



Hazardous Waste Phase 2 Rulemaking – DSW Rule Fiscal Impact Statement

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Fiscal and Economic Impact

If adopted, DEQ anticipates the 2015 *Definition of Solid Waste* federal rule will create cost savings for businesses managing their hazardous secondary material.

The DSW regulation is less stringent than federal base rules because it allows excluding certain hazardous secondary materials from the solid waste and hazardous waste regulations. This federal rule allows businesses to:

1. Reclaim and manage hazardous secondary materials on site under the control of the generator provided there is notification to the EPA Regional Administrator or the State Director and ensures the hazardous secondary materials are managed in a manner that is protective of human health and the environment;
2. Reclaim and manage hazardous secondary wastes generated under toll manufacturing agreements and returned to the party contracting for the manufacturing;
3. Reclaim and manage hazardous secondary materials offsite through a Verified Recycler which are Permitted Hazardous Waste Facilities or Recyclers holding a variance from the State; and
4. Remanufacture any one of 18 higher-value hazardous waste spent solvents used for reacting, extracting, blending, or purifying chemicals in the pharmaceutical, organic, chemical, plastics and resins, and the paint and coatings sectors.

The federal rule is more stringent than Oregon DEQ's current hazardous waste regulations. The 2015 DSW final rule increases environmental safeguards by adopting a new regulatory definition of "contained," requiring all four legitimacy factors be met, increasing oversight by state or EPA for hazardous secondary materials transferred offsite, and revising the definition of speculative accumulation.

Assumptions

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

Statement of Cost

Local, state and federal agencies

DEQ anticipates the proposed rule will have no adverse fiscal or economic impacts on local, state or other federal agencies as the rule applies only to specific recyclers of hazardous secondary materials.

Oregon DEQ

The proposed rule may result in a significant but indeterminable decrease in revenue for the hazardous waste program. This is because some businesses will lower their hazardous waste generator category and some will no longer need to comply with hazardous waste regulations. This will result those businesses paying less fees for hazardous waste disposal and paying less annual fees to DEQ.

If Oregon adopts the proposed rule, the state will incur costs in applying and enforcing the rule including the notification and variance provisions (*see Appendix B*).

Indirect Impacts

DEQ expects minor impacts for staff training and performing additional outreach to those eligible businesses through the hazardous waste technical assistance program, and enforcement guidance.

Large and Small Business

A small business is 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 estimates the compliance costs of the final rule to be approximately (2012\$)²:

- 7% discount rate: \$1.0 million per year in cost savings
- 3% discount rate: \$1.6 million per year in cost savings
- Non-discounted: \$2.0 million per year in cost savings

Because most of the provisions of the 2014 DSW rule result in cost savings based on voluntary participation in one of the new solid waste exclusions, the average annual impact per facility affected by the rule would be a small cost savings of \$868 per year.³

However, for facilities that do not choose to participate in one of the new exclusions, they could still incur costs of documenting legitimacy in the case

¹ Source: *Federal Register* (80 FR 1694-1814), C. Regulatory Flexibility Act, p.1769

² Source: *EPA 2014 DSW Regulatory Impact Analysis*, p.7-2

³ Source: *EPA 2014 DSW Regulatory Impact Analysis*, p.7-6

where the recycled product does not otherwise meet the new rule. Therefore, EPA assumes the average per facility cost for those facilities would be \$689 (the cost for documenting one waste stream). (See Appendix A)

DEQ reviewed its current list of conditionally excluded, small and large quantity generators and found this rule may affect approximately 30 listed active Oregon generators based on 2014 reporting.

EPA’s small business impacts were only estimated for 27 of the industries that will have the largest number of affected facilities out of 622 NAICS code industries⁴ that may be affected by the pre-2008 DSW 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.⁵

<p>a. Estimated number and type of small businesses subject to proposed rule.</p> <p>*Industry eligible for remanufacturing exclusion⁶</p>	<p>Using recent employment data, DEQ found an estimated 507 Oregon businesses, with 506 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,⁷ 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>3</td></tr> <tr><td>325211 – *Plastic & Resin Manufacturing</td><td>5</td></tr> <tr><td>325412 – *Pharmaceutical Manufacturing</td><td>17</td></tr> <tr><td>325510 – *Paint & Coating Manufacturing</td><td>13</td></tr> <tr><td>325998 – All other misc chem product prep manuf.</td><td>9</td></tr> <tr><td>326199 – All other plastic product manufacturing</td><td>73</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>47</td></tr> <tr><td>332813 – Electroplating, polishing, anodizing</td><td>34</td></tr> <tr><td>332999 – All other misc. fabrication metal manuf.</td><td>100</td></tr> <tr><td>333415 – Air condition, heating, refrig. equip.</td><td>5</td></tr> <tr><td>334412 – Bare printed circuit board manuf.</td><td>6</td></tr> <tr><td>334413 – Semi-conductor & related manuf.</td><td>22</td></tr> <tr><td>334418 – Printed circuit assembly manuf.</td><td>21</td></tr> <tr><td>336399 – All other motor vehicle parts manuf.</td><td>0</td></tr> <tr><td>336412 – Aircraft engine & parts manuf.</td><td>3</td></tr> <tr><td>336413 – Other aircraft part & equip manuf.</td><td>13</td></tr> <tr><td>541710 – Research/development phys, eng, life sci.</td><td>0</td></tr> <tr><td>562211 – Hazardous waste treatment & disposal</td><td>1</td></tr> <tr><td>611310 – College, university, prof. schools</td><td>95</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.	3	325211 – *Plastic & Resin Manufacturing	5	325412 – *Pharmaceutical Manufacturing	17	325510 – *Paint & Coating Manufacturing	13	325998 – All other misc chem product prep manuf.	9	326199 – All other plastic product manufacturing	73	331111 – Iron & steel mills	0	331492 – Secondary smelting, non-ferrous	2	332312 – Fabricated structural metal manuf.	31	332812 – Metal coating, engraving manuf.	47	332813 – Electroplating, polishing, anodizing	34	332999 – All other misc. fabrication metal manuf.	100	333415 – Air condition, heating, refrig. equip.	5	334412 – Bare printed circuit board manuf.	6	334413 – Semi-conductor & related manuf.	22	334418 – Printed circuit assembly manuf.	21	336399 – All other motor vehicle parts manuf.	0	336412 – Aircraft engine & parts manuf.	3	336413 – Other aircraft part & equip manuf.	13	541710 – Research/development phys, eng, life sci.	0	562211 – Hazardous waste treatment & disposal	1	611310 – College, university, prof. schools	95
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⁴ Source: EPA 2014 DSW Regulatory Impact Analysis, Appendix A

⁵ Source: EPA 2014 DSW Regulatory Impact Analysis, p.7-7

⁶ Source: EPA 2014 DSW Regulatory Impact Analysis, p.2-13

⁷ Source: EPA 2014 DSW Regulatory Impact Analysis, Exhibit 7A table, p.7-4

	622110 – General medical & surgical hospitals 7 928110 – National security 0
b. Projected reporting, recordkeeping and other administrative activities, including costs of professional services, required for small businesses to comply with the proposed rule.	This rule will incrementally decrease administrative costs for different reporting, recordkeeping and other administrative activities.
c. Projected equipment, supplies, labor and increased administration required for small businesses to comply with the proposed rule.	This rule will likely present no additional requirements as most small businesses are CEGs or non-regulated.
d. Describe how DEQ involved small businesses in developing this proposed rule.	DEQ included small business representatives on the Hazardous Waste Rulemaking Advisory Committee. Representatives from Associated Oregon Industries on the committee will advise DEQ on the cost of compliance for small businesses. DEQ will also provide rulemaking notice to eligible small businesses for additional fiscal and economic impact considerations.

Documents relied on for fiscal and economic impact

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>	EPA 2014 DSW Regulatory Impact Analysis
<i>Potential Adverse Impacts (including Minority and Low-income Populations)</i>	Potential Adverse Impacts (including Minority and Low-income Populations)
Oregon Annual Hazardous Waste Reporting for disposal in 2014	Oregon Department of Environmental Quality Hazardous Waste Program 811 SW Sixth Avenue Portland, OR 97204
Oregon Department of Employment 3 rd quarter 2015 data	Employment Department 875 Union Street NE Salem OR 97311

Advisory committee

DEQ appointed an advisory committee.

As ORS 183.333 requires, DEQ will ask for the committee's recommendations on:

- Whether the proposed rule would have a fiscal impact,

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

The committee will review the draft fiscal and economic impact statement and its findings will be in the record for this rulemaking.

If the committee determines there would be a significant impact to small businesses, as ORS 183.333 and 183.540 require, the committee will consider how DEQ could reduce the rule's fiscal impact on small businesses by:

- Establishing differing compliance or reporting requirements or time tables for small business;
- Clarifying, consolidating or simplifying the compliance and reporting requirements under the rule for small business;
- Utilizing objective criteria for standards; or
- Establishing less intrusive or less costly alternatives applicable to small business.

Housing cost

As ORS 183.534 requires, DEQ evaluated whether the proposed rule 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 rule would have no effect on the development costs because the proposed rule only affects businesses under the hazardous waste regulations.

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 is based on the assumption 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
Total Annual Costs =				

Explanatory Notes:

^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.

^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.

^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.

^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.

^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.

^f State cost estimate obtained from 2011 DSW ICR inflated to 2012 dollars.

^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.

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