



State of Oregon Department of Environmental Quality

Draft Fiscal Impact Statement

Hazardous Waste 2022 Rulemaking: Definition of Solid Waste
[40 CFR Part 260](#); [40 CFR Part 261](#); [EPA-HQ-OLEM-2018-0185](#)

Introduction

This is a draft fiscal impact statement developed by the Oregon Department of Environmental Quality for the 2022 Hazardous Waste Rulemaking. This document is being presented to the Rules Advisory Committee for their input before being finalized for inclusion in the public notice.

DEQ invites public input on proposed permanent rule amendments to Chapter 340 of the Oregon Administrative Rules. If adopted as proposed, DEQ anticipates the 2018 Definition of Solid Waste federal rule will not significantly increase generator net costs or provide cost savings for managing and disposal of generated hazardous waste.

The rule establishes a new classification of hazardous secondary material, or HSM, which includes hazardous materials now managed under preexisting exclusions in 40 CFR Section 261.2 and 261.4. This rule also introduces environmental safeguards by establishing four required legitimacy criteria factors which are used to define sham recycling, update the management standards for speculative accumulation, and provide a regulatory definition of “contained” applicable to both hazardous wastes and hazardous secondary materials. The rule is more stringent than DEQ’s current hazardous waste regulations, except for the broad hazardous secondary material exclusion, of which Oregon is not recommending adoption.

Fee Analysis

This rulemaking does not involve fees.

Summary of Fiscal and Economic impacts

DEQ assumes the fiscal and economic impacts identified in the federal rulemaking are accurate and apply to Oregon facilities the same as determined during the federal rulemaking.

At this time, DEQ is unable to quantify any additional potential Oregon economic impacts of this rule, as there are no known additional fees or costs associated with the mandatory or optional provisions of this rule.

Overall, DEQ does not expect generator costs to significantly increase as a result of adoption of this proposed rule. The regulations resulting from this rule provide much-needed regulatory certainty and a commonsense framework to promote the legitimate recycling of hazardous secondary materials. Removing barriers to legitimate recycling is good for business and the environment, and will result in conserving natural resources, reducing waste, saving energy, and reducing costs. Facilities may incur initial minimal cost increases as a result of complying with the new mandatory provisions.

Statement of Cost of Compliance

State agencies

DEQ will incur costs to develop new guidance materials, train staff, provide technical assistance outreach, adopt new enforcement guidance, and implement the rule during compliance inspections.

Local governments

DEQ does not anticipate local governments will incur any additional costs due to this rulemaking.

Public

DEQ does not anticipate the public will incur any additional costs due to this rulemaking.

Large businesses - businesses with more than 50 employees

DEQ anticipates large businesses may incur minor additional costs. These costs will likely include training, conducting legitimacy criteria reviews and maintaining documentation for review onsite, along with meeting speculative accumulation and storage provisions, only if reclaiming what would otherwise be hazardous waste under current exemptions and exclusions. These reviews are one-time requirements, as long as the waste and recycling process remain the same. Generators of hazardous secondary materials must maintain this documentation for three years past the date recycling concludes.

Small businesses – businesses with 50 or fewer employees

DEQ anticipates small businesses may incur minor additional costs. These costs will likely include training, conducting legitimacy criteria reviews and maintaining documentation for review on-site, and meeting speculative accumulation and storage provisions only if reclaiming waste under current exemptions and exclusions. These reviews are one-time requirements, as long as the waste and recycling process remain the same. Generators of hazardous secondary materials must maintain this documentation for three years past the date recycling concludes.

ORS 183.336 - Cost of Compliance for Small Businesses

1. Estimated number of small businesses and types of businesses and industries with small businesses subject to proposed rule.

During the federal rulemaking, the U.S. Environmental Protection Agency identified fiscal and economic impacts. For this purpose, EPA identified a small business as one with 50 or fewer employees.

The Regulatory Flexibility Act requires EPA to conduct economic assessments for small businesses before adopting rules. EPA determined the proposed rules would not have a significant economic impact on small businesses.¹

EPA’s small business impacts were only estimated for 27 of the industries that will have the largest number of impacted facilities out of 622 NAICS code industries² that may be affected by the pre-2008 Definition of Solid Waste exclusions. EPA assumes these 27 largest impacted industries represent the largest potential impact to small entities for purposes of their impact evaluation. There may be additional significant impacts to small businesses in some of the industries that were not evaluated.³ Refer to appendices A and B for Estimated Average Annual Impact of the 2014 DSW Revisions on Small Businesses and Estimated Maximum Average State Cost Burden Associated with 2014 DSW Revisions, respectively.

<p>a. Estimated number and type of small businesses subject to the proposed rule.</p> <p>*Industry eligible for remanufacturing exclusion ⁴</p>	<p>Using 2019 employment data, DEQ found an estimated 839 Oregon businesses, with 708 having less than 50 employees that may be impacted by this rule. Using the EPA identified 27 small business North American Industry Classification System codes,⁵ DEQ found the following:</p> <table border="0"> <tr><td>323110 – Commercial lithographic printing</td><td>0</td></tr> <tr><td>324110 – Petroleum refineries</td><td>0</td></tr> <tr><td>325188 – All other basic inorganic chem manuf.</td><td>0</td></tr> <tr><td>325199 – *Basic Organic Chemical Manuf.</td><td>9</td></tr> <tr><td>325211 – *Plastic & Resin Manufacturing</td><td>9</td></tr> <tr><td>325412 – *Pharmaceutical Manufacturing</td><td>40</td></tr> <tr><td>325510 – *Paint & Coating Manufacturing</td><td>14</td></tr> <tr><td>325998 – All other misc chem product prep manuf.</td><td>42</td></tr> <tr><td>326199 – All other plastic product manufacturing</td><td>66</td></tr> <tr><td>331111 – Iron & steel mills</td><td>0</td></tr> <tr><td>331492 – Secondary smelting, non-ferrous</td><td>2</td></tr> <tr><td>332312 – Fabricated structural metal manuf.</td><td>31</td></tr> <tr><td>332812 – Metal coating, engraving manuf.</td><td>59</td></tr> <tr><td>332813 – Electroplating, polishing, anodizing</td><td>29</td></tr> <tr><td>332999 – All other misc. fabrication metal manuf.</td><td>80</td></tr> </table>	323110 – Commercial lithographic printing	0	324110 – Petroleum refineries	0	325188 – All other basic inorganic chem manuf.	0	325199 – *Basic Organic Chemical Manuf.	9	325211 – *Plastic & Resin Manufacturing	9	325412 – *Pharmaceutical Manufacturing	40	325510 – *Paint & Coating Manufacturing	14	325998 – All other misc chem product prep manuf.	42	326199 – All other plastic product manufacturing	66	331111 – Iron & steel mills	0	331492 – Secondary smelting, non-ferrous	2	332312 – Fabricated structural metal manuf.	31	332812 – Metal coating, engraving manuf.	59	332813 – Electroplating, polishing, anodizing	29	332999 – All other misc. fabrication metal manuf.	80
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¹ Source: Federal Register (80 FR 1694-1814), C. Regulatory Flexibility Act, p.1769
² Source: EPA 2014 DSW Regulatory Impact Analysis, Appendix A
³ Source: EPA 2014 DSW Regulatory Impact Analysis, p.7-7
⁴ Source: EPA 2014 DSW Regulatory Impact Analysis, p.2-13
⁵ Source: EPA 2014 DSW Regulatory Impact Analysis, Exhibit 7A table, p.7-4

	333415 – Air condition, heating, refrig. equip.	9
	334412 – Bare printed circuit board manuf.	8
	334413 – Semi-conductor & related manuf.	37
	334418 – Printed circuit assembly manuf.	17
	336399 – All other motor vehicle parts manuf.	0
	336412 – Aircraft engine & parts manuf.	2
	336413 – Other aircraft part & equip manuf.	17
	541710 – Research/development phys, eng, life sci.	1
	562211 – Hazardous waste treatment & disposal	3
	611310 - College, university, prof. schools	217
	622110 – General medical & surgical hospitals	15
	928110 – National security	2

2. Projected reporting, recordkeeping, and other administrative activities, including costs of professional services, required for small businesses to comply with the proposed rule.

The proposed rule will not require any additional reporting or administrative activities. Adopting this rule would cause hazardous secondary material, or HSM, generators to document legitimacy criteria and keep records available for review documenting that HSM recycling activity meets these criteria. Generators may pay costs associated with procuring professional services if the company outsources a firm to evaluate and produce legitimacy criteria for each HSM.

3. Projected equipment, supplies, labor, and increased administration required for small businesses to comply with the proposed rule.

The proposed rule will not require any additional equipment, supplies, labor, or increased administration except as noted above. DEQ Hazardous Waste Technical Assistance is especially designed to assist smaller businesses with Resource Conservation and Recovery Act, or RCRA, compliance and hazardous waste reduction.

4. Describe how DEQ involved small businesses in developing this proposed rule.

DEQ will include small business representatives on the Hazardous Waste 2022 Rulemaking Advisory Committee who will advise DEQ on the cost of compliance for small businesses. DEQ anticipates working with industry representatives and developing templates for documenting legitimacy criteria for small businesses; for example, for the autobody industry when recycling hazardous secondary material solvent and paint by onsite distillation.

Documents relied on for fiscal and economic impact

The requirement to list the documents relied on to determine fiscal impact is separate from and in addition to the similar list in the Rules affected, authorities, supporting documents section above.

Document title	Document location
Federal Register entries for the incorporated rule and amendments	Federal Register
Federal: <i>Regulatory Impact Analysis: EPA's 2014 Revision to Industrial Recycling Exclusion</i> <i>Potential Adverse Impacts (including Minority and Low-income Populations)</i>	EPA 2014 DSW Regulatory Impact Analysis Potential Adverse Impacts (including Minority and Low-income Populations).
Oregon Annual Hazardous Waste Reporting for reclamation and disposal, years 2017 to 2019	Oregon Department of Environmental Quality Hazardous Waste Program 700 NE Multnomah St., Suite 600 Portland, OR 97232
Oregon Department of Employment 2nd quarter 2019 data	Employment Department 875 Union St. NE Salem OR 97311

Advisory committee fiscal review

DEQ appointed an advisory committee for this rulemaking.

As ORS 183.33 requires, DEQ will ask for the committee's recommendations on:

- Whether the proposed rules would have a fiscal impact,
- The extent of the impact, and
- Whether the proposed rules would have a significant adverse impact on small businesses; if so, then how DEQ can comply with ORS 183.540 reduce that impact.

The committee will review the draft fiscal and economic impact statement and its findings will be stated in the approved minutes.

The committee determines if the proposed rules would or would not have a significant adverse impact on small businesses in Oregon.

If a significant impact is identified by the committee, as ORS 183.333 and 183.540 requires, the committee will consider how DEQ could reduce the rules' fiscal impact on small business by:

- Establishing differing compliance or reporting requirements or timetables for small business;

- Clarifying, consolidating, or simplifying the compliance and reporting requirements under the rule for small business;
- Using objective criteria for standards;
- Exempting small businesses from any or all requirements of the rule; or
- Otherwise establishing less intrusive or less costly alternatives applicable to small business.

Housing cost

As ORS 183.534 requires, DEQ evaluated whether the proposed rules would have an effect on the development cost of a 6,000 square-foot parcel and construction of a 1,200-square-foot detached, single-family dwelling on that parcel. DEQ determined the proposed rules would have no effect on the development costs because the proposed rule only affects businesses subject to the hazardous waste regulations.

Racial Equity

ORS 183.335(2)(a)(F) requires state agencies to provide a statement identifying how adoption of this rule will affect racial equity in this state.

Adoption of this rule will provide further clarification regarding federal regulations that are implemented by Oregon DEQ. Regulated entities and the public will benefit from this increased clarity. As there are no expected changes to practical implementation of these federal standards based on the clarification of applicable terms and definitions, there is no expected impact on racial equity in the state.

Alternative formats

DEQ can provide documents in an alternate format or in a language other than English upon request. Call DEQ at 800-452-4011 or email deqinfo@deq.state.or.us.

Appendix A

Exhibit 7C Estimated Average Annual Impact of the 2014 DSW Revisions on Small Businesses (54% notification rate, 3% discount rate)^a				
NAICS	Industry	Small Company Average Annual Revenue (2012\$/yr) ^b	Average Annual Cost Impact per Facility (2012\$/yr) ^c	Annual Cost Impact as a Percent of Annual Revenue
323110	Commercial Lithographic Printing	\$8,161,602	\$689	0.00844%
324110	Petroleum Refineries	\$1,537,248,716	\$689	0.00004%
325188	All other Basic Inorganic Chemical Manuf.	\$49,023,390	\$689	0.00141%
325199	All other Basic Organic Chemical Manuf.	\$118,588,973	\$689	0.00058%
325211	Plastics Material and Resin Manufacturing	\$94,751,550	\$689	0.00073%
325412	Pharmaceutical Preparation Manufacturing	\$94,154,056	\$689	0.00073%
325510	Paint and Coating Manufacturing	\$31,468,344	\$689	0.00219%
325998	All other Misc. Chemical Product & Prep Manuf.	\$28,444,332	\$689	0.00242%
326199	All other Plastics Product Manufacturing	\$13,246,157	\$689	0.00520%
331111	Iron and Steel Mills	\$145,513,720	\$689	0.00047%
331492	Secondary Smelting, Refining Alloying-Non-ferrous	\$55,535,573	\$689	0.00124%
332312	Fabricated Structural Metal Manufacturing	\$13,709,787	\$689	0.00503%
332812	Metal Coating, Engraving & Allied Services Manuf.	\$11,729,470	\$689	0.00587%
332813	Electroplating, Plating, Anodizing, Coloring	\$4,751,901	\$689	0.01450%
332999	All Other Misc. Fabricated Metal Product Manuf.	\$9,300,367	\$689	0.00741%
333415	Air-Condition, Heating, Refrigeration Equip Manuf.	\$22,934,067	\$689	0.00300%
334412	Bare Printed Circuit Board Manufacturing	\$3,959,633	\$689	0.01740%
334413	Semiconductor and Related Device Manufacturing	\$29,146,505	\$689	0.00519%
334418	Printed Circuit Assembly Manufacturing	\$13,273,845	\$689	0.00274%
336399	All other Motor Vehicle Parts Manufacturing	\$18,009,218	\$689	0.00383%
336412	Aircraft Engine and Engine Parts Manufacturing	\$29,103,856	\$689	0.00237%
336413	Other Aircraft Part and Auxiliary Equipment Manuf.	\$25,126,126	\$689	0.00274%
541710	R&D in Physical, Engineering & Life Sciences	\$6,662,747	\$689	0.01034%
562211	Hazardous Waste Treatment and Disposal	\$6,966,571	\$689	0.00989%
611310	Colleges, Universities and Professional Schools	\$8,352,604	\$689	0.00825%
622110	General Medical and Surgical Hospitals	NA	\$689	NA
928110	National Security	NA	\$689	NA

^a The 54% notification rate assumes that 3.2% of facilities notify under the 2008 DSW exclusions as revised under the 2014 DSW rule each year. By year 2063 a total of 3,865 facilities will have notified under one of the 2008 DSW recycling exclusions. In addition, 1% of 7,500 facilities (midpoint between 5,000 and 10,000 facilities) or 75 facilities that operate under pre-2008 exclusions may be affected. Annual cost impact per facility is discounted by 3% to reflect change in price level from 2016 to 2012. The total number of affected facilities is 3,940 (3,865 + 75).

^b Small company annual revenue is approximated using the average establishment value of shipments from Census of Manufacturers Data. For example, the number is the average establishment value of shipments for small establishments (e.g., for industries with an SBA small business size standard of 1,000 employees, the number is the average value of shipments for facilities with less than 500 employees). This estimate is intended to serve as a conservative value of annual revenue for small businesses.

^c Average Annual Cost Impact per Facility divided by Small Company Average Annual Revenue times 100.

Source: EPA 2014 Regulatory Impact Analysis, p. 7-8

Appendix B

Exhibit 7D				
Estimated Maximum Average State Cost Burden Associated with 2014 DSW Revisions (2012\$) ^a				
		54% Notification Rate		
Item	Type of Direct Compliance Cost	Count of Submissions per Year	State Cost per Submission	Total Annual Cost
1 ^b	Receive, Review and File Biennial Notifications (Revision 3 Requirement 3A, Revision 3 Requirement 3B, Revision 4 Requirement 4B, Revision 4 Requirement 4C)	921	\$6.34	\$5,843
2 ^g	Receive, Review and File Verified Recycler Exclusion Variance (Revision 1 Requirement 1B)	14	\$6,257.93	\$87,611
3 ^{c, d}	Evaluation of Legitimacy Documentation (Revision 3 Requirement 3A and 3B)	45	\$2,158.76	\$97,144
4 ^e	All other Basic Organic Chemical Manuf. Receive, Review and File Re-application for Variance or Non-waste Determination (Revision 4 Req. 4A)	11	\$8,635.06	\$94,144
5 ^f	Plastics Material and Resin Manufacturing Review Partial Reclamation Variance (Revision 4 Req. 4C)	4	\$6,254.05	\$25,016
6 ^f	EPA provides online public access to a list (including supporting documentation) of facilities receiving non-waste determinations (Revision 4)	7	\$76.07	\$533
7 ^f	Petition Process for Remanufacturing Exclusion (Revision 5 Requirement 5C)	1	\$13,774.58	\$6,887
<p>Explanatory Notes:</p> <p>^a Data depict the estimated annual costs that will be incurred by states in any one year. The cost is overestimated for the earlier years of the period of performance evaluated (2014 through 2063) and reflective of the maximum number of submissions in later years.</p> <p>^b 50% for the total number of wastes covered under the rule submit notifications every year. State cost estimate obtained from the "Supporting Statement for Revisions to the RCRA Definition of Solid Waste (Proposed Rule), June 30, 2011 (i.e., 2011 DSW ICR) inflated to 2012 dollars. The notification agency costs under Revision 1, Revision 2, and Revision 5 are covered by the 2008 DSW Rule and not the 2014 DSW Revisions. The estimated number of notifications under Revision 3 is 1% of 7,500 facilities recovering 11 wastes each for pre-2008 exclusion facilities and 1% of 3,821 RCRA recycling facilities recovering 2.2 wastes each. The estimated number of notifications under Revision 4 is 74 non-waste determinations, 4 variances, and 4 partial reclamation variances.</p> <p>^c Assumes that legitimacy documentation is prepared for 1% of affected pre-2008 wastes and 2008 DSW transfer-based exclusion wastes (revised to be the 2014 verified recycler exclusion) and revised every three years. Assume State reviews legitimacy documentation for 5% of wastes every year. State cost estimate obtained from 2011 DSW ICR inflated to 2012 dollars.</p> <p>^d Assumes that legitimacy documentation is prepared for all 2008 DSW generator-controlled exclusion wastes. Non-waste determination exclusion waste agency costs are assumed to be covered under the determination process. Assume State reviews legitimacy documentation for 5% of wastes every year. State costs obtained from 2011 DSW ICR inflated to 2012 dollars.</p> <p>^e Assumes non-waste determination is resubmitted every 10 years (74/10 = 7 per year) resulting in 7 non-waste determination applications per years. Every year 4 variances are filed. State cost estimate obtained from 2011 DSW ICR inflated to 2012 dollars.</p> <p>^f State cost estimate obtained from 2011 DSW ICR inflated to 2012 dollars.</p> <p>^g This RIA uses agency burden estimates from EPA's ICR for the "Supporting Statement for EPA Information Collection Request Number 1189.24 Identification, Listing and Rulemaking Petitions (Renewal)", January 2012. The variance from "Classification as Solid Waste Material that are Reclaimed but Must Be Reclaimed Further" under 40 CFR 260.31(c) is assumed to be similar in scope to preparing a variance for the verified recycler exclusion. Labor rate estimates reflect estimated from EPA's ICR for the "Supporting Statement for Revisions to the RCRA Definition of Solid Waste (Proposed Rule) OMB Control No. 2050-0202, EPA ICR No. 2310.02," June 30, 2011. State costs are inflated to 2012 dollars.</p>				

Source: EPA 2014 Regulatory Impact Analysis, p. 7-12