improve the policies around ET and RSF?

Metro fees are enormously harsh, staff seems to have gotten too big and they are concerned about the fees and taxes for solid waste subsidizing other parts of government, an example of this is in park funding. We respect Metro and think overall Metro's mission is good as are the staff, however, the staff has grown tremendously in the past several years and Metro needs to be more transparent about why funds are needed and what staff are doing for the Region.

Eligible Party 2 Interview

12/28/2016

Background	
Major business activities	Dry Waste MRF processing mixed C&D, roll-off services, commercial and residential hauling
Materials generated in Region	Process C&D dry waste from drop-box service
Potential exempted and reduced materials	Shaker screen fines could qualify, right now we just get the exemptions for the recyclables we pull from the stream
Would you consider getting / applying for an exemption?	Maybe. We do not have a shaker screen and are not collecting any fines. We do not have the capital to purchase one. We are doing a floor sort of all materials and do not have an option at this time to collect shaker screen fines. We do not plan on doing so anytime soon.
Portion of total that could qualify for exemptions?	Not sure
Marketplace	
If you received the reduced / exempted RSF and ET, what would be the impact to your business?	Small positive. The exemptions would enable us to save some money, however, not sure they would ever want to qualify for them.
Are competitors getting an advantage if they qualify for exemptions?	Yes, there are other ways to make your business work without getting the exemptions for a material that isn't really being recycled or diverted from disposal.
Program Administration	
Are the ET and RSF exemptions and reductions clearly defined and understandable?	No - they are pretty ambiguous, whether or not the shaker screen fines are really a beneficial use is questionable, they are still being landfilled so how do they qualify?
Are the RSF and ET exemptions and reductions equitable?	Not really. Some companies that are getting the exemptions are just running materials over a belt quickly not to get more recycling, but to reduce their fees and taxes and they are not recycling, they are just working the system.
Open-Ended Opinion	
Do the ET and RSF exemptions and reductions help to drive waste diversion, waste reduction, or improved environmental quality for the Region?	No impact. We are more concerned with trying to capture the large items and materials that could be diverted and re-used. The shaker screen fines are still being landfilled and not diverted so it doesn't have an impact.



Do the 2015 proposed changes help to increase the clarity, equity, and transparency of the Code?

Somewhat. Dry waste processors can operate successfully without the exemptions. We built our business on a social platform with a triple bottom line philosophy, the goal is to sustain and grow the business while also helping the environment and people in the region. We can do this without getting the exemptions.

Any recommendations to improve the policies around ET and RSF?

Metro should look to base incentive on recovery rates, perhaps the more a company recovers / recycles, the lower the fees / taxes on the residuals? This would encourage companies to increase efficiency and not just run more materials over the shaker screens. Government has a history of ID'ing winners and loser in the market place and the companies with the loudest voices tend to be the 'winners' that government supports. This is not necessarily equitable and Metro needs to concern themselves with that smaller companies that are also doing impactful work in the region.

Eligible Party 3 Interview

12/20/2016

Background	
Major business activities	Full service material recovery facility for dry waste recycling
Materials generated in Region	Service commercial, residential, and industrial customers, process dry waste only
Potential exempted and reduced materials	Materials pulled from stream and recycled are exempted, could get shaker screen fines exempted but do not
Would you consider getting / applying for an exemption?	No. Will never apply for exemptions on shaker screen fines, shaker screen fines are just garbage and should be subject to fees and taxes.
Portion of total that could qualify for exemptions?	Not sure
Marketplace	
If you received the reduced / exempted RSF and ET, what would be the impact to your business?	Small positive. We could get the benefit but is it 'crap'.
Are competitors getting an advantage if they qualify for exemptions?	Yes - they are skirting the system. The issue is real recycling versus what the companies that get exemptions are doing. They are not recycling, they are just screwing over Metro and not paying the taxes and fees they should be paying.
Program Administration	
Are the ET and RSF exemptions and reductions clearly defined and understandable?	Yes
Are the RSF and ET exemptions and reductions equitable?	No - The current system needs to be stopped, the shaker fines are garbage and need to be charged, anyone not paying is cheating. Companies either spend money to do the right thing, or they spend money to skirt the system and make a profit. The litmus test should be that if the material could be used as fill, then it is dirt and good for ADC, shaker fines could not be used as fill and shouldn't be good for ADC.
Open-Ended Opinion	
Do the ET and RSF exemptions and reductions help to drive waste diversion, waste reduction, or improved environmental quality for the Region?	No impact. Real recovery is what you pull from a mixed load and sell as a commodity, not what you pull from a load and use as ADC. If the material that you pull from the stream can be sold for a positive value, then it is a commodity and should not have a fee or tax.



Do the 2015 proposed changes help to increase the clarity, equity, and transparency of the Code?

Yes. If the changes were enacted it would absolutely not hurt the dry waste recovery infrastructure, the companies that are getting the exemptions would need to change their operations or get out of the game, they are working the system.

Any recommendations to improve the policies around ET and RSF?

Metro should pull the exemptions around shaker screen fines, it is garbage and should be charged. If a processor is paying for a material (i.e. auto bodies) it is a commodity and should not be charged. Also, if a material, once processed, can be sold for any amount above \$0.00, it should not be charged. Shaker fines have no value as a commodity, it is just that generators have cut a deal with a landfill and are skirting the fees and taxes. It is wrong and should be stopped. If someone has built their business model around the exemptions, who cares, they did it wrong and are not operating the way they should be. All Metro regulated facilities that are getting a tipping fee should also be paying fees and taxes for materials not sold as commodities.

APPENDIX 4: JURISDICTION RESULTS

Del Norte Solid Waste Management Authority, CA

Population: 28,610 Households: 9,420

The County Solid Waste Management Authority (SWMA) receives one-third of the gate fees collected at the County owned and permitted transfer stations. No materials are exempted from fees. However, the gate fees (\$144 / ton of MSW) are reduced for source separated organics, recyclables, tires, asphalt, concrete, and clean soil as a way to encourage diversion.

Program Details: The Del Norte Solid Waste Management Authority is a joint powers authority formed by the City of Crescent City and the County of Del Norte, encompassing 9,420 households. The Authority manages all solid waste, recycling, composting, household hazardous waste facilities, services, and programs throughout Del Norte County. Recology is the exclusive hauler in the Authority and is required to haul material to the transfer stations. Three transfer stations are located within the Authority, the Authority owns one, one is County owned, and the third is rented. The Authority contracts with a private company to operate the transfer stations. Hambro Waste Solutions Group is responsible for operating the transfer stations and proper disposal. Disposal agreement is between the landfill and the transfer station operator. Current contract transfers all solid waste to the Dry Creek Disposal Site in Oregon, and in 2015, 17,700 tons were disposed of in Dry Creek from Del Norte SWMA. The Authority charges \$144 per ton on all municipal solid waste disposed. The fee structure is such that Hambro Waste Solutions Group is paid two-thirds of the amount that is received at the gate, and the remaining one-third goes to the Authority. The portion of Hambro/WSG fees cover operations including transportation, landfill disposal tipping fees, state disposal fees, etc. The Authority's portion of fees is used for planning, developing, constructing, maintaining, and managing the transfer stations, providing residents with HHW programs, implementing ordinances and programs to control illegal dumping, and for the post-closure maintenance, monitoring, reporting, and remediation related to the Crescent City Landfill.

Exempted or Reduced Fees: Despite the high rate, Del Norte's tip fees are still lower than comparable facilities in Humboldt County, CA, Curry County, OR, or other facilities in Del Norte County, CA. All municipal solid waste is charged the \$144 per ton tip fee, and there is no reduction in material that may be used by the landfill for purposes such as ADC. The county does not have a major industrial presence and all waste gets classified as residential. Recyclables and compostables are charged a lower per ton rate than solid waste. For example, ferrous metals are charged \$27.86 per ton, brush is charged \$50.15, and \$9.77 for mattresses. Additionally, asphalt, concrete without steel, and clean soil are available to customers for free reuse and therefore are accepted at the landfill at reduced rates. If the landfill receives more of these materials than customers are hauling away, they may be disposed in landfill. Tires are also accepted at the

landfill at a reduced tip fee, cut into quarters and disposed of in landfill. The transfer station operator, Hambro Waste Solutions Group, has examined recycling and recovery options for tires, but has determined they are not economical at this time. Household hazardous waste is accepted at the transfer stations free of charge.

Recommendations: While the high tip fee is in part due to the high transfer cost to dispose of solid waste in a landfill more than 2 hours one way from the transfer station, the fee structure has also been designed by the SWMA to encourage and support waste reduction and recycling programs in the County. Since 2007, the Authority has used the revenues generated from the fee to add recycling programs surrounding household hazardous waste collection, policy encouraging waste reduction, recycling and government source reduction programs. Del Norte County believes that the differential fees, combined with the additional recycling programs is helping to drive waste reduction. Since 2007, Del Norte has seen a decrease in per capital disposal rates from 4.0 per resident to 3.5 per resident in 2015.

The Del Norte SWMA has a third party beneficiary agreement with the transfer station operator such that after the customer pays and leaves scale, the materials become the property of Hambro/WSG. The transfer station operator is responsible for sorting and load checking. This agreement allows De Norte SWMA a degree of separation in the case of environmental regulation violations and/or contamination that may arise at the landfill.

San Francisco, California

Population: 864,816 Households: 353,287

The City of San Francisco funds their zero waste and collection programs entirely through monthly garbage bills to residents, and contracts all waste collection to a private company Recology. Recology, collects 100 percent of the tip fee for material brought to the San Francisco transfer station, and as such there are no local surcharge exemptions. Recyclables can be dropped off at no charge, as well as TVs, computers, batteries, and fluorescent tubes and bulbs. The City has a long term, mutually beneficial agreement with Recology in which the city regulates the rates Recology charges, while the guarantee of business allows Recology to invest in waste diversion programs.

Program Details: San Francisco, California contracts all its solid waste management needs including disposal, recycling, composting, and other diversion programs to Recology, which is headquartered in the City. Recology is the only resource recovery company allowed to operate in San Francisco, and the City maintains the right to regulate the rates Recology charges customers. San Francisco's solid waste program is funded solely through revenue generated from refuse rates charged to customers. Residential customers are charged rates depending on bin size. Rates include four components: a base charge, a trash bin charge, a recycling bin charge, and composting bin charge. For example, a 32-gallon bin system will cost a San Francisco resident \$35.18 per month. The larger the refuse cart, the more the customer pays. Commercial rates are based upon service configurations, frequency of collection, and site-specific diversion rates. Commercial rate structure charges a fixed base charge. San Francisco does not collect any money from the



tip fee at the Recology operated transfer station. Presently, San Francisco waste is hauled to a landfill owned by Recology in Vacaville, CA. In 2009, a mandatory recycling and composting ordinance went into effect as a part of moving the City towards their zero waste goal. In 2012, San Francisco diverted nearly 80 percent of solid waste from the landfill, the highest diversion rate of any major US city and significantly more than the City's diversion rate of just 35 percent in 1990.

Exempted or Reduced Fees: Residents and businesses can drop off waste at the Recology operated transfer station in San Francisco. Refuse is charged \$154 per ton, and there are no exemptions or reductions to this fee. Recyclables can be dropped off at no charge, as well as TVs, computers, batteries, and fluorescent tubes and bulbs.

Recommendations: The long term agreement between Recology, who manages all of San Francisco's solid waste, recycling, and composting, and the City of San Francisco provides maximum benefit to San Francisco residents. The city regulates the rates Recology can charge residents, while at the same time the guarantee of long term business for Recology allows the company to commit to larger scale waste diversion programs that might otherwise be too risky or costly. As a result, San Francisco has some of the most comprehensive waste diversion programs in the nation. For example, citywide curbside composting for all residents and businesses. Also, the City boasts a recycling program that accepts a wide array of materials often excluded from other communities' curbside programs such as CDs, toys, and large plastic buckets.

Santa Barbara County, CA Public Works Department

Population: 444,769 Households: 142,713

The Santa Barbara Resource Recovery and Waste Management Division encourages recycling and composting by accepting these materials at a much lower per ton rate than solid waste, \$35 per ton versus \$87 per ton respectively. In addition, construction and demolition debris is accepted at a slightly lower rate, \$84 per ton, when it is used as alternative daily cover. However, Santa Barbra limits the tonnage of C&D accepted for ADC.

Program Details: The Resource Recovery and Waste Management Division (RR&WMD) of the Santa Barbara County Public Works Department is responsible for cost-effective management of solid waste within the County. The Division manages recycling collection, disposal of solid waste, and abatement of illegal dumping of waste. The County owns and operates the Tajiguas Landfill and four transfer stations. In FY 2015-2016, 200,281 tons of material was disposed of at the landfill, 36,855 tons of green waste were ground and distributed regionally as mulch, and 25,796 tons of material from MarBorg Industries' construction and demolition debris facility were used as alternative daily cover. Residents can self-haul materials to the transfer stations, but not the landfill. The per ton tip fee for municipal solid waste is \$87. The fees are used to operate and maintain the landfill and promote recycling programs. The tip fee has also included surcharges in the past to cover downturns in the income from recyclables. Currently, Santa Barbara County is working on a multi-million dollar environmental review process for developing additional facilities for solid waste management, and the fees are supporting this effort.

Exempted or Reduced Fees: The RR&WMD encourages waste diversion at the Tajiguas Landfill by reducing the tip fee to \$35 for clean green and wood waste. In addition, the landfill accepts inert material (remaining material after construction and demolition debris sorting) that is used as alternative daily cover at \$84 per ton. Construction and demolition debris is charged the full tip fee. Tires are charged at a per tire rate, rather than per ton. The rate increases according to the size of the tire. Tires are sent to recycling, and 8,101 tons of miscellaneous materials such as tires, mattresses, and metals were recovered in FY 2015-2016.

Residents can drop off hazardous household waste and electronics for free at certain transfer stations during collection events or at the Community Hazardous Waste Collection Center. Businesses may also use the Community Hazardous Waste Collection Center for a fee of \$24 plus additional small recycling charges. The transfer stations apply a \$5 per ton surcharge on commercial delivered commingled recyclables to offset costs associated with delivering these materials to the MarBorg Industries material recovery facility. Of recent because of recycling commodity markets franchised residential commingled recyclables are charged between \$25-30 per ton when delivered.

Recommendations: The RR&WMD's fee structure is set up such that recycling is encouraged by charging residents a significantly reduced fee for recyclables and compostables. Only a small discount is applied for material that goes towards alternative daily cover. Additionally, in 2003 the County Board of Supervisors approved an ordinance banning the disposal of recyclables by commercial customers. The RR&WMD staff worked to develop a convenient collection program for the commercial sector. Many programs are in place to make recycling and composting easy for residents as well, such as a three cart garbage, composting, and recycling collection system. These factors in combination have helped increase diversion in Santa Barbara County, and in 2015, CalRecycle reported that the City of Goleta and the County of Santa Barbara landfilled 4.1 pounds per capital, which is equivalent to a diversion rate of 72 percent. The RR&WMD recommends simplifying reporting requirements as much as possible or focusing on annual reports rather than quarterly reports to minimize data confusion and need for data manipulation.

Canyon County Solid Waste Department, ID

Population: 207,478 Households: 65,807

The County owned and operated landfill charges a tip fee per ton of \$14 for all waste disposed of in the landfill, which is one of the lowest tip fees in the state. The fee includes no taxes or surcharges. Clean wood waste is accepted at \$12 per ton, mulched, and sold as cattle bedding. The landfill uses clean dirt from on-site for ADC and does not offer discounted rates for potential ADC materials.

Program Details: Canyon County, ID is the state's second largest county, behind Ada County, and is located in the southwest portion of the state. The Canyon County Solid Waste Department operates the Canyon County landfill. Canyon County residents can drop-off MSW, recyclables and hazardous household waste at the landfill. Residents in Owyhee County can also use the landfill, but are charged a higher per ton rate.

The landfill tip fee is \$14 per ton for Canyon County residents, and \$16 per ton for Owyhee County Residents.

Exempted or Reduced Fees: The tip fee at the Canyon County Landfill is lower than tip fees of the surrounding counties. The Canyon County tip fee covers the cost of operating the landfill, and there are no additional fees, taxes, or surcharges associated with the \$14 per ton rate. The Canyon County Landfill is able to charge an extremely low per ton tip fee because the landfill does not include any liner or monitoring equipment. All materials disposed of in the landfill pay this fee, and the landfill uses onsite dirt for daily cover. Clean wood waste is accepted at a reduced fee of \$12 per ton since this material is diverted from the landfill and chipped and sold for cattle bedding. Residents can drop off recyclables and hazardous household waste free of charge.

Recommendations: The lower tip fee for wood waste encourages people to separate out this type of material for recycling, and thus it has a positive impact on saving space within the landfill and waste reduction. The Director of the Canyon County Solid Waste Department feels that maintain an affordable tip fee is crucial to minimizing illegal dumping and littering in the County.

Kootenai County MSW Department, ID

Population: 150,346 Households: 56,421

There are no local or state taxes or surcharges assessed on the \$67 per ton tip fee at the Kootenai County transfer stations or landfill. County residents are assessed \$93 annually and commercial entities are charged \$350 annually on their property tax to fund the MSW programs in Kootenai. Inert fill is accepted at a significantly reduced rate (\$11/ton) as the inert materials are disposed in an unlined inert pit. Wood waste, which is chipped and diverted, is accepted at \$54 per ton. Recyclables are accepted at no charge at the landfill. There is no discounted fee for ADC or for tires. The County does not accept PCS or dredge materials for disposal.

Program Details: The Kootenai County Solid Waste Department is responsible for managing all MSW, recycling, and household hazardous waste generated in the County and operates two transfer stations, the Kootenai County Farm Landfill at Fighting Creek, and a number of rural collection sites. Kootenai County is Idaho's third largest county, and the Solid Waste Department services 56,421 households. In 2014, the landfill received a total of 132,978 tons of MSW. Residents of Kootenai County pay an annual fee on their property taxes of \$93 per year that covers the cost of disposing of normal household waste up to 2,000 pounds per household per year. Commercial entities are charges \$350 annually. Private haulers and residents disposing of more than 2,000 pounds of MSW pay \$67 per ton. The \$67 per ton rate is the highest in the state, more than double the tip fee applied for waste in Ada County, ID, the largest county in the state. The per ton tip fee and assessed property tax funds the two County owned transfer stations, landfill, and 13 rural collection sites. There are no state or local taxes encompassed on the tip fee.

Exempted or Reduced Fees: Kootenai County has the highest tip fee in the state at \$67 per ton. However, inert fill such as clean rock, bricks, soil, and concrete are accepted at a significantly lower rate of \$11 per ton. Inert fill is disposed of in an inert pit, which does not require liners or monitoring equipment and the County uses the rates to encourage diversion. Additionally, inert fill and road spoils / asphalt disposed of at Kootenai County facilities can be accepted at no fee 'provided there is a ready use for them'. Wood waste is diverted from the landfill, chipped, and sold as cattle bedding so that it is also charged a reduced fee of \$54 per ton. The only other items Kootenai County accepts at reduced fees include recyclables and hazardous household waste at no charge, and electronic waste at a small fee. Full tires are accepted for a fee at the landfill, the landfill uses the fee to pay for tire recycling and processing. Petroleum contaminated soils and dredge materials are not accepted at County facilities. Street sweepings are accepted at the same tipping fee as MSW.

Recommendations: Kootenai County has an agreement with the largest city in the County, Coeur d'Alene (44,137 people), that requires the City to bring all waste to the County transfer stations. This commitment of tonnage along with the secured property tax funding provides Kootenai with steady revenue to operate the transfer stations, landfill, and 13 rural collection sites.

Southern Idaho Solid Waste District

Population: 191,329 Households: 67,396

Southern Idaho Solid Waste District manages the landfill and transfer stations for its seven counties. The counties pay per ton fees for landfill disposal, transportation, and operations. The landfill tipping fee is \$16 per ton. Transportation and operation fees are calculated from services needed, thus each county costs per ton vary. Wood Waste and fly ash receive a reduced tip fee. Wood waste is mulched and sold, while fly ash aids in biosolids degradation. Customers understand that fees need to increase small amounts at regular intervals to account for changes in the economy. However, customers don't like to be surprised by a sudden, large fee increase. Clearly explain fees and any changes.

Program Details: The Southern Idaho Solid Waste (SISW) District is the only solid waste district in the state of Idaho. The District encompasses Blaine, Cassia, Gooding, Jerome, Lincoln, Minidoka, and Twin Falls Counties, and serves 67,396 households spread over more than 10,000 square miles. The Milner Butte Landfill as well as fourteen waste transfer stations are leased and operated by SISW but owned by the counties. Recycling, waste diversion programs, and public education are also a part of the District's programs. Each transfer station has diversion opportunities. On average, the District manages 700 tons of waste each day. In 2014, the District won the Silver Excellence Award in Landfill Management by the Solid Waste Association of North America (SWANA).

The member counties pay per ton fees for landfill disposal, transportation, and operations. The landfill tipping fee is \$16 per ton. Transportation and operation fees are calculated from services needed, thus each county costs per ton vary. Landfill tipping fees cover landfill disposal and management costs,



transportation fees cover costs for transporting waste (includes equipment) and operation fees cover employees at the transfer stations. SISW charges each county equitably for services needed.

Counties use various funding mechanisms to fund their system (tax assessments, tipping fee, etc.) SISW does not charge surcharges and is not sure if county's charge additional surcharges. The counties have to charge enough to cover SISW fees.

Exempted or Reduced Fees: Certain materials that are considered beneficial to the landfill are accepted at a reduced rate below the \$16 per ton tip fee. For example, wood waste that can be chipped may be charged a rate as low as \$2 per cubic yard or \$4 per ton, again depending on the rate agreement between SISW and the county. Another example is fly ash which is accepted at \$12 per ton because it is used by the landfill to hasten the windrow composting process of biosolids.

Recyclables and household hazardous waste can be dropped off by residents at the transfer stations free of charge. SISW also offers programs for residents to recycle computers free of charge, tires, and old appliances.

A special category is inert materials such as construction and demolition with less than 10 percent organic materials, inert soils, concrete, and asphalt. These materials are not sent to the Milner Butte Landfill and instead go to a Nonmunicipal Solid Waste Landfill. This type of landfill in Idaho does not require liners or monitoring equipment so that the tipping fee at Nonmunicipal Landfills is significantly less than at the Milner Butte Landfill.

Recommendations: The recycling and other diversion programs of SISW have had a large positive impact on the District's environment. For example, in 2014 SISW recycled over 32,000 pounds of computers and 325 tons of tires, and diverted 12,000 tons of wood waste from the landfill. Josh Bartlome, the Executive Director of SISW, emphasized that an important component to success for any waste management program is to justify fees to the community. The customers are more willing to pay the tip fees if they understand the purpose of the fees. Furthermore, customers should be informed early about any fee changes. If possible, fees should be raised at smaller intervals over several years, rather than a large jump all at once. Changing the fees by a substantial amount suddenly, without fully justifying those changes to the community will inevitably result in confusion and anger among residents and businesses.

Pierce County, Washington Solid Waste

Population: 843,954 Households: 336,357

In general, Pierce County address solid waste management in all unincorporated and incorporated areas of Pierce County. A gate fee is charged on all MSW landfilled and includes per ton fees to operate all components of the waste management system. Pierce County contracts with private sector to provide waste, recycling, and composting services. County only collects gate fee on contracted MSW and has authority to offer fee exemptions. Most fee exemptions are generator based, not material based and are

offered to self-haul customers. Alternative daily cover, metal, VOC containing soils, mixed construction and land clearing debris, material recovery facility residuals and manufacturing by-product are off-spec materials and are not directly managed as part of the Pierce County solid waste system.

Program Details: Pierce County is located in western Washington State, in the south Puget Sound area. Pierce County is the second most populous county in Washington State with a population of 843,954, approximately 24 percent of the county population resides in the county's largest corporation, Tacoma. There are three separate management systems in Pierce County: unincorporated areas of Pierce County and 19 cities and towns; Tacoma; and Fort Lewis/McChord Air Force Base. In Washington local governments have lead responsibility for solid waste management. The unincorporated areas of the County and 19 cities and towns use Pierce County's waste management system.

The Pierce County Public Works Department is charged with solid waste and recycling planning for the Pierce County management system. This system serves the unincorporated areas of the county and cities and towns, which have interlocal agreements to participate in the county's management system. Even though the City of Tacoma and Pierce County coordinate activities, Tacoma's management system is independent and is not included in this summary.

In Pierce County's system there are 5 transfer stations. One is private owned and operated the other 4 are owned by Pierce County and privately operated. Whether received at transfer stations by self-haulers or hauling company vehicles, all MSW is transported to a private landfill. Pierce County contracts with the private company for operations of the transfer stations and landfill disposal. The contract also includes recycling and yard waste. Private haulers provide recycling service in the county or drop-off sites are available for recyclables. Recyclables are transported to a materials recovery facility where a combination of hand and mechanical sorting separates the different materials. They are then baled and transported to manufacturing plants. Yard waste is either collected at the curb or self hauled to the transfer stations.

Residents may take their household hazardous waste free-of-charge to 2 transfer stations.

The gate fee (referred as tipping fee by Pierce County) is used to manage the integrated waste management system as described in the Tacoma-Pierce County solid waste management plan. The gate fee is a per ton charge imposed on landfilled waste. The tipping fee consists of several components:

Tipping Fee Component	2016 Charges
Transfer, Transportation and Recycling	\$45.03/ton
Disposal Fee	\$56.99/ton
County Diversion Programs	\$30.82/ton
Community Support Services	\$0.80/ton
County Program Costs (education, outreach, administration, code enforcement)	\$12.20/ton
Total Gate Fee	\$145.84/ton

The Pierce County gate fee does not include State fee charges.

Exempted or Reduced Fees:

Pierce County has authority to offer exemptions. Identified exemptions include:

- The county waives the \$12.20/ton for self-hauled residential waste.
- Sometimes the County has special circumstances to abate a property as issued per court order. For these clean up activities, the County will waive the \$30.82/ton fee.
- There may be a rare instance when a generator direct hauls waste. If this occurs, the County has authority to waive \$45.03/ton.

Alternative daily cover, metal- and VOC- containing soils, mixed construction and land clearing debris, material recovery facility residuals and manufacturing by-product are off-spec materials and are not directly managed as part of the Pierce County solid waste system.

Recommendations:

Strive for 1.) Consistency, promotion and transparency 2.) Documentation of all decisions and 3.) Checks and balances. Develop a policy for integrated environmental management system and implement. Local generators being able to work with local vendors – has a large impact on supporting business activity in the county. Excluding off contract waste from gate fees supports this and keeps revenue in the county.

Spokane County Regional Solid Waste System

Population: 490,945 Households: 208,296

In general, Spokane County Regional Solid Waste System manages the solid waste for Spokane County, City of Spokane and other regional cities and jurisdictions. A gate fee is charged on all MSW and yard waste. The disposal fee consists of several components: tipping fee, City of Spokane fee, State Fee, contract fee, and program costs. Gate fee discounts are provided to non-profit organizations and to the Litter Control Program. All fees are waived on recyclables and organics are afforded approximately 50% discount. Waste materials are processed at a Waste-to-Energy facility and thus, ADC is not required.

Program Details: The Spokane County Regional Solid Waste System (System) encompasses Spokane County, City of Spokane and other regional cities and jurisdictions, and serves 208,296 households. About half of the population resides in the City of Spokane. The Interlocal Cooperation Agreement with the County and City of Spokane places the County responsible for ensuring delivery of waste from unincorporated areas to the System. The Interlocal Agreement created the Spokane Regional Solid Waste System.

Facilities in System include two county owned transfer stations and one waste to energy (WTE) facility owned by the City of Spokane. Yard waste collected throughout the county is hauled to System facilities and hauled to a contracted composting operation located outside of the county. The System does not

provide curbside collection of recyclables but does provide drop-off opportunities at the transfer stations and the WTE. Each has a recycling area and adjacent household hazardous waste drop-off facility. Recycling/HHW are accepted without charge or payment for material brought in. The System provides regional recycling promotion and support for all of the regional cities and Spokane County.

Disposal fees are collected from residents, businesses, and haulers, including the City of Spokane at the transfer stations and the WTE. The disposal fee is used to manage the integrated waste management system as described in the solid waste management plan. The disposal fee consists of several components: tipping fee, City of Spokane fee, State Fee, contract fee, and program costs.

Exempted or Reduced Fees: Gate fees are waived for any waste delivered by the Litter Control Program. Non-profits, such as Goodwill and Salvation Army, are charged two-thirds of the costs for MSW brought to System facilities. Recyclables and household hazardous waste can be dropped off by residents at System facilities free of charge.

Recommendations: The System offered no recommendations because all MSW is incinerated.

Seattle, Washington Solid Waste *(To be expanded in next draft)*

Population: 684,451 Households: 308,516

In general, Seattle manages all solid waste management in the city through contracts. Seattle waste management is handled as a utility and all residential homes are billed for usage. Garbage and recycling are bundled in the rates. Food and yard waste have separate monthly rate charges. Commercial businesses are charged rates based on service options.

Program Details: Seattle is the northernmost city on the mainland of the United States in King County, Washington. It is the largest city in Washington with a population of 684,451.

Seattle contracts with a private sector for hauling and processing of garbage, recycling, and food and yard waste. Seattle manages the following contracts: organics processing, solid waste collection (garbage, recycling, food and yard waste), recyclable processing, food and yard waste processing, and long haul disposal.

In Seattle's system there are 2 city owned transfer stations. Collected garbage waste is transported to transfer facilities then to a railhead. From the railhead, garbage is transported by rail to a landfill. Depending on how the permit and or plan of operation are written, transfer stations can have MRF activities going on concurrent with transfer station activities. In Seattle both transfer stations have recycling facilities. The transfer stations accept more than 10 categories of separated material—from garbage to wood waste to vehicle batteries. In addition to these services, Seattle also operates two household hazardous waste (HHW) collection facilities.



The transfer stations charge a per ton rate, \$145, for garbage. Rates for clean yard waste and wood waste are lower at \$110 per ton. In order to get the lower rates, materials must be separate before arriving at the transfer stations. A flat rate vehicle fee is available for sedans, station wagons, and sport utility vehicles (all without trailers) for garbage, clean yard waste and wood waste.

Construction and demolition debris is directed to King County solid waste management facilities.

Seattle taxes for waste management system. Seattle revenue sources come from residential rates, commercial rates, self-haul tipping fees, and a general solid waste tonnage fee. Residential customers are charged rates depending on bin size. Residential customers see one charge for trash disposal, which includes recycling and composting service. Components of the residential monthly rates include garbage collection and processing fees, transportation fees, transfer station operation fees, landfill and waste reduction fees, planning, program and administration fees, and customer service fees.

Recommendations: Very helpful to tax the outbound stream. All materials sent to transfer facility where sorting takes place then landfill materials are taxed on the outbound stream. This helps eliminate poorly recycled or poorly disposed items. In other words, true items going to the landfill are disposed. In Seattle the local taxes are more significant than state taxes. Need coordination with the county, state, and city and it helps if the definitions of materials are consistent.

APPENDIX 5: DETAILED TIMELINE OF METRO CODE

The following timeline was developed by Metro staff as part of this project.

Ordinance No.	Adoption Date	Effective Date	Summary
82-146	11/4/1982	1/3/1983	<p>1) Establishes "solid waste user fees" which are collected and paid by solid waste disposal facilities (inside and outside of Metro). User fees for the disposal of solid waste "generated, originating, or collected within Metro boundaries."</p> <p>2) Establishes a regional transfer charge paid by operators of solid waste disposal facilities (inside and outside of Metro). Same definition as user fee and add-on charge for "services rendered by Metro in administering and operating solid waste transfer facilities owned, operated or franchised by Metro."</p> <p>3) Exempts inert materials from user fees when used at St. Johns Landfill. Specifically, exemption for inert materials "including but not limited to earth, sand, stone, crushed stone, crushed concrete, broken asphaltic concrete and wood chips used at a landfill for cover, diking, road base or other internal use and for which disposal charges have been waived" by the operator of the St. Johns Landfill (indirect reference via another code citation).</p>
85-191	11/26/1985	1/1/1986	<p>1) Amends user fees for the disposal of solid waste "generated, originating, collected, <i>or disposed</i> within Metro boundaries."</p> <p>2) Amends transfer charge as above.</p> <p>3) Exempts waste disposed at "limited purpose landfills by commercial disposers" from transfer charge. States that the purpose of the exemption is to "encourage disposal of non-food waste at limited use sites and thus prolong the capacity of general purpose landfills."</p> <p>4) Establishes that the solid waste director can exempt waste from the transfer charge at transfer stations "not owned by Metro" if the: i) exemption benefits the system and is need to provide incentive for waste diversion, ii) exemption is for a reasonable time not to exceed the construction of the Washington Transfer Center, iii) exemption applies to the quantity of waste that does not adversely affect the finances of the system, iv) station accepts the entire quantity of waste from the region that it can legally and operationally accept, v) station continues to collect other Metro fees, and vi) exemption is granted through written agreement.</p>
86-214	12/18/1986	4/1/1987	<p>Establishes that user fees and transfer charges do not apply to "waste received at franchised processing centers that accomplish material recovery and recycling as a primary operation." Identified as a "recycling incentive" to "encourage the development and operation" of processing centers.</p>

Ordinance No.	Adoption Date	Effective Date	Summary
88-257	8/11/1988	11/1/1988	Establishes that user fees and transfer charges do not apply to "loads of waste received at the Clackamas Transfer & Recycling Center which are verified by an authorized Metropolitan Services District representative to be at least 90 percent cardboard."
88-266B	10/27/1988		Adopts 1988 Regional Solid Waste Management Plan. Includes rate structure policy to provide financial incentives for waste reduction and recycling to reduce disposal. Also references intent to achieve stable, equitable, and predictable solid waste system costs and rates.
89-269	1/26/1989		Changes name of "Clackamas Transfer & Recycling Center" to "Metro South Station."
90-333A	3/8/1990	7/1/1990	1) Adopts Chapter 7.01 and imposes excise tax "for the privilege of use of the facilities, equipment, systems, functions, services, or improvements owned, operated, franchised, or provided by the District." Tax assessed as a percentage of the payment charged by the operator. 2) Exempts "an operator of a franchised processing center that accomplishes material recovery and recycling as a primary operation."
90-337	3/22/1990		1) Establishes a two tier user fee structure. Tier One User Fee is collected at all regional facilities. Tier Two User Fee is collected at Metro owned facilities. 2) Amends "Chapter 11 - Rate Structure" policies in 1988 as follows: i) "the solid waste system shall be developed to achieve stable, equitable and predictable solid waste system costs and rates," ii) "while the base rate will remain uniform throughout the region, local solid waste management options may affect rates," iii) Metro shall provide financial support for source separation programs, to produce high-grade select loads and to carry out other waste reduction programs," and iv) "in establishing financial support for waste reduction programs, Metro shall consider cost effectiveness, legal, technical and economic feasibility."
90-372	11/29/1990	1/12/1991	Establishes tonnage based solid waste disposal rates at Metro facilities.
91-386C	3/28/1991	7/1/1991	1) Changes name of "Metro East Station" to "Metro Central Station." 2) Changes "Tier One User Fee" to "Regional System Fee." 3) Changes "Tier Two User Fee" to "Metro User Fee." 4) Establishes that Metro User Fees may be assessed on waste subject to non-system license.
92-455B	5/14/1992	7/1/1992	1) Removes St. Johns as disposal site due to closure. 2) Amends user fee exemption to specifically reference inert materials (including wood chips) used at the St. Johns Landfill (removes previous reference to "landfill" and cross reference to disposal charges at St. Johns).
94-531	3/10/1994		Establishes that the solid waste director may issue special exemptions from disposal fees to a public agency, local government or qualified non-profit entity under certain circumstances (likely pre-cursor to disposal voucher program).

Ordinance No.	Adoption Date	Effective Date	Summary
96-634	2/29/1996		<p>1) Approves franchise for Waste Recovery, Inc. to operate a waste tire processing facility.</p> <p>2) Establishes that Waste Recovery, Inc. is exempt from payment of user fees (under a graduated scale as provided in franchise).</p> <p>3) Establishes exemption from excise tax for "a tire processor operating pursuant to a Metro franchise, which processes used tires into fuel and/or other products." Exemption is granted on the "disposal of residual material produced directly as a result of such process."</p> <p>4) Staff report cites unique attributes of waste tire management and references the objective of encouraging recovery of waste tires by the private sector (economic incentive to encourage recycling, reduce disposal, and enhance local recycling capacity). In addition, foregoing certain fees for a period of time will allow investment in residual reducing technology.</p>
97-681B	3/27/1997	7/1/1997	Amends user fee exemption to reference inert materials (including wood chips) used at disposal facilities (removes previous reference to "St. Johns Landfill").
98-720A	2/26/1998	6/1/1998	<p>1) Establishes "direct-haul disposal charge" which means the fee to pay the direct unit costs of disposal of waste under the disposal contract with Waste Management of Oregon. Levied on waste that is delivered directly to Columbia Ridge Landfill (other than that delivered by Metro).</p> <p>2) Changes "Metro user fee" to "Metro facility fee" which is imposed on waste delivered to Metro Central and South.</p> <p>3) Changes "regional user fee" to "regional system fee."</p> <p>4) Establishes exemption from regional system fees for solid waste received at transfer facilities which will transport waste to another facility that collects regional system fees (eliminates double payments).</p> <p>5) Establishes Regional System Fee Credit Program.</p>
98-762C	7/23/1998	8/1/1998	<p>1) Expands regulatory requirements in Chapter 5.01.</p> <p>2) Establishes definition for "useful material" in Chapter 5.01.</p> <p>3) Amends user fee exemptions to include: i) non-putrescible waste accepted at a franchised and licensed solid waste facility that is authorized to perform only material recovery or recycling activities, ii) PCS accepted at certified facilities that treat PCS to applicable DEQ standards, iii) source-separated yard debris accepted at licensed yard debris processing facilities or yard debris reload facilities, iv) waste accepted at a licensed or franchised solid waste facility that delivers putrescible waste to a transfer station owned, operated, licensed or franchised by the District, or to the District's contract operator for disposal of putrescible waste; and that delivers non-putrescible waste and processing residuals to: A) a licensed or franchised facility that is authorized to perform material recovery or recycling activities, or B) to a solid waste facility or disposal site listed as a Metro designated facility in Chapter 5.05, or C) another facility or disposal site under authority of a Metro non-system license issued pursuant to Chapter 5.05 provided that the person holding the NSL and license or franchise pays all fees and taxes required by</p>

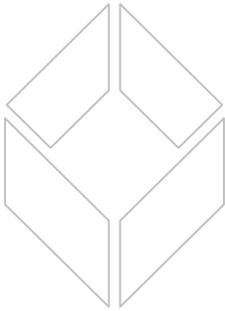
Ordinance No.	Adoption Date	Effective Date	Summary
			<p>this Code, and v) useful material that is accepted at a disposal site that is listed as a Metro Designated Facility in Chapter 5.05 or accepted at a disposal site under authority of a Metro non-system license issued pursuant to Chapter 5.05, provided that the useful material: A) is intended to be used, and is in fact used, productively in the operation of the disposal site such as for roadbeds or alternative daily cover and B) is accepted at the disposal site at no charge.</p> <p>4) Establishes direct haul conditions.</p>
00-865	6/15/2000		Amends 1995 Regional Solid Waste Management Plan
00-866	6/15/2000		<p>1) Establishes term "cleanup material contaminated by hazardous substances." 2) Amends "useful material" definition to exclude cleanup material. 3) Amends user fee exemptions to include: i) solid waste facilities that are certified, licensed, franchised, or exempt (replaces previous reference to non-putrescible waste at recovery facilities and removes previous provision to waste received at other facilities), ii) cleanup material (replaces reference to PCS), iii) source-separated yard debris (no change), iv) useful material (no change), v) processing residual produced by tire processors (newly added). 4) Establishes user fee credit for disposal of cleanup material.</p>
00-867	6/15/2000		<p>1) Amends Chapter 5.02 to remove exemption list from chapter - cites reference to list in Chapter 5.01. 2) Establishes term "cleanup material contaminated by hazardous substances." 3) Establishes user fee credit for disposal of cleanup material.</p>

APPENDIX 6: 2006 URS REPORT UPDATE

2006 Section	Title	Comments or Updates
1.0	Introduction	No updates or comments
2.0	Background and Research Activities	The 2016/17 updated report followed a similar work plan as the 2006 report (background, data analysis, interviews, recommendations) with an expanded interview and stakeholder input process. For instance, while some of the same entities that were interviewed in 2006 (i.e. Tire Disposal and Recycling Inc., Schnitzer Steel, Allied Waste / Republic, Waste Management, Waste Connections) were also interviewed for the 2016/17 update, the number of entities interviewed was expanded in the 2016 /17 update to include 24 total entities. Additionally, the update was expanded to include interviews with 9 local jurisdictions.
3.0	Background of Reduced Fee Materials	Similar to 2006, the 2016/17 update includes a comprehensive review of Metro Code and policy application for RSF and ET exemptions and reduced fees. There have been no significant changes in the Metro Code regarding exemptions and reductions since the 2006 report. The changes proposed by Metro in 2015 are contained in the updated report.
4.0	Volume and Tracking of Reduced Fee Materials	The 2016/17 update includes an analysis of disposal, exempted, and reduced material tonnages over time. Data was not available for analysis for years from 2006 to 2009 making continuity in analysis difficult. Additionally, while the 2006 report did include tons of exempted and reduced fee materials, it did not include total tonnage disposed making it difficult to proportionally compare the new data to the previous reported data. When applicable, the 2006 report data is referenced.
5.0	Use of Beneficial Use Materials in Landfills	Similar to the 2006 report, the update includes details on how materials are being used on-site at landfills. The update expands on the 2006 report with additional interviews, questions, and recommendations.
6.0	Oregon DEQ Policies	The updated report once again shares the Oregon DEQ procedures and policies related to reduced rate materials. The policies have changed since 2006 and the updates are reflected in the report.
7.0	Charges Assessed	The charges assessed for the RSF and ET have increased since 2006, the updated report includes the timeline and adjustments to the charges.
8.0	Other States Policies	The updated report includes information from California, Idaho, and Washington. It does not include information on Maine, New Jersey, or Minnesota (included in the 2006 report). The policies in California have changed since 2006 and the changes are reflected in the report.



2006 Section	Title	Comments or Updates
9.0	Alternatives Discussion and Recommendations	The 2006 report included an analysis of four potential options for policy change and a recommendation for Metro. The updated report (when completed) will include both recommendations for improvements to the current system as well as an evaluation of multiple policy scenarios and final recommendation for Metro.



MANAGING CHANGE IN A RESOURCE-CONSTRAINED WORLD

RRS is a consultancy with a vision. We see a world where resources are managed to maximize economic and social benefit while minimizing environmental impact. A world where abundance keeps pace with societal needs.

We have assembled a unique team of strategists, engineers, economists and communications specialists with core strengths in materials and recovery, coupled with expertise in life cycle management and applied sustainable design. These experts operate confidently across the supply chain, identifying the most leveraged opportunities to affect change, and developing pathways to long-term value.

RRS has been working toward this vision since 1986. Our clients are leaders in materials management, and in partnership we have achieved outstanding results. We remain nimble and responsive, providing informed, innovative, actionable solutions to the sustainability challenges of our time.