



July 22, 2016

[Text of proposed changes](#)
[Proposed Div 2\Z Silica rules only](#)

**Oregon OSHA – Proposed Changes to
Occupational Exposure to Respirable Silica in
General Industry, Construction, and Maritime**

Public Hearings Scheduled for:

<u>Date</u>	<u>Time</u>	<u>Location</u>
August 25, 2016	10:00 am	Oregon OSHA Durham Plaza 16760 SW Upper Boones Ferry Rd, Suite 200 Tigard, OR 97224
August 30, 2016	11:00 am	Oregon OSHA Red Oaks Square 1230 NE Third Street, Suite A-115 Bend, OR 97701-4374
September 8, 2016	10:00 am	Oregon OSHA 1140 Willagillespie Road, Suite 42 Eugene, OR 97401-6730
September 9, 2016	10:00 am	City of Medford Lausmann Annex – Room 151 200 S Ivy Medford OR 97501

This rulemaking is to keep Oregon OSHA in harmony with recent changes to Federal OSHA's standards.

On March 25, 2016, federal OSHA adopted final rules for crystalline silica for general industry, construction, and maritime. Before these rules, the only specific rule for crystalline silica was an airborne permissible exposure limit (PEL) of 100 micrograms per cubic meter of air ($\mu\text{g}/\text{m}^3$). With the adoption of these rules, federal OSHA lowered the PEL from 100 $\mu\text{g}/\text{m}^3$ to 50 $\mu\text{g}/\text{m}^3$, and instituted an action level of 25 $\mu\text{g}/\text{m}^3$. These rules require an exposure assessment, with periodic monitoring under certain circumstances, requires engineering and work practice controls to reduce exposure levels, institutes a written exposure control plan, requires provisions for regulating employee access to certain areas, respiratory protection, medical surveillance, and employee training and information. The construction rule also lists specific tasks with engineering controls, work practice controls, and respiratory protection for specific tasks that do not require an exposure assessment, and requires that a competent person ensure that the written program and specific tasks are followed.

Oregon OSHA proposes to combine the requirements of the general industry and construction rules into one set of rules applicable to both industries, as new Oregon-initiated rules OAR 437-002-1053 through 437-002-1065. These Oregon initiated rules provide the same options for construction employers to use certain specified methods in lieu of an exposure assessment as the federal rules, and maintain the same compliance dates as the federal standards.

Oregon OSHA also proposes to update the air contaminants rules for general industry and construction, OAR 437-002-0382 and 437-003-1000, to reflect the new silica rules.

Please visit our web site osha.oregon.gov Click 'Rule changes' in the Topics, rules, guidelines column and view our proposed rules; or, select other rule activity from the left vertical column on the Proposed Rules page.

When does this happen: Adoption tentatively will be by September 25, 2016

To get a copy: Our web site – osha.oregon.gov Rules, then Proposed Rules
Or call 503-947-7449

To comment: Department of Consumer and Business Services/Oregon OSHA
350 Winter Street NE
Salem OR 97301-3882
E-mail – tech.web@state.or.us
Fax – 503-947-7461

Comment period closes: **September 16, 2016**

Oregon OSHA contact: **Dave McLaughlin, Central Office @ 503-947-7457**
or email at dave.mclaughlin@oregon.gov

Note: In compliance with the Americans with Disabilities Act (ADA), this publication is available in alternative formats by calling 503-378-3272.

Secretary of State
NOTICE OF PROPOSED RULEMAKING HEARING*

A Statement of Need and Fiscal Impact accompanies this form.

Department of Consumer and Business Services/Oregon OSHA

OAR 437

Agency and Division

Administrative Rules Chapter Number

Sue Joye

350 Winter Street NE Salem OR 97301-3882

503-947-7449

Rules Coordinator

Address

Telephone

RULE CAPTION

Adopt federal OSHA amendments: Occupational Exposure to Respirable Crystalline Silica in General Industry, Construction, Maritime.

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Hearing Date

Time

Location

Hearings Officer

Auxiliary aids for persons with disabilities are available upon advance request.

RULEMAKING ACTION

Adopt: OAR 437-002-1053, 437-002-1054, 437-002-1055, 437-002-1056, 437-002-1057, 437-002-1058, 437-002-1059, 437-002-1060, 437-002-1061, 437-002-1062, 437-002-1063, 437-002-1064, 437-002-1065.

Amend: OAR 437-002-0382, 437-003-1000, 437-005-0001.

ORS 654.025(2) and 656.726(4)

Stat. Auth.

Other Authority

ORS 654.001 through 654.295

Stats. Implemented

RULE SUMMARY

This rulemaking is to keep Oregon OSHA in harmony with recent changes to Federal OSHA's standards.

On March 25, 2016, federal OSHA adopted final rules for crystalline silica for general industry, construction, and maritime. Before these rules, the only specific rule for crystalline silica was an airborne permissible exposure limit (PEL) of 100 micrograms per cubic meter of air ($\mu\text{g}/\text{m}^3$). With the adoption of these rules, federal OSHA lowered the PEL from 100 $\mu\text{g}/\text{m}^3$ to 50 $\mu\text{g}/\text{m}^3$, and instituted an action level of 25 $\mu\text{g}/\text{m}^3$. These rules require an exposure assessment, with periodic monitoring under certain circumstances, requires engineering and work practice controls to reduce exposure levels, institutes a written exposure control plan, requires provisions for regulating employee access to certain areas, respiratory protection, medical surveillance, and employee training and information. The construction rule also lists specific tasks with engineering controls, work practice controls, and respiratory protection for specific tasks that do not require an exposure assessment, and requires that a competent person ensure that the written program and specific tasks are followed.

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Oregon OSHA also proposes to update the air contaminants rules for general industry and construction, OAR 437-002-0382 and 437-003-1000, to reflect the new silica rules.

Please visit our web site osha.oregon.gov Click 'Rule changes' in the Topics, rules, guidelines column and view our proposed rules; or, select other rule activity from the left vertical column on the Proposed Rules page.

The Agency requests public comment on whether other options should be considered for achieving the rule's substantive goals while reducing the negative economic impact of the rule on business.



Signature
Michael D. Wood 07/14/16
Printed name Date

September 16, 2016

Last Day for Public Comment

Last day to submit written comments to the Rules Coordinator

*The *Oregon Bulletin* is published on the 1st of each month and updates the rule text found in the Oregon Administrative Rules Compilation. Notice forms must be submitted to the Administrative Rules Unit, Oregon State Archives, 800 Summer Street NE, Salem, Oregon 97310 by 5:00 pm on the 15th day of the preceding month unless this deadline falls on a Saturday, Sunday or legal holiday when Notice forms are accepted until 5:00pm on the preceding workday. ARC 920-2005

Secretary of State
STATEMENT OF NEED AND FISCAL IMPACT

A Notice of Proposed Rulemaking Hearing or a Notice of Proposed Rulemaking accompanies this form.

Department of Consumer and Business Services/Oregon OSHA
Agency and Division

OAR 437

Administrative Rules Chapter Number

In the Matter of:

Adopting: OAR 437-002-1053, 437-002-1054, 437-002-1055, 437-002-1056, 437-002-1057, 437-002-1058, 437-002-1059, 437-002-1060, 437-002-1061, 437-002-1062, 437-002-1063, 437-002-1064, 437-002-1065.

Amending: OAR 437-002-0382, 437-003-1000, 437-005-0001.

Rule Caption:

Adopt federal OSHA amendments: Occupational Exposure to Respirable Crystalline Silica in General Industry, Construction, Maritime.

Statutory Authority: ORS 654.025(2) and 656.726(4)

Stats. Implemented: ORS 654.001 through 654.295

Need for the Rule(s):

This rulemaking is to keep Oregon OSHA in harmony with recent changes to Federal OSHA's standards.

On March 25, 2016, federal OSHA adopted final rules for crystalline silica for general industry, construction, and maritime. Before these rules, the only specific rule for crystalline silica was an airborne permissible exposure limit (PEL) of 100 micrograms per cubic meter of air ($\mu\text{g}/\text{m}^3$). With the adoption of these rules, federal OSHA lowered the PEL from 100 $\mu\text{g}/\text{m}^3$ to 50 $\mu\text{g}/\text{m}^3$, and instituted an action level of 25 $\mu\text{g}/\text{m}^3$. These rules require an exposure assessment, with periodic monitoring under certain circumstances, requires engineering and work practice controls to reduce exposure levels, institutes a written exposure control plan, requires provisions for regulating employee access to certain areas, respiratory protection, medical surveillance, and employee training and information. The construction rule also lists specific tasks with engineering controls, work practice controls, and respiratory protection for specific tasks that do not require an exposure assessment, and requires that a competent person ensure that the written program and specific tasks are followed.

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Oregon OSHA also proposes to update the air contaminants rules for general industry and construction, OAR 437-002-0382 and 437-003-1000, to reflect the new silica rules.

Documents Relied Upon, and where they are available:

Federal Register, March 25, 2016
https://www.osha.gov/FedReg_osha_pdf/FED20160325B.pdf

Federal Register, May 18, 2016
https://www.osha.gov/FedReg_osha_pdf/FED20160518.pdf

OAR 437-002-0382, Oregon Rules for Air Contaminants, Division 2/Z in general industry
<http://osha.oregon.gov/OSHARules/div2/div2Z-437-002-0382-air-cont.pdf>

OAR 437-003-1000, Oregon Rules for Air Contaminants, Division 3/Z in construction
<http://osha.oregon.gov/OSHARules/div3/div3Z.pdf#page=7>

Fiscal and Economic Impact, including Statement of Cost of Compliance:

Fiscal and Economic Impact:

All fiscal and economic impact data is derived from the analysis performed by federal OSHA, as detailed in the March 25, 2016 federal register. There are no expected additional or unique costs of compliance for Oregon employers beyond the federal analysis.

Statement of Cost of Compliance:

1. Impact on state agencies, units of local government and the public (ORS 183.335(2)(b)(E)):
Costs incurred by Oregon OSHA represent similar costs associated with the promulgation, implementation and administration of a rule.

All state agencies and local government units are affected by the rules in the sense that they are employers under the Oregon Safe Employment Act (OSEAct).

The public as a whole will be affected only to the degree that members of the public are employers and employees.

2. Cost of compliance effect on small business (ORS 183.336):

- a. Estimate the number of small businesses and types of business and industries with small businesses subject to the rule:

Construction Industry

Federal OSHA identified 10 construction industries that may be impacted by this rule. The following table lists the industries, number of employers in Oregon within that industry, and the expected average annual costs per small employer. While the number of Oregon employers does not specifically indicate the number of small businesses, approximately 90% of all Oregon employers are small businesses. The costs reflect the most probable impact, based on the federal OSHA data.

NAICS Code	Industry	Oregon Employers	Average Annual Compliance Costs
236100	Residential Building Construction	3,717	\$333
236200	Nonresidential Building Construction	673	\$879
237100	Utility System Construction	350	\$1,806
237200	Land Subdivision	125	\$459
237300	Highway, Street, and Bridge Construction	240	\$2,449
237900	Other Heavy and Civil Engineering Construction	121	\$1,368
238100	Foundation, Structure, and Building Exterior Contractors	1374	\$1,306
238200	Building Equipment Contractors	2,919	\$295
238300	Building Finishing Contractors	2,081	\$581
238900	Other Specialty Trade Contractors	1,184	\$1,241

The annual average compliance costs can range from \$295 to \$2,449 for the construction industry. These costs include equipment for engineering and work practice controls, respiratory protection, initial and recurring airborne exposure assessments, medical surveillance, establishing and maintaining a written exposure control plan, and employee training.

Oregon employment data is from the Oregon Employment Department's employer database (<https://www.qualityinfo.org>).

General Industry

Federal OSHA identified approximately 100 other industries that may be impacted by this rule. The following table lists the industries, number of employers in Oregon within that industry, and the expected average annual costs per small employer. While the number of Oregon employers does not specifically indicate the number of small businesses, approximately 90% of all Oregon employers are small businesses. The costs reflect the most probable impact, based on the federal OSHA data.

NAICS Code	Industry	Oregon Employers	Average Annual Compliance Costs
34121	Asphalt Paving Mixture and Block Manufacturing	16	\$610
324122	Asphalt Shingle and Coating Materials Manufacturing	2	\$10,782
325510	Paint and Coating Manufacturing	14	\$887
327110	Pottery, Ceramics, and Plumbing Fixture Manufacturing	9	\$8,161
327120	Clay Building Material and Refractories Manufacturing	11	\$34,727
327211	Flat Glass Manufacturing	3	\$3,282
327212	Other Pressed and Blown Glass and Glassware Manufacturing	36	\$6,171
237213	Glass Container Manufacturing	3	\$81,273
237230	Ready-Mix Concrete Manufacturing	65	\$9,821
327331	Concrete Block and Brick Manufacturing	20	\$9,363
327332	Concrete Pipe Manufacturing	20	\$12,926
327390	Other Concrete Product Manufacturing	25	\$9,139
327991	Cut Stone and Stone Product Manufacturing	21	\$7,343
327992	Ground or Treated Mineral and Earth Manufacturing	6	\$16,878
327993	Mineral Wool Manufacturing	15	\$8,768
327999	All Other Miscellaneous Nonmetallic Mineral Product Manufacturing	1	\$21,200
331110	Iron and Steel Mills and Ferroalloy Manufacturing	5	\$1,194
331210	Iron and Steel Pipe and Tube Manufacturing from Purchased Steel	3	\$1,262
331221	Rolled Steel Shape Manufacturing	ND	\$1,210
331222	Steel Wire Drawing	5	\$1,254
331314	Secondary Smelting and Alloying of Aluminum	ND	\$1,249
331420	Copper Rolling, Drawing, Extruding, and Alloying	ND	\$1,280
331492	Secondary Smelting, Refining, and Alloying of Nonferrous Metal (except Copper and Aluminum)	1	\$1,218
331511	Iron Foundries	12	\$38,050
331512	Steel Investment Foundries	2	\$26,727

331513	Steel Foundries (except Investment)	22	\$31,446
331524	Aluminum Foundries (except Die-Casting)	ND	\$8,437
331529	Other Nonferrous Metal Foundries (except Die-Casting)	6	\$6,092
332111	Iron and Steel Forging	9	\$1,199
332112	Nonferrous Forging	ND	\$1,186
332117	Powder Metallurgy Part Manufacturing	ND	\$1,174
332119	Metal Crown, Closure, and Other Metal Stamping (except Automotive)	24	\$1,179
332215	Metal Kitchen Cookware, Utensil, Cutlery, and Flatware (except Precious) Manufacturing	1	\$1,181
332216	Saw Blade and Handtool Manufacturing	25	\$1,203
332323	Ornamental and Architectural Metal Work Manufacturing	69	\$1,081
332439	Other Metal Container Manufacturing	12	\$1,221
332510	Hardware Manufacturing	15	\$1,178
332613	Spring Manufacturing	6	\$1,245
332618	Other Fabricated Wire Product Manufacturing	22	\$1,213
332710	Machine Shops	399	\$1,147
332812	Metal Coating, Engraving (except Jewelry and Silverware), and Allied Services to Manufacturers	106	\$1,851
332911	Industrial Valve Manufacturing	1	\$1,213
332912	Fluid Power Valve and Hose Fitting Manufacturing	ND	\$1,211
332913	Plumbing Fixture Fitting and Trim Manufacturing	4	\$1,198
332919	Other Metal Valve and Pipe Fitting Manufacturing	10	\$1,193
332991	Ball and Roller Bearing Manufacturing	2	\$1,237
332996	Fabricated Pipe and Pipe Fitting Manufacturing	13	\$1,172
332999	All Other Miscellaneous Fabricated Metal Product Manufacturing	75	\$1,153
333318	Other Commercial and Service Industry Machinery Manufacturing	60	\$1,162
333413	Industrial and Commercial Fan and Blower and Air Purification	7	\$1,202
333414	Heating Equipment (except Warm Air Furnaces) Manufacturing	11	\$1,166
333511	Industrial Mold Manufacturing	ND	\$1,161
333514	Special Die and Tool, Die Set, Jig, and Fixture Manufacturing	26	\$1,150
333515	Cutting Tool and Machine Tool Accessory Manufacturing	8	\$1,166
333517	Machine Tool Manufacturing	11	\$1,169
333519	Rolling Mill and Other Metalworking Machinery Manufacturing	5	\$1,171

333612	Speed Changer, Industrial High-Speed Drive, and Gear Manufacturing	6	\$1,235
333613	Mechanical Power Transmission Equipment Manufacturing	ND	\$1,196
333911	Pump and Pumping Equipment Manufacturing	28	\$1,195
333912	Air and Gas Compressor Manufacturing	1	\$1,201
333991	Power-Driven Handtool Manufacturing	2	\$1,160
333992	Welding and Soldering Equipment Manufacturing	5	\$1,159
333993	Packaging Machinery Manufacturing	4	\$1,170
333994	Industrial Process Furnace and Oven Manufacturing	7	\$1,188
333995	Fluid Power Cylinder and Actuator Manufacturing	1	\$1,210
333996	Fluid Power Pump and Motor Manufacturing	2	\$1,158
333997	Scale and Balance Manufacturing	1	\$1,184
333999	All Other Miscellaneous General Purpose Machinery Manufacturing	82	\$1,156
334519	Other Measuring and Controlling Device Manufacturing	19	\$1,163
335210	Small Electrical Appliance Manufacturing	8	\$1,077
335221	Household Cooking Appliance Manufacturing	2	\$968
335222	Household Refrigerator and Home Freezer Manufacturing	ND	\$1,005
335224	Household Laundry Equipment Manufacturing	ND	\$958
335228	Other Major Household Appliance Manufacturing	1	\$986
336111	Automobile Manufacturing	6	\$1,031
336112	Light Truck and Utility Vehicle Manufacturing	8	\$1,017
336120	Heavy Duty Truck Manufacturing	2	\$1,164
336211	Motor Vehicle Body Manufacturing	7	\$1,207
336212	Truck Trailer Manufacturing	8	\$1,220
336213	Motor Home Manufacturing	ND	\$1,139
336310	Motor Vehicle Gasoline Engine and Engine Parts Manufacturing	ND	\$1,144
336320	Motor Vehicle Electrical and Electronic Equipment Manufacturing	7	\$1,179
336330	Motor Vehicle Steering and Suspension Components (except Spring) Manufacturing	ND	\$1,151
336340	Motor Vehicle Brake System Manufacturing	2	\$1,241
336350	Motor Vehicle Transmission and Power Train Parts Manufacturing	1	\$1,178
336370	Motor Vehicle Metal Stamping	ND	\$1,254
336390	Other Motor Vehicle Parts Manufacturing	48	\$1,199

336611	Ship Building and Repairing	21	\$7,778
336612	Boat Building	24	\$6,551
336992	Military Armored Vehicle, Tank, and Tank Component Manufacturing	3	\$1,186
337110	Wood Kitchen Cabinet and Countertop Manufacturing	484	\$900
337215	Showcase, Partition, Shelving, and Locker Manufacturing	12	\$1,177
339114	Dental Equipment and Supplies Manufacturing	15	\$6,215
339116	Dental Laboratories	197	\$878
339910	Jewelry and Silverware Manufacturing	41	\$988
339950	Sign Manufacturing	332	\$1,088
423840	Industrial Supplies Merchant Wholesalers	108	\$1,469
444110	Home Centers	217	\$1,219
561730	Landscaping Services	1829	\$716
621210	Offices of Dentists	3624	\$312

ND=No data available

The average annual cost can range from \$312 to \$81,273. These costs include equipment for engineering and work practice controls, respiratory protection, initial and recurring airborne exposure assessments, medical surveillance, establishing and maintaining a written exposure control plan, establishing and maintaining a regulated area, and employee training.

Oregon employment data is from the Oregon Employment Department's employer database (<https://www.qualityinfo.org>).

b. Projected reporting, recordkeeping and other administrative activities required for compliance, including costs of professional services:

These costs are inclusive with the costs listed above.

c. Equipment, supplies, labor and increased administration required for compliance:

These costs are inclusive with the costs listed above.

How were small businesses involved in the development of this rule?

A stakeholder group from a variety of businesses and business organizations was formed.

Administrative Rule Advisory Committee consulted?

If not, why?

Yes.



 Authorized Signer

Michael D. Wood 7/14/16
 Printed name Date