September 24, 2024

Text of changes
May 20, 2024, Federal Register

Proposed Adoption of Federal OSHA Changes to Hazard Communication

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Remote Public Hearings Scheduled for:

Hearing Date	Time	Location	Hearings Officer
Tuesday, October 29	**9:00 am**	**Remote – Zoom Gov Webinar**	**OSHA Staff**

Register in advance for this webinar:
https://www.zoomgov.com/webinar/register/WN_95VS-ocSQoq5_tm_92kdfg

Wednesday, October 30	**1:00 pm**	**Remote – Zoom Gov Webinar**	**OSHA Staff**

Register in advance for this webinar:
https://www.zoomgov.com/webinar/register/WN_1w6QzHs8Q3SdTYY5wHzCSg

After registering, you will receive a confirmation email containing information about joining the webinar.

The hearing will close no earlier than 30 minutes after the webinar begins and may close at any point after 30 minutes if all interested persons have had their opportunity to enter their comments into the record.

To submit comments on the proposed rule changes, please email the Rules Coordinator at OSHA.rulemaking@dcbs.oregon.gov.

You may also send hardcopy written materials to: Rules Coordinator, Oregon OSHA, PO Box 14480, Salem, OR 97309-0405.

Rulemaking Summary:

This proposed rulemaking is to keep Oregon OSHA in harmony with recent changes to federal OSHA's standards.
Federal OSHA published final changes to the Hazard Communication (1910.1200) and Incorporation by Reference (1910.6) standards in the May 20, 2024, Federal Register. In this rulemaking, Oregon OSHA proposes to adopt identical to the amended federal standards and proposes corresponding changes in its own Oregon administrative rules to align with their adopted amendments.

Federal OSHA amended the Hazard Communication Standard (HCS) to conform to the United Nations Globally Harmonized System of Classification and Labelling of Chemicals (GHS), primarily Revision 7 (Rev. 7), to address issues that arose during the implementation of the 2012 update to the HCS and provide better alignment with other U.S. agencies and international trading partners, while enhancing the effectiveness of the standard. The modifications to the standard include revised criteria for classification of certain health and physical hazards, revised provisions for updating labels, new labeling provisions for small containers, new provisions related to trade secrets, technical amendments related to the contents of safety data sheets (SDSs), and related revisions to definitions of terms used in the standard.

This rulemaking also proposes to adopt identical federal OSHA's changes to 1910.6, Incorporation by reference, that updates and adds a few new paragraphs to align with the amended HCS standard. While these changes don't introduce a large volume of new language, they do result in significant changes to the paragraph outlining and order of information.

To align its own rules to the amended HCS standard, Oregon OSHA proposes to update the following rules with the revised federal definitions, effective dates and references:

- Division 2 OAR 437-002-0378 - Oregon Rules for Pipe Labeling, and
- Division 4 OAR 437-004-0100 - Universal Definitions, OAR 437-004-9800 - Hazard Communication Standard for Agricultural Employers, and OAR 437-004-9850 - Pipe Labeling.

The federal OSHA website provides additional detail on their adopted changes at https://www.osha.gov/hazcom.

Please visit our website osha.oregon.gov/rules to view our proposed rules or select other rule activity from this 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.

When does this happen: Adoption is tentative by the end of 2024.

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

To comment: Department of Consumer and Business Services/
Oregon OSHA
PO BOX 14480
Salem OR 97309-0405
Email – OSHA.rulemaking@dcbs.oregon.gov
Fax – 503-947-7461

Comment period closes: Wednesday**,** November 6, 2024, at 11:55 p.m.

Oregon OSHA contact: Jennifer Stewart, Salem Central Office @ 503-378-3272, or email at jennifer.stewart2@dcbs.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
Lisa Appel	350 Winter Street NE Salem OR 97301-3882	503-947-7449
Rules Coordinator	Address	Telephone

RULE CAPTION

Proposed Adoption of Federal OSHA Changes to Hazard Communication

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.

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Please visit the rules and laws section of our website at osha.oregon.gov/rules and select *proposed rules* in the rule making column to view our proposed rules.

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

RULEMAKING ACTION

Amend: OAR 437-002-0005, 437-002-0360, 437-002-0378, 437-004-0100, 437-004-9800, and 437-004-9850.

ORS 654.025(2) and 656.726(4)	
Stat. Auth.	Other Authority

ORS 654.001 through 654.295

Stats. Implemented

RULEMAKING SUMMARY

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

Federal OSHA published final changes to the Hazard Communication (1910.1200) and Incorporation by Reference (1910.6) standards in the May 20, 2024, Federal Register. In this rulemaking, Oregon OSHA proposes to adopt identical to the amended federal standards and proposes corresponding changes in its own Oregon administrative rules to align with their adopted amendments.

Federal OSHA amended the Hazard Communication Standard (HCS) to conform to the United Nations Globally Harmonized System of Classification and Labelling of Chemicals (GHS), primarily Revision 7 (Rev. 7), to address issues that arose during the implementation of the 2012 update to the HCS and provide better alignment with other U.S. agencies and international trading partners, while enhancing the effectiveness of the standard. The modifications to the standard include revised criteria for classification of certain health and physical hazards, revised provisions for updating labels, new labeling provisions for small containers, new provisions related to trade secrets, technical amendments related to the contents of safety data sheets (SDSs), and related revisions to definitions of terms used in the standard.

This rulemaking also proposes to adopt identical federal OSHA's changes to 1910.6, Incorporation by reference, that updates and adds a few new paragraphs to align with the amended HCS standard. While these changes don't introduce a large volume of new language, they do result in significant changes to the paragraph outlining and order of information.

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The federal OSHA website provides additional detail on their adopted changes at https://www.osha.gov/hazcom.

INDIVIDUAL RULE SUMMARY (By rule number)

Provide a brief summary of the rule (if new adoption), or a brief summary of changes made to the rule (if amending)

OAR 437-002-0005(6) – Updates the reference to the Federal Register to 5/20/24, FR vol.89, no. 98, pp. 44144-44461 that adopted changes to the 1910.6 Incorporation by reference federal standard.

As described in the May 20, 2024, Federal Register, the 1910.6 standard was amended as follows:

- Revise paragraph (a), the introductory text of paragraph (e), and the introductory text of paragraph (h);
- Redesignate paragraphs (h)(27) and (28) as (h)(28) and (29) and add new paragraph (h)(27);
- Redesignate paragraphs (n) through (bb) as follows: old paragraph (n) becomes new paragraph (p); old paragraph (o) becomes new paragraph (s); old paragraph (p) through (x) becomes new paragraph (t) through (bb); old paragraph (y) becomes new paragraph (o); old paragraph (z) becomes new paragraph (cc); old paragraph (aa) becomes new paragraph (r); and old paragraph (bb) becomes new paragraph (dd);
- Add new paragraphs (n) and (q); and
- Revise newly redesignated paragraphs (v) and (dd).

OAR 437-002-0360(36) – Updates the reference to the Federal Register of 5/20/24, FR vol.89, no. 98, pp. 44144-44461 that adopted changes to the 1910.1200 Hazard Communication federal standard.

As described in the May 20, 2024, Federal Register, the 1910.1200 standard is amended as follows:

- Revise paragraphs (a)(1) and (b)(6)(x);
- Revise and republish paragraph (c);
- Revise paragraphs (d)(1), (e)(4), (f)(1), (5), and (11);
- Add paragraph (f)(12); and
- Revise paragraphs (g)(1) and (2), (7) and (10), (i)(1) through (3), (j), and appendices A through D.

OAR 437-002-0378 – Throughout the rule and in the title, the spelling of 'labelling" is corrected to "labeling" to align with the spelling in 1910.1200. Added outlining to (2) Definitions to create (a) through (e). In (2)(c) Definitions, updates the definition of "Physical Hazard" to align with federal OSHA changes in the 1910.1200 Hazard Communication standard. In (4)(b) there is an outlining change; no change in content but deletes (A) and folds that language into (b) to conform with Secretary of State outlining standards. At the end of the rule "NOTE" is changed to "Note."

OAR 437-004-0100 – In (1)(n), updates the definition of "Flammable"; and, in (1)(q) updates the definition of "Hazardous Chemical" to align with federal OSHA changes in the 1910.1200 Hazard Communication standard. "NOTE" is changed to "Note" throughout.

OAR 437-004-9800 – (10) is changed to reflect new federal requirements and effective dates in the 1910.1200 Hazard Communication standard; (11)(y) definition of "Hazardous chemical," is modified; (11)(nn) definition of "physical hazard" is updated; and (11)(ss) Pyrophoric gas is removed, as a result the outlining is updated in the remainder of the rule after (ss). "NOTE" is changed to "Note" throughout.

OAR 437-004-9850 – In (2), updates the definition of "physical hazard" to align with federal OSHA changes in the 1910.1200 Hazard Communication standard. "NOTE" is changed to "Note" throughout. Text references to the Illustration and Appendix A (Non-mandatory) are added.

Renée Stapleton
Signature

November 6, 2024, at 11:55 p.m.
Last Day for Public Comment
Last day to submit written comments to the Rules Coordinator

Renée Stapleton 9/24/24
Printed name Date

*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.

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 — 437
Agency and Division — Administrative Rules Chapter Number

In the Matter of:

Adopting:

Amending: OAR 437-002-0005, 437-002-0360, 437-002-0378, 437-004-0100, 437-004-9800, and 437-004-9850

Repealing:

Rule Caption: Proposed Adoption of Federal OSHA Changes to Hazard Communication

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

Stats. Implemented: ORS 654.001 through 654.295

Need for the Rule(s):

On May 20,2024, federal OSHA announced final rule amendments to the Hazard Communication standard in the Federal Register, 5/20/24, FR vol.89, no. 98. Federal OSHA is amending the Hazard Communication Standard (HCS) to conform to the United Nations Globally Harmonized System of Classification and Labelling of Chemicals (GHS), primarily Revision 7 (Rev. 7), to address issues that arose during the implementation of the 2012 update to the HCS and provide better alignment with other U.S. agencies and international trading partners, while enhancing the effectiveness of the standard. The agency has determined that the revisions in this final rule will enhance the effectiveness of the HCS by ensuring employees are appropriately apprised of the chemical hazards to which they may be exposed thus reducing the incidence of chemical-related occupational illnesses and injuries. The modifications to the standard include revised criteria for classification of certain health and physical hazards, revised provisions for updating labels, new labeling provisions for small containers, new provisions related to trade secrets, technical amendments related to the contents of safety data sheets (SDSs), and related revisions to definitions of terms used in the standard

Oregon OSHA is required to adopt rules that are at least as effective as federal OSHA to maintain its approval as an OSHA State Plan. In addition, without adopting these changes, Oregon employers will find compliance with rules to be confusing and inconsistent if Oregon OSHA and federal OSHA have different requirements regarding labels and safety data sheets.

Documents Relied Upon, and where they are available:
Federal Register Vol. 89, No.98, Monday, May 20, 2024, pages 44144 - 44461, Hazard Communication Standard; adopted by Occupational Safety and Health Administration (OSHA), Labor. Final rule.
https://www.osha.gov/sites/default/files/laws-regs/federalregister/2024-05-20.pdf

Oregon Employment Department - A Snapshot of Oregon Firms by Size Class, 2024:
https://www.qualityinfo.org/-/a-snapshot-of-oregon-firms-by-size-class-2024

Bureau of Labor Statistics – wage data from federal OSHA
https://www.bls.gov/oes/current/oes_nat.htm

Oregon Employment Department Quality Information – wage date from Oregon OSHA
https://www.qualityinfo.org/home

Federal OSHA's Final Rule to Amend the Hazard Communication standard:
https://www.osha.gov/hazcom/rulemaking

Statement Identifying How Adoption of Rule(s) Will Affect Racial Equity in This State:

Oregon OSHA is committed to ensuring safe and healthful working and living conditions for all workers in Oregon. Recognizing the historical and systemic racial inequities that have disproportionately affected communities of color, Oregon OSHA is dedicated to incorporating racial equity into its rulemaking. By aligning with updates to the United Nations Globally Harmonized System of Classification and Labelling of Chemicals (GHS) and training requirements, Oregon OSHA aims to help address the disproportionate risk of working with hazardous chemicals for vulnerable workers who may have limited English proficiency. This rule seeks to strengthen worker protections, providing a safe and healthy workplace place in all industries and improve the communication of chemical hazard for workers.

Fiscal and Economic Impact:

Please see attached statement of fiscal and economic impact. The analysis largely reflects information provided by federal OSHA as the "final economic analysis" published in the Federal Register (Vol. 89, No.98, Monday, May 20, 2024, pages 44144-44461, Hazard Communication Standard). Oregon's statement integrates additional cost considerations and wage data from Oregon.

Statement of Cost of Compliance:

1. Impact on state agencies, units of local government and the public (ORS 183.335(2)(b)(E)):
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 (who may be cited and assessed penalties) or employees (who may benefit from inspection activity).

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:
According to the Oregon Employment Department, *"A Snapshot of Oregon Firms by Size Class, 2024,"* (published September 10, 2024) there were 111,207 firms with fewer than 50 employees in Oregon in March 2024. These firms accounted for 96 percent of all firms statewide and 39% of employees in the state of Oregon.

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

Please see attached statement of fiscal and economic impact.

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

Please see attached statement of fiscal and economic impact.

How were small businesses involved in the development of this rule?
Small businesses and others were involved in the development of this rule insofar as their representatives participated in the Rules Advisory Group (RAG) meeting or provided written feedback to Oregon OSHA's Technical Specialist.

Administrative Rule Advisory Committee consulted? No. However, Oregon OSHA convened a rulemaking advisory group comprised across industries in Oregon specific to this rulemaking.

Oregon OSHA contacted standing Oregon OSHA Advisory Groups and invited their members to participate in the Hazard Communication Rules Advisory Group (RAG), including members of the Oregon OSHA Construction Advisory Committee, Fire Service Advisory Group, Forest Activities Advisory Group, Lead Advisory Group and Agriculture Labor Housing Advisory Group. Additionally, Oregon OSHA invited SAIF, and several chemical manufactures based in Oregon regarding RAG participation. Membership was open to all interested individuals, employers, and organizations. Current members of groups were also encouraged to make business referrals for RAG participation.

For individuals who expressed interest in participating in the RAG, Oregon OSHA communicated regularly about the Hazard Communication rule changes and rulemaking process over a three-month period from June to August 2024. Oregon OSHA convened a June 27, 2024, RAG meeting, presented proposed changes, and solicited input from RAG members to include the cost of compliance to be used for development of the FIS. Follow-up electronic communications accepted additional comments and requested feedback on the FIS.

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.

Renée Stapleton — Renée Stapleton — 9/24/24

Signature — Printed name — Date

Oregon OSHA

Fiscal Impact Statement (Filing Attachment)

Proposed Adoption of Federal OSHA Changes to Hazard Communication

9/24/2024

Proposed rules for amendment:

- OAR 437-002-0005 Adoption by Reference
  - 29 CFR 1910.6 Incorporation by Reference
- OAR 437-002-0360 Adoption by Reference
  - 29 CFR 1910.1200 Hazard Communication
- OAR 437-002-0378 Pipe Labeling
- OAR 437-004-0100 Universal Definitions
- OAR 437-004-9800 Hazard Communication Standard for Agricultural Employers
- OAR 437-004-9850 Pipe Labeling

Introduction

Oregon OSHA is engaged in rulemaking activities related to its requirements for its hazard communication standard (HCS) 29 CFR 1910.1200 and rules connected to HCS (see amended rules listed above). The following is a fiscal impact statement (FIS) based on the federal OSHA proposed rule amendments to 29 CFR 1910.1200. This FIS includes cost estimates and considerations that were received from Oregon stakeholders and members of the rule advisory group (RAG) convened by Oregon OSHA during this rulemaking process. As a federally initiated rulemaking, Oregon OSHA relied on the U.S. Department of Labor's fiscal impact assessments for many estimates. Oregon OSHA also included wage and cost information for Oregon and federal OSHA information.

Generally, the FIS is organized by individual rule sections and includes standardized language to provide additional clarity. To the extent that a proposed rule amendment is not addressed in the FIS, it is intended to signify that Oregon OSHA does not anticipate a fiscal impact for that specific provision. Proposed rule amendments can be identified as either "substantive change" or "clarification of existing requirement," which denote that a potential fiscal impact is anticipated, or no fiscal impact is anticipated, respectively.

Throughout the FIS there will be estimated costs based on available data and information. However, because of data gaps and variability between operations, some cost estimates cannot be calculated or are indeterminate. Factors that impact the fiscal impact can vary widely based on each employer's unique decisions or individual circumstances. Oregon OSHA expects that employers will make site-specific and operation-specific decisions on how best to minimize the costs to come into compliance on a case-by-case basis.

Wage Data

"Loaded wages" are used in the calculation in this FIS. Wage loading refers to the additional payments or allowances that may be added to a worker's base pay to account for various factors such as benefits, taxes, and other employment related costs.

Federal OSHA calculations for loaded employee wages is based on following formula:

- Average Hourly Wages (US) + fringe benefits + applicable overhead costs = Total loaded wages
- Fringe benefits are calculated at 45 percent of the base wage
- Applicable overhead costs are calculated at 17 percent of the base wage

Federal OSHA used the base wage information provided by Bureau of Labor Statistics (https://www.bls.gov/oes/current/oes_nat.htm). Occupations with the greatest impact were identified and wage data for those occupations were identified by using the standard occupational code (SOC). Federal OSHA identified four SOC's impacted for their FIS calculations and identified loaded average total wages as:

(1) Manager $83.62 (SOC code 11-0000)
(2) Logistics Personnel $60.37 (SOC code 13-1081)
(3) Production Worker $31.09 (SOC code 51-0000)
(4) Occupational Health and Safety Specialist $61.18 (SOC code 19-5011)

Oregon OSHA used the base wage information identified by the Oregon Employment Department online database (Oregon Employment Department Quality Information). To complete the fiscal impact statement (FIS), Oregon OSHA relied on the tenth (10^{th}), fiftieth (50^{th}), and ninetieth (90^{th}) percentiles wage data for 2024. The average Oregon wage (non-loaded) is provided below as a reference to federal OSHA wage data provided.

1. Manager (11-1021) Oregon All Counties; Hourly Wage:
   $22.97 ($10^{th}$), $65.63 ($50^{th}$), $100.11 ($90^{th}$), $55.68 (average)
2. Logistics Personnel (13-1081) Oregon All Counties; Hourly Wage:
   $25.87 ($10^{th}$), $39.32 ($50^{th}$), $63.15 ($90^{th}$), $42.30 (average)
3. Production Worker (51-9198) Oregon All Counties; Hourly Wage:
   $15.99 ($10^{th}$), $18.97 ($50^{th}$), $24.46 ($90^{th}$), $20.03 (average)
4. Occupational Health and Safety Specialist (19-5011) Oregon All Counties:
   Hourly Wage: $24.28 ($10^{th}$), $38.32 ($50^{th}$), $54.09 ($90^{th}$), $39.22 (average)

Oregon OSHA used a range of thirty-five percent (35%) to one hundred percent (100%) of the base wage for purposes of wage loading. When estimating labor costs, Oregon OSHA utilized the following formula:

- Hourly Wage Data for the 10th Percentile x 135% Wage Loading x Time = Lower Bound
- Hourly Wage Data for the 90th Percentile x 200% Wage Loading x Time = Upper Bound

By using the upper and lower bound wage information from Oregon, Oregon OSHA's intent is to represent the variety of industries and regional differences found in Oregon.

Oregon OSHA recognizes that employee roles identified in this FIS may not represent all employers in Oregon and that identified roles and estimated time can be applied to applicable employees completing the work. Oregon OSHA utilized the federally identified employment positions for consistency with the federally adopted rule fiscal analysis.

Oregon OSHA convened a June 27, 2024, RAG meeting, presented proposed changes, and solicited input from RAG members to include the cost of compliance to be used for development of this FIS. Follow-up electronic communications accepted additional comments and requested feedback on the FIS.

Proposed Amendments to OAR 437-002-0360
437-002-0360 Adoption by Reference

- Adopts by reference the May 20, 2024, Federal Register (Vol. 89, No. 98, pp. 44144-44461.
- The fiscal impact is detailed below.

Proposed Amendments to 1910.1200 and all appendix sections to the rule

Amendment 1910.1200(a) – Substantive Change (potential fiscal impact anticipated)
1910.1200(a) – Purpose

- The rule was updated to include a reference from Global Harmonizing System (GHS) version 3 to GHS version 7. This version is consistent with the version used by other nations and is the reference for the changes found in this rule.
- The revisions to the HCS will not change the existing requirement for firms that sell hazardous chemicals to employers to provide information about the associated hazards. Information must be presented in a Safety Data Sheet (SDS) in the format specified in the standard, and some information must also be presented on product labels. The final rule will require affected chemical manufacturers to revise SDSs and labels for select hazardous chemicals to reflect chemical reclassifications (Appendix B) and to conform to language criteria in precautionary statements and other mandatory language (Appendices C and D).

- Federal OSHA expects that downstream users, distributors, and wholesalers would continue to rely on SDSs and labels provided by manufacturers to fulfill their obligations under the OSHA standard and would not incur costs associated with chemical reclassification under the revisions to the HCS.
- Federal OSHA expects that the revisions will also result in some positive economic effects. For example, being better aligned with the GHS will help facilitate international trade, thereby enhancing competition, increasing export opportunities for U.S. businesses, reducing costs for imported products, and generally expanding the selection of chemicals and products available to U.S. businesses and consumers.
- While there are no direct fiscal impacts from this change, employers will need to update their written hazard communication program, SDS documents, container labeling and employee training. Oregon OSHA has included estimated costs for this requirement in this section.
- Federal OSHA estimated activity regarding SDS changes would be as follows:

Employer Size	Time needed to revise electronic templates for labels and SDS's	Changes to chemical classification		Time needed for management familiarization	
		General SDS changes	SDS for aerosols, flammable gases, and desensitized explosives	General SDS changes	SDS for aerosols, flammable gases, and desensitized explosives
		Indirectly Affected	Directly Affected	Indirectly Affected	Directly Affected
1-499 Employees	0.5 -0.7 hours per SDS	1.25 - 1.75 hours per SDS	1.5 - 2.1 hours per SDS	0.25 - 1 hours	1 - 4 hours

- Using the 10th and 90th percentile loaded hourly wage information for Oregon and federal OSHA loaded wage information identified above, the fiscal impact is expected as follows:
- Revision to electronic templates for labels and SDS's (per SDS) by the Occupational Health and Safety Specialist:

  Estimated impact using Oregon OSHA wage calculations:
  - $24.28 (10th) x 135%-200% loading x 0.5 hours = $16.39 - $24.28
  - $54.09 (90th) x 135%-200% loading x 0.5 hours = $36.51 - $54.09
  - $24.28 (10th) x 135%-200% loading x 0.7 hours = $22.94 - $33.99

- $54.09 (90th) x 135%-200% loading x 0.7 hours = $51.12 - $75.73

Estimated impact using federal OSHA wage calculations:

- $61.18 (loaded wage) x 0.5 hours = $30.59
- $61.18 (loaded wage) x 0.7 hours = $42.83

- Familiarization with the changes to chemical classification by the Occupational Health and Safety Specialist (per SDS):

  Estimated impact using Oregon OSHA wage calculations:

  Indirectly Affected (general SDS changes)
  - $24.28 (10th) x 135%-200% loading x 1.25 hours = $40.97 - $60.70
  - $54.09 (90th) x 135%-200% loading x 1.25 hours = $91.28 - $135.23
  - $24.28 (10th) x 135%-200% loading x 1.75 hours = $57.36 - $84.98
  - $54.09 (90th) x 135%-200% loading x 1.75 hours = $127.79 - $189.32

  Directly Affected (aerosols, flammable gases, and desensitized explosives)
  - $24.28 (10th) x 135%-200% loading x 1.5 hours = $49.17 - $72.84
  - $54.09 (90th) x 135%-200% loading x 1.5 hours = $109.53 - $192.27
  - $24.28 (10th) x 135%-200% loading x 2.1 hours = $68.83 - $101.98
  - $54.09 (90th) x 135%-200% loading x 2.1 hours = $153.35 - $227.18

  Estimated impact using federal OSHA wage calculations:

  Indirectly Affected (general SDS changes)
  - $61.18 (loaded wage) x 1.25 hours = $76.48
  - $61.18 (loaded wage) x 1.75 hours = $107.07

  Directly Affected (aerosols, flammable gases, and desensitized explosives)
  - $61.18 (loaded wage) x 1.5 hours = $91.77
  - $61.18 (loaded wage) x 2.1 hours = $128.48

- Management familiarization:

  Estimated impact using Oregon OSHA wage calculations:

  Indirectly Affected (general SDS changes)
  - $24.28 (10th) x 135%-200% loading x 0.25 hours = $7.75 - $11.49
  - $54.09 (90th) x 135%-200% loading x 0.25 hours = $33.79 - $50.06
  - $24.28 (10th) x 135%-200% loading x 1 hour = $31.01 - $45.94
  - $54.09 (90th) x 135%-200% loading x 1 hour = $135.15 - $200.22

  Directly Affected (aerosols, flammable gases, and desensitized explosives)
  - $24.28 (10th) x 135%-200% loading x 1 hour = $31.01 - $45.94
  - $54.09 (90th) x 135%-200% loading x 1 hour = $135.15 - $200.22
  - $24.28 (10th) x 135%-200% loading x 4 hour = $124.04 - $183.76
  - $54.09 (90th) x 135%-200% loading x 4 hour = $540.59 - $800.88

  Estimated impact using federal OSHA wage calculations:

  Indirectly Affected (general SDS changes)
  - $83.62 (loaded wage) x 0.25 hours = $20.91
  - $83.62 (loaded wage) x 1 hours = $83.62

Directly Affected (aerosols, flammable gases, and desensitized explosives)
- $83.62 (loaded wage) x 1 hours = $83.62
- $83.62 (loaded wage) x 4 hours = $334.48

- Costs associated with training employees will vary based on many factors including number of employees, method of training and impact of changes. Employers with more employees may benefit from economies of scale, reducing cost per employee, while smaller or employers with larger number of chemicals may incur higher per employee expenses. Taken together, these and other variables collectively contribute to the complexity of estimating the range of costs observed across different employers.

Federal OSHA estimated employee training regarding SDS changes would be:

Role	OSHA estimated time
Health and Safety Specialist's time to preparing new training	2.5 hours
chemical manufacturing firms: affected logistics or production worker	12 minutes
users of aerosols, desensitized explosives, or flammable gases in the workplace	0

- Using the 10th and 90th percentile loaded hourly wage information for Oregon and federal OSHA loaded wage information identified above, the fiscal impact is expected as follows
- Health and Safety Specialist's time to preparing new training:
  Estimated impact using Oregon OSHA wage calculations:
  - $24.28 (10th) x 135%-200% loading x 2.5 hours = $81.95 - $121.40
  - $54.09 (90th) x 135%-200% loading x 2.5 hours = $182.55 - $270.45

  Estimated impact using federal OSHA wage calculations:
  - $61.18 (loaded wage) x 2.5 hours = $152.95
- Chemical manufacturing firms: affected logistics or production worker
  Estimated impact using Oregon OSHA wage calculations:
  Logistics Personnel
  - $24.28 (10th) x 135%-200% loading x .2 hours = $6.98 - $10.35
  - $54.09 (90th) x 135%-200% loading x .2 hours = $17.05 - $25.26

  Production Worker
  - $24.28 (10th) x 135%-200% loading x .2 hours = $4.32 - $6.40
  - $54.09 (90th) x 135%-200% loading x .2 hours = $6.60 - $9.78

  Estimated impact using federal OSHA wage calculations:
  Logistics Personnel
  - $60.37 (loaded wage) x .2 hours = $12.07

  Production Worker

- $31.09 (loaded wage) x .2 hours = $6.22

Oregon OSHA determined that the federally estimated increase in training time could be applied to all industries with directly affected employees and not limited to only chemical manufacturing.

Amendment 1910.1200(b) - Clarification of Existing Requirement(s) (no potential fiscal impact anticipated)
1910.1200(b)(6)(x) – Clarification of hazard exemptions

- The words, "hazard " and "other hazards" were added to the proposed rule to clarify the types of nuisance particulates that are hazards being addressed in the exemption section of the proposed rule.
- No fiscal impact anticipated.

Amendment 1910.1200(c) – Substantive Change (no potential fiscal impact anticipated)

1910.1200(c) - Updates to definition of terms used in the rule
Bulk Shipment:

- Addition of a definition for bulk shipment for shipment labeling of chemicals.
- Federal OSHA identified potential cost savings from this addition for industries.
- For bulk shipments, the new paragraph should increase flexibility by allowing labels to be placed on the immediate container or transmitted with shipping papers, bills of lading, or by other technological or electronic means so that they are immediately available to workers in printed form on the receiving end of the shipment. Federal OSHA intends the definition of "bulk shipment" to apply only when the mode of transportation is the immediate container, such as a tanker truck, rail car, or intermodal container.
- This may result in cost savings for some Oregon businesses that ship or receive chemicals in this format. Federal OSHA was unable to provide direct cost savings for this revision but anticipate a cost savings from expanded options for employers to be compliant with the rule requirements and reduces administrative costs with the additional options.
- Additional fiscal impact regarding this change can be found in 1910.1200(f) rule change below.

Combustible dust:

- Addition of the definition for combustible dust for hazard communication. This change brings the program directive for combustible dust and the hazard communication rule into alignment. There are no additional rule obligations to combustible dust.
- No fiscal impact anticipated.

Exposure or exposed:

- Clarification of exposure is to a hazard as defined in this rule
- No fiscal impact anticipated.

Gas:

- Addition of the definition for a gas as defined in this rule.
- No fiscal impact anticipated.

Hazardous chemical:

- Deletion of the definition of pyrophoric gas from definition of hazardous chemical consistent with the deletion of a pyrophoric gas from definitions.
- No fiscal impact anticipated.

Immediate outer package:

- Addition of a definition of immediate outer package shipment for shipment labeling of chemicals
- No fiscal impact anticipated

Liquid:

- Addition of a definition for a liquid.
- No fiscal impact anticipated.

Physical hazard:

- Addition of clarification of a physical hazard and the criteria used for evaluation in Appendix B.
- No fiscal impact anticipated

Pyrophoric gas:

- The definition of pyrophoric gas was removed and moved to Appendix B.2.1.
- No fiscal impact anticipated

Physician or other licensed health care professional (PLHCP):

- Clarification of what is included when physician or other licensed health care professional is referenced in the rule.
- No fiscal impact anticipated.

Released for shipment:

- Clarification of when a chemical is released for shipment as referenced in the rule updates.
- No fiscal impact anticipated.

Solid:

- Addition of the definition for a solid.
- No fiscal impact anticipated.

Amendment 1910.1200(d) - Substantive Change (potential fiscal impact anticipated)
1910.1200(d)(1) - Chemical manufacturers and importers requirements

- Clarification of requirements for Chemical manufacturers and importers to evaluate reasonably anticipated hazards including changes in form and reactions with known or reasonably anticipated uses or applications. Classification of chemical hazards are outlined in Appendix A, Appendix B and Appendix C.

- The revisions to the HCS will not change the existing requirement for firms that sell hazardous chemicals to employers to provide information about the associated hazards. Information must be presented in an SDS in the format specified in the standard, and some information must also be presented on product labels. The final rule will require affected chemical manufacturers to revise SDS's and labels for select hazardous chemicals to reflect chemical reclassifications (Appendix B) and to conform to language criteria in precautionary statements and other mandatory language (Appendices C and D).
- Federal OSHA estimated compliance costs associated with the reclassification of hazards and related changes to SDSs and labels are directly related to the number of chemicals for which electronic files will need to be updated in order to prepare updated SDSs and labels. Federal OSHA estimated the number of directly affected electronic files for SDS's and labels is 50 percent of the overall number of SDS's.
- Federal OSHA expects that downstream users, distributors, and wholesalers would continue to rely on SDSs and labels provided by manufacturers to fulfill their obligations under the OSHA standard and would not incur costs associated with chemical reclassification under the revisions to the HCS.

Amendment 1910.1200(f) - Substantive Change (potential fiscal impact anticipated)
1910.1200(f)(1) - Labels on shipped containers

- Clarification of inclusion of hazard assessment and label requirements. Addition of requirements for a U.S. address and phone numbers.
- No fiscal impact anticipated.

1910.1200(f)(5) - Transportation

- Clarification of requirements for bulk shipment of chemicals. Bulk shipment labels for hazardous chemicals must be either on the immediate container, transmitted with the shipping papers or the bills of lading or, transmitted by technological or
- electronic means (if agreed to by the receiving entity) so that workers on the receiving end have immediate access in printed form.
- No fiscal impact anticipated.

1910.1200(f)(11) – Shipping and labeling requirements

Clarification of labeling requirements for newly identified hazards and labeling requirements for chemicals that have been released for shipment and are awaiting future distribution, chemical manufacturers, importers, distributors, or employers have the option not to relabel those containers.

- Federal OSHA identified some cost reductions benefits for employers from the revised requirements for shipping and labeling.

- Federal OSHA expects that chemical manufacturers and importers will be able to phase in revisions to their labels and SDS's in accordance with the normal cycle of change, and therefore will not need to replace existing labels or SDS's
- For chemicals released for shipment but still in a holding facility prior to future distribution, chemical manufacturers, importers, distributors, or employers can opt not to relabel those containers; but in that case they must either provide the updated label for each individual container with each shipment or, upon agreement of the receiving entity, transmit the labels by electronic or other technological means.
- Federal OSHA identified a cost savings resulting from the changes to paragraph (f)(11) was the avoided economic loss for affected manufacturers or wholesalers who would otherwise have to relabel products being held in storage.
- Federal OSHA expected that the percentage of products warehoused for more than six months would be quite low because it is expensive to hold inventory over long periods of time. Federal OSHA anticipated that manufacturer-initiated relabeling would be rare and estimated that only 1 percent of products warehoused for more than six months would be relabeled in any particular year due to a manufacturer-initiated labeling change.
- Federal OSHA identified six industries (four manufacturing and two wholesale) that it expected would be impacted by the modifications to paragraph (f)(11). These are primarily fertilizer manufacturers, paint manufacturers, and wholesalers of related farm and paint supplies. Federal OSHA identified the following North American Industry Classification System (NAICS) codes:
  - 325311 Nitrogenous Fertilizer Manufacturing
  - 325312 Phosphatic Fertilizer Manufacturing
  - 325314 Fertilizer (Mixing Only) Manufacturing
  - 325510 Paint and Coating Manufacturing
  - 424910 Farm Supplies Merchant Wholesalers
  - 424950 Paint, Varnish, and Supplies Merchant Wholesalers
- Federal OSHA estimated that 5 percent of the products in six NAICS industries, identified above, are potentially impacted by the modifications to paragraph (f)(11) and would be warehoused for more than six months. Federal OSHA's estimated relabeling costs from this rule making as a percentage of the value of the products requiring relabeling. Federal OSHA estimates relabeling costs range will from 1.5 percent to 204 percent of the value of the product, depending on product type (e.g., liquid versus dry), container type (plastic bags, etc.), and the volume and value of the product.
- Oregon OSHA did not receive any feedback regarding federal OSHA's cost impacts for this subsection or identify the above NAICS codes as operating in Oregon. However, the base NAICS code of 325 does include more than 300 employers and 5,000 employees in the state.

1910.1200(f)(12) - Small container labelling

- Clarification of labeling requirements for shipping and storage of small container labeling.
- Federal OSHA identified some cost reductions benefits for employers from the revised requirements for very small containers. The costs and cost savings of some of the revised provisions (new classification criteria for select hazards and labels on very small containers) are driven by the number of SDSs (and labels) that manufacturers must redesign as a result of the new criteria and the number of labels on very small containers.
- The revised requirements for the labeling of very small containers, which would eliminate full labeling requirements for some containers with a volume capacity of three milliliters (ml) or less, are expected to address current feasibility issues related to labeling these containers. When a label would interfere with the normal use of the container, and it is not feasible to use pullout labels, fold-back labels, or tags containing full label information, the rule will permit the container to bear only the product identifier, which could be etched onto the container itself.
- Federal OSHA estimated that no cost savings will arise from paragraph (f)(12)(ii) (small containers); federal OSHA expected that employers are already benefitting from the practical accommodations on the labeling of small packages described in the aforementioned letters of interpretation.
- Federal OSHA determined that affected manufacturers where the use of *any* label (even an abbreviated label) would interfere with the normal use of the container and only the product identifier would be required, would fall in only a few NAICS industries:
  - All Other Basic Organic Chemical Manufacturing (NAICS 325180),
  - All Other Basic Organic Chemical Manufacturing (NAICS 325199),
  - Pharmaceutical and Medical Manufacturing (NAICS 3254) (encompassing 6-digit NAICS 325411, 325412, 325413, and 325414).
- Oregon OSHA was able to identify the above NAICS codes operating in Oregon.
  - All Other Basic Organic Chemical Manufacturing (NAICS 325180)
    - 7 employers. No employee numbers were available.
  - All Other Basic Organic Chemical Manufacturing (NAICS 325199),
    - 18 employers and approximately 286 employees
  - Pharmaceutical and Medical Manufacturing (NAICS 3254 as identified above)
    - 108 employers and approximately 1,273 employees
- Manufacturers with containers falling under paragraph (f)(12)(iii) could expect to obtain cost savings from avoided labeling costs on very small containers (with only the product identifier required) versus the labeling costs of abbreviated labels (requiring the product identifier, pictogram(s), signal word, manufacturer's name and phone number, and a statement that the full label information is provided on the immediate outer packaging). Federal OSHA estimates unit cost savings of $0.058 per label for very small containers.

Amendment 1910.1200(g) - Substantive Change (no potential fiscal impact anticipated)
1910.1200(g)(2) - Safety Data Sheets

- Clarification of requirements for information on SDS. No new requirements for analysis or information. Changes are referenced in Appendix D.
- The revisions to SDS's will not require a fundamental change to how SDS's and labels are prepared therefore, federal OSHA believes that the available software is capable of generating compliant SDS's and labels.
- The revisions to the HCS will not change the existing requirement for firms that sell hazardous chemicals to employers to provide information about the associated hazards. Information must be presented in an SDS in the format specified in the standard, and some information must also be presented on product labels. The final rule will require affected chemical manufacturers to revise SDS's and labels for select hazardous chemicals to reflect chemical reclassifications (Appendix B) and to conform to language criteria in precautionary statements and other mandatory language (Appendices C and D).
- Federal OSHA estimated compliance costs associated with the reclassification of hazards and related changes to SDSs and labels are directly related to the number of chemicals for which electronic files will need to be updated in order to prepare updated SDSs and labels. Federal OSHA estimated the number of directly affected electronic files for SDS's and labels is 50 percent of the overall number of SDS's.
- Federal OSHA expects that downstream users, distributors, and wholesalers would continue to rely on SDSs and labels provided by manufacturers to fulfill their obligations under the OSHA standard and would not incur costs associated with chemical reclassification under the revisions to the HCS.
- Federal OSHA expects that the revisions will also result in some positive economic effects. For example, being better aligned with the GHS will help facilitate international trade, thereby enhancing competition, increasing export opportunities for U.S. businesses, reducing costs for imported products, and generally expanding the selection of chemicals and products available to U.S. businesses and consumers.
- No fiscal impact anticipated.

1910.1200(g)(10)

- Clarification of methods employer may store and maintenance of SDS at the workplace.
- No fiscal impact anticipated.

Amendment 1910.1200(i) – Trade Secrets Clarification of Existing Requirement(s)
Assessment of trade secrets assessment requirements

- Clarification of requirements for trade secrets.
- No fiscal impact anticipated.

Concentration range

- Clarification of known concentration ranges for chemicals with a trade secret
- No fiscal impact anticipated.

Emergency medical care requirements for chemicals with trade secrets

- Clarification of requirements for SDS with trade secrets during an emergency response.
- No fiscal impact anticipated.

Non-emergency medical care requirements for chemicals with trade secrets

- Clarification of requirements for SDS with trade secrets during a non-emergency response.
- No fiscal impact anticipated.

Amendment 1910.1200(j) – Substantive Change

1910.1200(j)(1) Effective Dates

- Clarification of effective dates for proposed rule changes. This section must become effective July 19, 2024
- No fiscal impact anticipated.

1910.1200(j)(2) Substances

- Clarification of effective dates for proposed rule changes. Manufacturers, importers, and distributors, evaluating substances must be in compliance with all modified provisions of this section no later than January 19, 2026. For substances with a newly identified physical hazard, or health hazards or other hazards covered under this section no later than July 20, 2026.
- No fiscal impact anticipated.

1910.1200(j)(3) Mixtures

- Clarification of effective dates for proposed rule changes. Chemical manufacturers, importers, and distributors evaluating mixtures must be in compliance with all modified provisions of this section no later than July 19, 2027. For mixtures with newly identified physical hazards, health hazards, or other hazards covered under this section no later than January 19, 2028.
- No fiscal impact anticipated.

1910.1200(j)(4) Compliance

- Clarification of effective dates for proposed rule changes. Between May 20, 2024, and the dates specified in paragraphs (j)(2) and (3) of this section, as applicable, chemical manufacturers, importers, distributors, and employers may comply with either this section or 29 CFR 1910.1200 revised as of July 1, 2023, or both during the transition period.
- No fiscal impact anticipated.

Proposed Amendments to OAR 437-002-0005
437-002-0005(6) Adoption by Reference

- Adopts by reference the May 20, 2024, Federal Register (Vol. 89, No. 98, pp. 44144-44461.
- No fiscal impact anticipated.

1910.6 Incorporation by Reference
Addition of clarification material for incorporated by reference.

- Revision and redesign of paragraphs including:
  - Addition of updated contact information
  - Renumbering of rules from the addition of new and updated standards
- Adoption of the following standards:
  - ISO 817:2014(E), Refrigerants – Designation and safety classification, Third edition, 2014-04-15; IBR approved for Appendix B to § 1910.1200
  - ISO 10156:1996 (E), Gases and Gas Mixtures—Determination of Fire Potential and Oxidizing Ability for the Selection of Cylinder Valve Outlets, Second Edition, Feb. 15, 1996; IBR approved for Appendix B to § 1910.1200.
  - ISO 10156:2017(E), Gas Cylinders - Gases and gas mixtures - Determination of fire potential and oxidizing ability for the selection of cylinder valve outlets, Fourth edition, 2017-07; IBR approved for Appendix B to § 1910.1200.
  - ISO 10156–2:2005 (E), Gas cylinders—Gases and Gas Mixtures—Part 2: Determination of Oxidizing Ability of Toxic and Corrosive Gases and Gas Mixtures, First Edition, Aug. 1, 2005; IBR approved for Appendix B to subpart Z.
  - ISO 13943:2000 (E/F); Fire Safety—Vocabulary, First Edition, April 15, 2000, IBR approved for Appendix B to § 1910.1200.
  - ADR 2019, European Agreement Concerning the International Carriage of Dangerous Goods by Road; Annex A: General provisions and provisions concerning dangerous substances and articles; (Volumes I and II) including December 2018 corrigendum to Volume II, applicable January 1, 2019; IBR approved for § 1910.1200.
  - ST/SG/AC.10/Rev.4 ("UN ST/SG/AC.10/Rev.4"), The UN Recommendations on the Transport of Dangerous Goods, Manual of Tests and Criteria, Fourth Revised edition, 2003; IBR approved for Appendix B to § 1910.1200.
  - ST/SG/AC.10/11/Rev.6 ("UN ST/SG/AC.10/11/Rev.6"), Recommendations on the Transport of Dangerous Goods: Manual of Tests and Criteria, sixth revised edition, copyright 2015; IBR approved for Appendix B to § 1910.1200.

Proposed Amendments to OAR 437-002-0378

437-002-0378(2)

- Updates the definition of "physical hazard" for consistency with the criteria used for evaluation in 29 CFR 1910.1200.
- No fiscal impact anticipated.

Proposed Amendments to OAR 437-004-0100

OAR 437-004-0100 (1)(n)

- Updates to the definition of "Flammable" to align with 29 CFR 1910.1200 HCS changes.
- No fiscal impact anticipated.

OAR 437-004-0100 (1)(q)

- Updates the definition of "Hazardous Chemical" to align with 29 CFR 1910.1200 HCS changes.
- No fiscal impact anticipated.

Proposed Amendments to OAR 437-004-9800

OAR 437-004-9800(8)

- While there are no changes in this language in this rule, it is noted that there are changes to the language of the trade secrets provisions in 29 CFR 1910.1200(i).
- No fiscal impact anticipated.

OAR 437-004-9800(10)

- This is changed to reflect new federal requirements and effective dates in the 1910.1200 Hazard Communication standard.
- As noted above in 1910.1200(j), no fiscal impact anticipated.

OAR 437-004-9800(11)(y)

- Updates the definition of "hazardous chemical" for consistency with the criteria used for evaluation in 29 CFR 1910.1200.
- No fiscal impact anticipated.

OAR 437-004-9800(11)(nn)

- Updates the definition of "physical hazard" for consistency with the criteria used for evaluation in 1910.1200.
- No fiscal impact anticipated.

OAR 437-004-9800(11)(ss)

Removal of the definition of "pyrophoric gas" for consistency with the criteria used for evaluation in 29 CFR 1910.1200.

- No fiscal impact anticipated.

Note to OAR 437-004-9800(11)(bbb)

- While there are no changes in this language in this rule, it is noted that there are changes to the language of the trade secrets provisions in 29 CFR 1910.1200(i) that are referenced.

- No fiscal impact anticipated.

Proposed Amendments to OAR 437-004-9850
437-004-9850(2)

- Updates the definition of "physical hazard" for consistency with the criteria used for evaluation in 29 CFR 1910.1200.
- No fiscal impact anticipated.

HOUSING COST IMPACT STATEMENT

FOR ESTIMATING THE EFFECT OF A PROPOSED RULE OR ORDINANCE ON THE COST OF DEVELOPING A *TYPICAL 1,200 SQ FT DETACHED SINGLE FAMILY DWELLING ON A 6,000 SQ FT PARCEL OF LAND.
(ORS 183.534)
FOR ADMINISTRATIVE RULES

AGENCY NAME: DCBS/Oregon OSHA **PERMANENT: X**
HEARING DATES: Tuesday, October 29, 9:00 am and Wednesday, October 30, 1:00 pm
ADDRESS: 350 Winter Street NE
CITY/STATE: Salem OR 97301-3882 **TEMPORARY:** **EFFECTIVE DATE:**

PHONE: 503-947-7449

BELOW PLEASE PROVIDE A DESCRIPTION OF THE ESTIMATED SAVINGS OR ADDITIONAL COSTS THAT WILL RESULT FROM THIS PROPOSED CHANGE.

PROVIDE A BRIEF EXPLANATION OF HOW THE COST OR SAVINGS ESTIMATE WAS DETERMINED.

IDENTIFY HOW CHANGE IMPACTS COSTS IN CATEGORIES SPECIFIED

Description of proposed change: (Please attach any draft or permanent rule or ordinance)

See attached Statement of Need and Fiscal Impact, Fiscal Impact Statement and Notice of Proposed Rulemaking.

Description of the need for, and objectives of the rule:

See attached Statement of Need and Fiscal Impact, Fiscal Impact Statement and Notice of Proposed Rulemaking.

List of rules adopted or amended:

Amend: OAR 437-002-0005, 437-002-0360, 437-002-0378, 437-004-0100, 437-004-9800, and 437-004-9850

Materials and labor costs increase or savings:
None

Estimated administrative construction or other costs increase or savings:
None

Land costs increase or savings:
Oregon OSHA does not foresee any effect on land costs.

Other costs increase or savings:
Oregon OSHA does not foresee any additional costs.

*Typical-Single story 3 bedrooms, 1 1/2 bathrooms, attached garage (calculated separately) on land with good soil conditions with no unusual geological hazards.

PREPARERS NAME: Lisa Appel
EMAIL ADDRESS: Lisa.Appel@dcbs.oregon.gov

OFFICE OF THE SECRETARY OF STATE
LAVONNE GRIFFIN-VALADE
SECRETARY OF STATE

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DEPUTY SECRETARY OF STATE
AND TRIBAL LIAISON

ARCHIVES DIVISION
STEPHANIE CLARK
DIRECTOR

800 SUMMER STREET NE
SALEM, OR 97310
503-373-0701

NOTICE OF PROPOSED RULEMAKING
INCLUDING STATEMENT OF NEED & FISCAL IMPACT

FILED
09/24/2024 3:29 PM
ARCHIVES DIVISION
SECRETARY OF STATE

CHAPTER 437
DEPARTMENT OF CONSUMER AND BUSINESS SERVICES
OREGON OCCUPATIONAL SAFETY AND HEALTH DIVISION

FILING CAPTION: Proposed Adoption of Federal OSHA Changes to Hazard Communication

LAST DAY AND TIME TO OFFER COMMENT TO AGENCY: 11/06/2024 11:55 PM

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

CONTACT: Lisa Appel
503-947-7449
OSHA.rulemaking@dcbs.oregon.gov

350 Winter St. NE
Salem,OR 97301

Filed By:
Lisa Appel
Rules Coordinator

HEARING(S)

Auxiliary aids for persons with disabilities are available upon advance request. Notify the contact listed above.

DATE: 10/29/2024
TIME: 9:00 AM
OFFICER: OSHA Staff

REMOTE HEARING DETAILS
MEETING URL: Click here to join the meeting
PHONE NUMBER: 669-254-5252
CONFERENCE ID: 1610173517
SPECIAL INSTRUCTIONS:
Go to the meeting URL to register for the webinar hearing. After registering, you will receive a confirmation email containing information about joining the webinar.

DATE: 10/30/2024
TIME: 1:00 PM
OFFICER: OSHA Staff

REMOTE HEARING DETAILS
MEETING URL: Click here to join the meeting
PHONE NUMBER: 669-254-5252
CONFERENCE ID: 1616126445
SPECIAL INSTRUCTIONS:
Go to the meeting URL to register for the webinar hearing. After registering, you will receive a confirmation email containing information about joining the webinar.

NEED FOR THE RULE(S)

On May 20,2024, federal OSHA announced final rule amendments to the Hazard Communication standard in the Federal Register, 5/20/24, FR vol.89, no. 98. Federal OSHA is amending the Hazard Communication Standard (HCS) to conform to the United Nations Globally Harmonized System of Classification and Labelling of Chemicals (GHS), primarily Revision 7 (Rev. 7), to address issues that arose during the implementation of the 2012 update to the HCS and provide better alignment with other U.S. agencies and international trading partners, while enhancing the effectiveness of the standard. The agency has determined that the revisions in this final rule will enhance the effectiveness of the HCS by ensuring employees are appropriately apprised of the chemical hazards to which they may be exposed thus reducing the incidence of chemical-related occupational illnesses and injuries. The modifications to the standard include revised criteria for classification of certain health and physical hazards, revised provisions for updating labels, new labeling provisions for small containers, new provisions related to trade secrets, technical amendments related to the contents of safety data sheets (SDSs), and related revisions to definitions of terms used in the standard

Oregon OSHA is required to adopt rules that are at least as effective as federal OSHA to maintain its approval as an OSHA State Plan. In addition, without adopting these changes, Oregon employers will find compliance with rules to be confusing and inconsistent if Oregon OSHA and federal OSHA have different requirements regarding labels and safety data sheets.

DOCUMENTS RELIED UPON, AND WHERE THEY ARE AVAILABLE

Federal Register Vol. 89, No.98, Monday, May 20, 2024, pages 44144 - 44461, Hazard Communication Standard; adopted by Occupational Safety and Health Administration (OSHA), Labor. Final rule.
https://www.osha.gov/sites/default/files/laws-regs/federalregister/2024-05-20.pdf

Oregon Employment Department - A Snapshot of Oregon Firms by Size Class, 2024:
https://www.qualityinfo.org/-/a-snapshot-of-oregon-firms-by-size-class-2024

Bureau of Labor Statistics – wage data from federal OSHA
https://www.bls.gov/oes/current/oes_nat.htm

Oregon Employment Department Quality Information – wage date from Oregon OSHA
https://www.qualityinfo.org/home

Federal OSHA's Final Rule to Amend the Hazard Communication standard:
https://www.osha.gov/hazcom/rulemaking

STATEMENT IDENTIFYING HOW ADOPTION OF RULE(S) WILL AFFECT RACIAL EQUITY IN THIS STATE

Oregon OSHA is committed to ensuring safe and healthful working and living conditions for all workers in Oregon. Recognizing the historical and systemic racial inequities that have disproportionately affected communities of color, Oregon OSHA is dedicated to incorporating racial equity into its rulemaking. By aligning with updates to the United Nations Globally Harmonized System of Classification and Labelling of Chemicals (GHS) and training requirements, Oregon OSHA aims to help address the disproportionate risk of working with hazardous chemicals for vulnerable workers who may have limited English proficiency. This rule seeks to strengthen worker protections, providing a safe and healthy workplace place in all industries and improve the communication of chemical hazard for workers.

FISCAL AND ECONOMIC IMPACT:

Please see attached statement of fiscal and economic impact. The analysis largely reflects information provided by federal OSHA as the “final economic analysis” published in the Federal Register (Vol. 89, No.98, Monday, May 20, 2024,

pages 44144-44461, Hazard Communication Standard). Oregon's statement integrates additional cost considerations and wage data from Oregon.

COST OF COMPLIANCE:

(1) Identify any state agencies, units of local government, and members of the public likely to be economically affected by the rule(s). (2) Effect on Small Businesses: (a) Estimate the number and type of small businesses subject to the rule(s); (b) Describe the expected reporting, recordkeeping and administrative activities and cost required to comply with the rule(s); (c) Estimate the cost of professional services, equipment supplies, labor and increased administration required to comply with the rule(s).

1. Impact on state agencies, units of local government and the public (ORS 183.335(2)(b)(E)):
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 (who may be cited and assessed penalties) or employees (who may benefit from inspection activity).

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:
According to the Oregon Employment Department, "A Snapshot of Oregon Firms by Size Class, 2024," (published September 10, 2024) there were 111,207 firms with fewer than 50 employees in Oregon in March 2024. These firms accounted for 96 percent of all firms statewide and 39% of employees in the state of Oregon.

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

Please see attached statement of fiscal and economic impact.

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

Please see attached statement of fiscal and economic impact.

DESCRIBE HOW SMALL BUSINESSES WERE INVOLVED IN THE DEVELOPMENT OF THESE RULE(S):

Small businesses and others were involved in the development of this rule insofar as their representatives participated in the Rules Advisory Group (RAG) meeting or provided written feedback to Oregon OSHA's Technical Specialist.

WAS AN ADMINISTRATIVE RULE ADVISORY COMMITTEE CONSULTED? NO IF NOT, WHY NOT?

No. However, Oregon OSHA convened a rulemaking advisory group comprised across industries in Oregon specific to this rulemaking.
Oregon OSHA contacted standing Oregon OSHA Advisory Groups and invited their members to participate in the Hazard Communication Rules Advisory Group (RAG), including members of the Oregon OSHA Construction Advisory Committee, Fire Service Advisory Group, Forest Activities Advisory Group, Lead Advisory Group and Agriculture Labor Housing Advisory Group. Additionally, Oregon OSHA invited SAIF, and several chemical manufactures based in Oregon regarding RAG participation. Membership was open to all interested individuals, employers, and organizations. Current members of groups were also encouraged to make business referrals for RAG participation.

For individuals who expressed interest in participating in the RAG, Oregon OSHA communicated regularly about the

Hazard Communication rule changes and rulemaking process over a three-month period from June to August 2024. Oregon OSHA convened a June 27, 2024, RAG meeting, presented proposed changes, and solicited input from RAG members to include the cost of compliance to be used for development of the FIS. Follow-up electronic communications accepted additional comments and requested feedback on the FIS.

HOUSING IMPACT STATEMENT:

HOUSING COST IMPACT STATEMENT

FOR ESTIMATING THE EFFECT OF A PROPOSED RULE OR ORDINANCE ON THE COST OF DEVELOPING A *TYPICAL 1,200 SQ FT DETACHED SINGLE FAMILY DWELLING ON A 6,000 SQ FT PARCEL OF LAND. (ORS 183.534) FOR ADMINISTRATIVE RULES

AGENCY NAME: DCBS/Oregon OSHA
PERMANENT: X
HEARING DATES: Tuesday, October 29, 9:00 am and Wednesday, October 30, 1:00 pm
ADDRESS: 350 Winter Street NE
CITY/STATE: Salem OR 97301-3882
PHONE: 503-947-7449

Description of proposed change:
See attached Statement of Need and Fiscal Impact, Fiscal Impact Statement and Notice of Proposed Rulemaking.

Description of the need for, and objectives of the rule:
See attached Statement of Need and Fiscal Impact, Fiscal Impact Statement and Notice of Proposed Rulemaking.

List of rules adopted or amended:

Amend: OAR 437-002-0005, 437-002-0360, 437-002-0378, 437-004-0100, 437-004-9800, and 437-004-9850

Materials and labor costs increase or savings:
None

Estimated administrative construction or other costs increase or savings:
None

Land costs increase or savings:
Oregon OSHA does not foresee any effect on land costs.

Other costs increase or savings:
Oregon OSHA does not foresee any additional costs.

*Typical-Single story 3 bedrooms, 1 1/2 bathrooms, attached garage (calculated separately) on land with good soil conditions with no unusual geological hazards.

Oregon OSHA

Fiscal Impact Statement (Filing Attachment)

Proposed Adoption of Federal OSHA Changes to Hazard Communication

9/24/2024

Proposed rules for amendment:

- OAR 437-002-0005 Adoption by Reference
  - 29 CFR 1910.6 Incorporation by Reference
- OAR 437-002-0360 Adoption by Reference
  - 29 CFR 1910.1200 Hazard Communication
- OAR 437-002-0378 Pipe Labeling
- OAR 437-004-0100 Universal Definitions
- OAR 437-004-9800 Hazard Communication Standard for Agricultural Employers
- OAR 437-004-9850 Pipe Labeling

Introduction

Oregon OSHA is engaged in rulemaking activities related to its requirements for its hazard communication standard (HCS) 29 CFR 1910.1200 and rules connected to HCS (see amended rules listed above). The following is a fiscal impact statement (FIS) based on the federal OSHA proposed rule amendments to 29 CFR 1910.1200. This FIS includes cost estimates and considerations that were received from Oregon stakeholders and members of the rule advisory group (RAG) convened by Oregon OSHA during this rulemaking process. As a federally initiated rulemaking, Oregon OSHA relied on the U.S. Department of Labor's fiscal impact assessments for many estimates. Oregon OSHA also included wage and cost information for Oregon and federal OSHA information.

Generally, the FIS is organized by individual rule sections and includes standardized language to provide additional clarity. To the extent that a proposed rule amendment is not addressed in the FIS, it is intended to signify that Oregon OSHA does not anticipate a fiscal impact for that specific provision. Proposed rule amendments can be identified as either "substantive change" or "clarification of existing requirement," which denote that a potential fiscal impact is anticipated, or no fiscal impact is anticipated, respectively.

Throughout the FIS there will be estimated costs based on available data and information. However, because of data gaps and variability between operations, some cost estimates cannot be calculated or are indeterminate. Factors that impact the fiscal impact can vary widely based on each employer's unique decisions or individual circumstances. Oregon OSHA expects that employers will make site-specific and operation-specific decisions on how best to minimize the costs to come into compliance on a case-by-case basis.

Wage Data

"Loaded wages" are used in the calculation in this FIS. Wage loading refers to the additional payments or allowances that may be added to a worker's base pay to account for various factors such as benefits, taxes, and other employment related costs.

Federal OSHA calculations for loaded employee wages is based on following formula:

- Average Hourly Wages (US) + fringe benefits + applicable overhead costs = Total loaded wages
- Fringe benefits are calculated at 45 percent of the base wage
- Applicable overhead costs are calculated at 17 percent of the base wage

Federal OSHA used the base wage information provided by Bureau of Labor Statistics (https://www.bls.gov/oes/current/oes_nat.htm). Occupations with the greatest impact were identified and wage data for those occupations were identified by using the standard occupational code (SOC). Federal OSHA identified four SOC's impacted for their FIS calculations and identified loaded average total wages as:

(1) Manager $83.62 (SOC code 11-0000)
(2) Logistics Personnel $60.37 (SOC code 13-1081)
(3) Production Worker $31.09 (SOC code 51-0000)
(4) Occupational Health and Safety Specialist $61.18 (SOC code 19-5011)

Oregon OSHA used the base wage information identified by the Oregon Employment Department online database (Oregon Employment Department Quality Information). To complete the fiscal impact statement (FIS), Oregon OSHA relied on the tenth (10^{th}), fiftieth (50^{th}), and ninetieth (90^{th}) percentiles wage data for 2024. The average Oregon wage (non-loaded) is provided below as a reference to federal OSHA wage data provided.

1. Manager (11-1021) Oregon All Counties; Hourly Wage:
   $22.97 ($10^{th}$), $65.63 ($50^{th}$), $100.11 ($90^{th}$), $55.68 (average)
2. Logistics Personnel (13-1081) Oregon All Counties; Hourly Wage:
   $25.87 ($10^{th}$), $39.32 ($50^{th}$), $63.15 ($90^{th}$), $42.30 (average)
3. Production Worker (51-9198) Oregon All Counties; Hourly Wage:
   $15.99 ($10^{th}$), $18.97 ($50^{th}$), $24.46 ($90^{th}$), $20.03 (average)
4. Occupational Health and Safety Specialist (19-5011) Oregon All Counties:
   Hourly Wage: $24.28 ($10^{th}$), $38.32 ($50^{th}$), $54.09 ($90^{th}$), $39.22 (average)

Oregon OSHA used a range of thirty-five percent (35%) to one hundred percent (100%) of the base wage for purposes of wage loading. When estimating labor costs, Oregon OSHA utilized the following formula:

- Hourly Wage Data for the 10th Percentile x 135% Wage Loading x Time = Lower Bound
- Hourly Wage Data for the 90th Percentile x 200% Wage Loading x Time = Upper Bound

By using the upper and lower bound wage information from Oregon, Oregon OSHA's intent is to represent the variety of industries and regional differences found in Oregon.

Oregon OSHA recognizes that employee roles identified in this FIS may not represent all employers in Oregon and that identified roles and estimated time can be applied to applicable employees completing the work. Oregon OSHA utilized the federally identified employment positions for consistency with the federally adopted rule fiscal analysis.

Oregon OSHA convened a June 27, 2024, RAG meeting, presented proposed changes, and solicited input from RAG members to include the cost of compliance to be used for development of this FIS. Follow-up electronic communications accepted additional comments and requested feedback on the FIS.

Proposed Amendments to OAR 437-002-0360
437-002-0360 Adoption by Reference

- Adopts by reference the May 20, 2024, Federal Register (Vol. 89, No. 98, pp. 44144-44461.
- The fiscal impact is detailed below.

Proposed Amendments to 1910.1200 and all appendix sections to the rule

Amendment 1910.1200(a) – Substantive Change (potential fiscal impact anticipated)
1910.1200(a) – Purpose

- The rule was updated to include a reference from Global Harmonizing System (GHS) version 3 to GHS version 7. This version is consistent with the version used by other nations and is the reference for the changes found in this rule.
- The revisions to the HCS will not change the existing requirement for firms that sell hazardous chemicals to employers to provide information about the associated hazards. Information must be presented in a Safety Data Sheet (SDS) in the format specified in the standard, and some information must also be presented on product labels. The final rule will require affected chemical manufacturers to revise SDSs and labels for select hazardous chemicals to reflect chemical reclassifications (Appendix B) and to conform to language criteria in precautionary statements and other mandatory language (Appendices C and D).

- Federal OSHA expects that downstream users, distributors, and wholesalers would continue to rely on SDSs and labels provided by manufacturers to fulfill their obligations under the OSHA standard and would not incur costs associated with chemical reclassification under the revisions to the HCS.
- Federal OSHA expects that the revisions will also result in some positive economic effects. For example, being better aligned with the GHS will help facilitate international trade, thereby enhancing competition, increasing export opportunities for U.S. businesses, reducing costs for imported products, and generally expanding the selection of chemicals and products available to U.S. businesses and consumers.
- While there are no direct fiscal impacts from this change, employers will need to update their written hazard communication program, SDS documents, container labeling and employee training. Oregon OSHA has included estimated costs for this requirement in this section.
- Federal OSHA estimated activity regarding SDS changes would be as follows:

Employer Size	Time needed to revise electronic templates for labels and SDS's	Changes to chemical classification		Time needed for management familiarization	
		General SDS changes	SDS for aerosols, flammable gases, and desensitized explosives	General SDS changes	SDS for aerosols, flammable gases, and desensitized explosives
		Indirectly Affected	Directly Affected	Indirectly Affected	Directly Affected
1-499 Employees	0.5 -0.7 hours per SDS	1.25 - 1.75 hours per SDS	1.5 - 2.1 hours per SDS	0.25 - 1 hours	1 - 4 hours

- Using the 10th and 90th percentile loaded hourly wage information for Oregon and federal OSHA loaded wage information identified above, the fiscal impact is expected as follows:
- Revision to electronic templates for labels and SDS's (per SDS) by the Occupational Health and Safety Specialist:

  Estimated impact using Oregon OSHA wage calculations:
  - $24.28 (10th) x 135%-200% loading x 0.5 hours = $16.39 - $24.28
  - $54.09 (90th) x 135%-200% loading x 0.5 hours = $36.51 - $54.09
  - $24.28 (10th) x 135%-200% loading x 0.7 hours = $22.94 - $33.99

- $54.09 (90th) x 135%-200% loading x 0.7 hours = $51.12 - $75.73

Estimated impact using federal OSHA wage calculations:

- $61.18 (loaded wage) x 0.5 hours = $30.59
- $61.18 (loaded wage) x 0.7 hours = $42.83

- Familiarization with the changes to chemical classification by the Occupational Health and Safety Specialist (per SDS):

  Estimated impact using Oregon OSHA wage calculations:

  Indirectly Affected (general SDS changes)
  - $24.28 (10th) x 135%-200% loading x 1.25 hours = $40.97 - $60.70
  - $54.09 (90th) x 135%-200% loading x 1.25 hours = $91.28 - $135.23
  - $24.28 (10th) x 135%-200% loading x 1.75 hours = $57.36 - $84.98
  - $54.09 (90th) x 135%-200% loading x 1.75 hours = $127.79 - $189.32

  Directly Affected (aerosols, flammable gases, and desensitized explosives)
  - $24.28 (10th) x 135%-200% loading x 1.5 hours = $49.17 - $72.84
  - $54.09 (90th) x 135%-200% loading x 1.5 hours = $109.53 - $192.27
  - $24.28 (10th) x 135%-200% loading x 2.1 hours = $68.83 - $101.98
  - $54.09 (90th) x 135%-200% loading x 2.1 hours = $153.35 - $227.18

  Estimated impact using federal OSHA wage calculations:

  Indirectly Affected (general SDS changes)
  - $61.18 (loaded wage) x 1.25 hours = $76.48
  - $61.18 (loaded wage) x 1.75 hours = $107.07

  Directly Affected (aerosols, flammable gases, and desensitized explosives)
  - $61.18 (loaded wage) x 1.5 hours = $91.77
  - $61.18 (loaded wage) x 2.1 hours = $128.48

- Management familiarization:

  Estimated impact using Oregon OSHA wage calculations:

  Indirectly Affected (general SDS changes)
  - $24.28 (10th) x 135%-200% loading x 0.25 hours = $7.75 - $11.49
  - $54.09 (90th) x 135%-200% loading x 0.25 hours = $33.79 - $50.06
  - $24.28 (10th) x 135%-200% loading x 1 hour = $31.01 - $45.94
  - $54.09 (90th) x 135%-200% loading x 1 hour = $135.15 - $200.22

  Directly Affected (aerosols, flammable gases, and desensitized explosives)
  - $24.28 (10th) x 135%-200% loading x 1 hour = $31.01 - $45.94
  - $54.09 (90th) x 135%-200% loading x 1 hour = $135.15 - $200.22
  - $24.28 (10th) x 135%-200% loading x 4 hour = $124.04 - $183.76
  - $54.09 (90th) x 135%-200% loading x 4 hour = $540.59 - $800.88

  Estimated impact using federal OSHA wage calculations:

  Indirectly Affected (general SDS changes)
  - $83.62 (loaded wage) x 0.25 hours = $20.91
  - $83.62 (loaded wage) x 1 hours = $83.62

Directly Affected (aerosols, flammable gases, and desensitized explosives)
  - $83.62 (loaded wage) x 1 hours = $83.62
  - $83.62 (loaded wage) x 4 hours = $334.48

- Costs associated with training employees will vary based on many factors including number of employees, method of training and impact of changes. Employers with more employees may benefit from economies of scale, reducing cost per employee, while smaller or employers with larger number of chemicals may incur higher per employee expenses. Taken together, these and other variables collectively contribute to the complexity of estimating the range of costs observed across different employers.

Federal OSHA estimated employee training regarding SDS changes would be:

Role	OSHA estimated time
Health and Safety Specialist's time to preparing new training	2.5 hours
chemical manufacturing firms: affected logistics or production worker	12 minutes
users of aerosols, desensitized explosives, or flammable gases in the workplace	0

- Using the 10th and 90th percentile loaded hourly wage information for Oregon and federal OSHA loaded wage information identified above, the fiscal impact is expected as follows
- Health and Safety Specialist's time to preparing new training:
  Estimated impact using Oregon OSHA wage calculations:
  - $24.28 (10th) x 135%-200% loading x 2.5 hours = $81.95 - $121.40
  - $54.09 (90th) x 135%-200% loading x 2.5 hours = $182.55 - $270.45

  Estimated impact using federal OSHA wage calculations:
  - $61.18 (loaded wage) x 2.5 hours = $152.95
- Chemical manufacturing firms: affected logistics or production worker
  Estimated impact using Oregon OSHA wage calculations:
  Logistics Personnel
  - $24.28 (10th) x 135%-200% loading x .2 hours = $6.98 - $10.35
  - $54.09 (90th) x 135%-200% loading x .2 hours = $17.05 - $25.26

  Production Worker
  - $24.28 (10th) x 135%-200% loading x .2 hours = $4.32 - $6.40
  - $54.09 (90th) x 135%-200% loading x .2 hours = $6.60 - $9.78

  Estimated impact using federal OSHA wage calculations:
  Logistics Personnel
  - $60.37 (loaded wage) x .2 hours = $12.07

  Production Worker

- $31.09 (loaded wage) x .2 hours = $6.22

Oregon OSHA determined that the federally estimated increase in training time could be applied to all industries with directly affected employees and not limited to only chemical manufacturing.

Amendment 1910.1200(b) - Clarification of Existing Requirement(s) (no potential fiscal impact anticipated)
1910.1200(b)(6)(x) – Clarification of hazard exemptions

- The words, “hazard ” and “other hazards” were added to the proposed rule to clarify the types of nuisance particulates that are hazards being addressed in the exemption section of the proposed rule.
- No fiscal impact anticipated.

Amendment 1910.1200(c) – Substantive Change (no potential fiscal impact anticipated)

1910.1200(c) - Updates to definition of terms used in the rule
Bulk Shipment:

- Addition of a definition for bulk shipment for shipment labeling of chemicals.
- Federal OSHA identified potential cost savings from this addition for industries.
- For bulk shipments, the new paragraph should increase flexibility by allowing labels to be placed on the immediate container or transmitted with shipping papers, bills of lading, or by other technological or electronic means so that they are immediately available to workers in printed form on the receiving end of the shipment. Federal OSHA intends the definition of “bulk shipment” to apply only when the mode of transportation is the immediate container, such as a tanker truck, rail car, or intermodal container.
- This may result in cost savings for some Oregon businesses that ship or receive chemicals in this format. Federal OSHA was unable to provide direct cost savings for this revision but anticipate a cost savings from expanded options for employers to be compliant with the rule requirements and reduces administrative costs with the additional options.
- Additional fiscal impact regarding this change can be found in 1910.1200(f) rule change below.

Combustible dust:

- Addition of the definition for combustible dust for hazard communication. This change brings the program directive for combustible dust and the hazard communication rule into alignment. There are no additional rule obligations to combustible dust.
- No fiscal impact anticipated.

Exposure or exposed:

- Clarification of exposure is to a hazard as defined in this rule
- No fiscal impact anticipated.

Gas:

- Addition of the definition for a gas as defined in this rule.
- No fiscal impact anticipated.

Hazardous chemical:

- Deletion of the definition of pyrophoric gas from definition of hazardous chemical consistent with the deletion of a pyrophoric gas from definitions.
- No fiscal impact anticipated.

Immediate outer package:

- Addition of a definition of immediate outer package shipment for shipment labeling of chemicals
- No fiscal impact anticipated

Liquid:

- Addition of a definition for a liquid.
- No fiscal impact anticipated.

Physical hazard:

- Addition of clarification of a physical hazard and the criteria used for evaluation in Appendix B.
- No fiscal impact anticipated

Pyrophoric gas:

- The definition of pyrophoric gas was removed and moved to Appendix B.2.1.
- No fiscal impact anticipated

Physician or other licensed health care professional (PLHCP):

- Clarification of what is included when physician or other licensed health care professional is referenced in the rule.
- No fiscal impact anticipated.

Released for shipment:

- Clarification of when a chemical is released for shipment as referenced in the rule updates.
- No fiscal impact anticipated.

Solid:

- Addition of the definition for a solid.
- No fiscal impact anticipated.

Amendment 1910.1200(d) - Substantive Change (potential fiscal impact anticipated)
1910.1200(d)(1) - Chemical manufacturers and importers requirements

- Clarification of requirements for Chemical manufacturers and importers to evaluate reasonably anticipated hazards including changes in form and reactions with known or reasonably anticipated uses or applications. Classification of chemical hazards are outlined in Appendix A, Appendix B and Appendix C.

- The revisions to the HCS will not change the existing requirement for firms that sell hazardous chemicals to employers to provide information about the associated hazards. Information must be presented in an SDS in the format specified in the standard, and some information must also be presented on product labels. The final rule will require affected chemical manufacturers to revise SDS's and labels for select hazardous chemicals to reflect chemical reclassifications (Appendix B) and to conform to language criteria in precautionary statements and other mandatory language (Appendices C and D).
- Federal OSHA estimated compliance costs associated with the reclassification of hazards and related changes to SDSs and labels are directly related to the number of chemicals for which electronic files will need to be updated in order to prepare updated SDSs and labels. Federal OSHA estimated the number of directly affected electronic files for SDS's and labels is 50 percent of the overall number of SDS's.
- Federal OSHA expects that downstream users, distributors, and wholesalers would continue to rely on SDSs and labels provided by manufacturers to fulfill their obligations under the OSHA standard and would not incur costs associated with chemical reclassification under the revisions to the HCS.

Amendment 1910.1200(f) - Substantive Change (potential fiscal impact anticipated)
1910.1200(f)(1) - Labels on shipped containers

- Clarification of inclusion of hazard assessment and label requirements. Addition of requirements for a U.S. address and phone numbers.
- No fiscal impact anticipated.

1910.1200(f)(5) - Transportation

- Clarification of requirements for bulk shipment of chemicals. Bulk shipment labels for hazardous chemicals must be either on the immediate container, transmitted with the shipping papers or the bills of lading or, transmitted by technological or
- electronic means (if agreed to by the receiving entity) so that workers on the receiving end have immediate access in printed form.
- No fiscal impact anticipated.

1910.1200(f)(11) – Shipping and labeling requirements

Clarification of labeling requirements for newly identified hazards and labeling requirements for chemicals that have been released for shipment and are awaiting future distribution, chemical manufacturers, importers, distributors, or employers have the option not to relabel those containers.

- Federal OSHA identified some cost reductions benefits for employers from the revised requirements for shipping and labeling.

- Federal OSHA expects that chemical manufacturers and importers will be able to phase in revisions to their labels and SDS's in accordance with the normal cycle of change, and therefore will not need to replace existing labels or SDS's
- For chemicals released for shipment but still in a holding facility prior to future distribution, chemical manufacturers, importers, distributors, or employers can opt not to relabel those containers; but in that case they must either provide the updated label for each individual container with each shipment or, upon agreement of the receiving entity, transmit the labels by electronic or other technological means.
- Federal OSHA identified a cost savings resulting from the changes to paragraph (f)(11) was the avoided economic loss for affected manufacturers or wholesalers who would otherwise have to relabel products being held in storage.
- Federal OSHA expected that the percentage of products warehoused for more than six months would be quite low because it is expensive to hold inventory over long periods of time. Federal OSHA anticipated that manufacturer-initiated relabeling would be rare and estimated that only 1 percent of products warehoused for more than six months would be relabeled in any particular year due to a manufacturer-initiated labeling change.
- Federal OSHA identified six industries (four manufacturing and two wholesale) that it expected would be impacted by the modifications to paragraph (f)(11). These are primarily fertilizer manufacturers, paint manufacturers, and wholesalers of related farm and paint supplies. Federal OSHA identified the following North American Industry Classification System (NAICS) codes:
  - 325311 Nitrogenous Fertilizer Manufacturing
  - 325312 Phosphatic Fertilizer Manufacturing
  - 325314 Fertilizer (Mixing Only) Manufacturing
  - 325510 Paint and Coating Manufacturing
  - 424910 Farm Supplies Merchant Wholesalers
  - 424950 Paint, Varnish, and Supplies Merchant Wholesalers
- Federal OSHA estimated that 5 percent of the products in six NAICS industries, identified above, are potentially impacted by the modifications to paragraph (f)(11) and would be warehoused for more than six months. Federal OSHA's estimated relabeling costs from this rule making as a percentage of the value of the products requiring relabeling. Federal OSHA estimates relabeling costs range will from 1.5 percent to 204 percent of the value of the product, depending on product type (e.g., liquid versus dry), container type (plastic bags, etc.), and the volume and value of the product.
- Oregon OSHA did not receive any feedback regarding federal OSHA's cost impacts for this subsection or identify the above NAICS codes as operating in Oregon. However, the base NAICS code of 325 does include more than 300 employers and 5,000 employees in the state.

1910.1200(f)(12) - Small container labelling

- Clarification of labeling requirements for shipping and storage of small container labeling.
- Federal OSHA identified some cost reductions benefits for employers from the revised requirements for very small containers. The costs and cost savings of some of the revised provisions (new classification criteria for select hazards and labels on very small containers) are driven by the number of SDSs (and labels) that manufacturers must redesign as a result of the new criteria and the number of labels on very small containers.
- The revised requirements for the labeling of very small containers, which would eliminate full labeling requirements for some containers with a volume capacity of three milliliters (ml) or less, are expected to address current feasibility issues related to labeling these containers. When a label would interfere with the normal use of the container, and it is not feasible to use pullout labels, fold-back labels, or tags containing full label information, the rule will permit the container to bear only the product identifier, which could be etched onto the container itself.
- Federal OSHA estimated that no cost savings will arise from paragraph (f)(12)(ii) (small containers); federal OSHA expected that employers are already benefitting from the practical accommodations on the labeling of small packages described in the aforementioned letters of interpretation.
- Federal OSHA determined that affected manufacturers where the use of *any* label (even an abbreviated label) would interfere with the normal use of the container and only the product identifier would be required, would fall in only a few NAICS industries:
  - All Other Basic Organic Chemical Manufacturing (NAICS 325180),
  - All Other Basic Organic Chemical Manufacturing (NAICS 325199),
  - Pharmaceutical and Medical Manufacturing (NAICS 3254)
    (encompassing 6-digit NAICS 325411, 325412, 325413, and 325414).
- Oregon OSHA was able to identify the above NAICS codes operating in Oregon.
  - All Other Basic Organic Chemical Manufacturing (NAICS 325180)
    - 7 employers. No employee numbers were available.
  - All Other Basic Organic Chemical Manufacturing (NAICS 325199),
    - 18 employers and approximately 286 employees
  - Pharmaceutical and Medical Manufacturing (NAICS 3254 as identified above)
    - 108 employers and approximately 1,273 employees
- Manufacturers with containers falling under paragraph (f)(12)(iii) could expect to obtain cost savings from avoided labeling costs on very small containers (with only the product identifier required) versus the labeling costs of abbreviated labels (requiring the product identifier, pictogram(s), signal word, manufacturer's name and phone number, and a statement that the full label information is provided on the immediate outer packaging). Federal OSHA estimates unit cost savings of $0.058 per label for very small containers.

Amendment 1910.1200(g) - Substantive Change (no potential fiscal impact anticipated)
1910.1200(g)(2) - Safety Data Sheets

- Clarification of requirements for information on SDS. No new requirements for analysis or information. Changes are referenced in Appendix D.
- The revisions to SDS's will not require a fundamental change to how SDS's and labels are prepared therefore, federal OSHA believes that the available software is capable of generating compliant SDS's and labels.
- The revisions to the HCS will not change the existing requirement for firms that sell hazardous chemicals to employers to provide information about the associated hazards. Information must be presented in an SDS in the format specified in the standard, and some information must also be presented on product labels. The final rule will require affected chemical manufacturers to revise SDS's and labels for select hazardous chemicals to reflect chemical reclassifications (Appendix B) and to conform to language criteria in precautionary statements and other mandatory language (Appendices C and D).
- Federal OSHA estimated compliance costs associated with the reclassification of hazards and related changes to SDSs and labels are directly related to the number of chemicals for which electronic files will need to be updated in order to prepare updated SDSs and labels. Federal OSHA estimated the number of directly affected electronic files for SDS's and labels is 50 percent of the overall number of SDS's.
- Federal OSHA expects that downstream users, distributors, and wholesalers would continue to rely on SDSs and labels provided by manufacturers to fulfill their obligations under the OSHA standard and would not incur costs associated with chemical reclassification under the revisions to the HCS.
- Federal OSHA expects that the revisions will also result in some positive economic effects. For example, being better aligned with the GHS will help facilitate international trade, thereby enhancing competition, increasing export opportunities for U.S. businesses, reducing costs for imported products, and generally expanding the selection of chemicals and products available to U.S. businesses and consumers.
- No fiscal impact anticipated.

1910.1200(g)(10)

- Clarification of methods employer may store and maintenance of SDS at the workplace.
- No fiscal impact anticipated.

Amendment 1910.1200(i) – Trade Secrets Clarification of Existing Requirement(s)
Assessment of trade secrets assessment requirements

- Clarification of requirements for trade secrets.
- No fiscal impact anticipated.

Concentration range

- Clarification of known concentration ranges for chemicals with a trade secret
- No fiscal impact anticipated.

Emergency medical care requirements for chemicals with trade secrets

- Clarification of requirements for SDS with trade secrets during an emergency response.
- No fiscal impact anticipated.

Non-emergency medical care requirements for chemicals with trade secrets

- Clarification of requirements for SDS with trade secrets during a non-emergency response.
- No fiscal impact anticipated.

Amendment 1910.1200(j) – Substantive Change

1910.1200(j)(1) Effective Dates

- Clarification of effective dates for proposed rule changes. This section must become effective July 19, 2024
- No fiscal impact anticipated.

1910.1200(j)(2) Substances

- Clarification of effective dates for proposed rule changes. Manufacturers, importers, and distributors, evaluating substances must be in compliance with all modified provisions of this section no later than January 19, 2026. For substances with a newly identified physical hazard, or health hazards or other hazards covered under this section no later than July 20, 2026.
- No fiscal impact anticipated.

1910.1200(j)(3) Mixtures

- Clarification of effective dates for proposed rule changes. Chemical manufacturers, importers, and distributors evaluating mixtures must be in compliance with all modified provisions of this section no later than July 19, 2027. For mixtures with newly identified physical hazards, health hazards, or other hazards covered under this section no later than January 19, 2028.
- No fiscal impact anticipated.

1910.1200(j)(4) Compliance

- Clarification of effective dates for proposed rule changes. Between May 20, 2024, and the dates specified in paragraphs (j)(2) and (3) of this section, as applicable, chemical manufacturers, importers, distributors, and employers may comply with either this section or 29 CFR 1910.1200 revised as of July 1, 2023, or both during the transition period.
- No fiscal impact anticipated.

Proposed Amendments to OAR 437-002-0005
437-002-0005(6) Adoption by Reference

- Adopts by reference the May 20, 2024, Federal Register (Vol. 89, No. 98, pp. 44144-44461.
- No fiscal impact anticipated.

1910.6 Incorporation by Reference
Addition of clarification material for incorporated by reference.

- Revision and redesign of paragraphs including:
  - Addition of updated contact information
  - Renumbering of rules from the addition of new and updated standards
- Adoption of the following standards:
  - ISO 817:2014(E), Refrigerants – Designation and safety classification, Third edition, 2014-04-15; IBR approved for Appendix B to § 1910.1200
  - ISO 10156:1996 (E), Gases and Gas Mixtures—Determination of Fire Potential and Oxidizing Ability for the Selection of Cylinder Valve Outlets, Second Edition, Feb. 15, 1996; IBR approved for Appendix B to § 1910.1200.
  - ISO 10156:2017(E), Gas Cylinders - Gases and gas mixtures - Determination of fire potential and oxidizing ability for the selection of cylinder valve outlets, Fourth edition, 2017-07; IBR approved for Appendix B to § 1910.1200.
  - ISO 10156–2:2005 (E), Gas cylinders—Gases and Gas Mixtures—Part 2: Determination of Oxidizing Ability of Toxic and Corrosive Gases and Gas Mixtures, First Edition, Aug. 1, 2005; IBR approved for Appendix B to subpart Z.
  - ISO 13943:2000 (E/F); Fire Safety—Vocabulary, First Edition, April 15, 2000, IBR approved for Appendix B to § 1910.1200.
  - ADR 2019, European Agreement Concerning the International Carriage of Dangerous Goods by Road; Annex A: General provisions and provisions concerning dangerous substances and articles; (Volumes I and II) including December 2018 corrigendum to Volume II, applicable January 1, 2019; IBR approved for § 1910.1200.
  - ST/SG/AC.10/Rev.4 (“UN ST/SG/AC.10/Rev.4"), The UN Recommendations on the Transport of Dangerous Goods, Manual of Tests and Criteria, Fourth Revised edition, 2003; IBR approved for Appendix B to § 1910.1200.
  - ST/SG/AC.10/11/Rev.6 (“UN ST/SG/AC.10/11/Rev.6"), Recommendations on the Transport of Dangerous Goods: Manual of Tests and Criteria, sixth revised edition, copyright 2015; IBR approved for Appendix B to § 1910.1200.

Proposed Amendments to OAR 437-002-0378

437-002-0378(2)

- Updates the definition of “physical hazard” for consistency with the criteria used for evaluation in 29 CFR 1910.1200.
- No fiscal impact anticipated.

Proposed Amendments to OAR 437-004-0100

OAR 437-004-0100 (1)(n)

- Updates to the definition of “Flammable” to align with 29 CFR 1910.1200 HCS changes.
- No fiscal impact anticipated.

OAR 437-004-0100 (1)(q)

- Updates the definition of “Hazardous Chemical” to align with 29 CFR 1910.1200 HCS changes.
- No fiscal impact anticipated.

Proposed Amendments to OAR 437-004-9800

OAR 437-004-9800(8)

- While there are no changes in this language in this rule, it is noted that there are changes to the language of the trade secrets provisions in 29 CFR 1910.1200(i).
- No fiscal impact anticipated.

OAR 437-004-9800(10)

- This is changed to reflect new federal requirements and effective dates in the 1910.1200 Hazard Communication standard.
- As noted above in 1910.1200(j), no fiscal impact anticipated.

OAR 437-004-9800(11)(y)

- Updates the definition of “hazardous chemical” for consistency with the criteria used for evaluation in 29 CFR 1910.1200.
- No fiscal impact anticipated.

OAR 437-004-9800(11)(nn)

- Updates the definition of “physical hazard” for consistency with the criteria used for evaluation in 1910.1200.
- No fiscal impact anticipated.

OAR 437-004-9800(11)(ss)

Removal of the definition of “pyrophoric gas” for consistency with the criteria used for evaluation in 29 CFR 1910.1200.

- No fiscal impact anticipated.

Note to OAR 437-004-9800(11)(bbb)

- While there are no changes in this language in this rule, it is noted that there are changes to the language of the trade secrets provisions in 29 CFR 1910.1200(i) that are referenced.

- No fiscal impact anticipated.

Proposed Amendments to OAR 437-004-9850
437-004-9850(2)

- Updates the definition of “physical hazard” for consistency with the criteria used for evaluation in 29 CFR 1910.1200.
- No fiscal impact anticipated.

RULES PROPOSED:

437-002-0005, 437-002-0360, 437-002-0378, 437-004-0100, 437-004-9800, 437-004-9850

AMEND: 437-002-0005

RULE SUMMARY: OAR 437-002-0005(6) – Updates the reference to the Federal Register to 5/20/24, FR vol.89, no. 98, pp. 44144-44461 that adopted changes to the 1910.6 Incorporation by reference federal standard.

CHANGES TO RULE:

437-002-0005
Adoption by Reference ¶

In addition to, and not in lieu of, any other safety and health codes contained in OAR Chapter 437, the Department adopts by reference the following federal regulations printed as part of the Code of Federal Regulations, 29 CFR 1910, in the Federal Register:¶
(1) 29 CFR 1910.1, Purpose and scope; published 6/27/74, Federal Register, vol. 39, no. 125, p. 23503.¶
(2) 29 CFR 1910.2, Definitions; published 6/27/74, Federal Register, vol. 39, no. 125, p. 23503.¶
(3) 29 CFR 1910.3, Petitions for the issuance, amendment, or repeal of a standard; published 6/27/74, Federal Register, vol. 39, no. 125, p. 23503.¶
(4) 29 CFR 1910.4, Amendments to this part; published 6/27/74, Federal Register, vol. 39, no. 125, p. 23503.¶
(5) 29 CFR 1910.5, Applicability of standards, published 2/18/20, FR vol. 85, no. 32, p. 8726-8746.¶
(6) 29 CFR 1910.6, Incorporation by reference; published 5/~~14/19~~20/24, FR vol.~~84~~89, no. 9~~3~~8, pp. ~~21416~~44144-44461.¶
(7) 29 CFR 1910.7, Definition and requirements for a Nationally Recognized Testing Laboratory, published 2/18/20, FR vol. 85, no. 32, p. 8726-8746.¶
(8) 29 CFR 1910.9, Compliance duties owed to each employee; published 12/12/08, Federal Register, vol. 73, no. 240, pp. 75568-75589.¶
These standards are on file at the Oregon Occupational Safety and Health Division, Oregon Department of Consumer and Business Services, and the United States Government Printing Office.
Statutory/Other Authority: ORS 654.025(2), 656.726(4)
Statutes/Other Implemented: ORS 654.001 - 654.295

AMEND: 437-002-0360

RULE SUMMARY: OAR 437-002-0360(36) – Updates the reference to the Federal Register of 5/20/24, FR vol.89, no. 98, pp. 44144-44461 that adopted changes to the 1910.1200 Hazard Communication federal standard.

CHANGES TO RULE:

437-002-0360
Adoption by Reference ¶

In addition to, and not in lieu of, any other safety and health codes contained in OAR Chapter 437, the Department adopts by reference the following federal regulations printed as part of the Code of Federal Regulations, 29 CFR 1910, in the Federal Register:¶
(1) (Reserved) 29 CFR 1910.1000 Air contaminants.¶
Note: 29 CFR 1910.1000 was repealed on 11/15/93 by OR OSHA. In Oregon, OAR 437-002-0382 applies.¶
(2) 29 CFR 1910.1001 Asbestos, published 5/14/19, FR vol. 84, no. 93, p. 21416.¶
(3) 29 CFR 1910.1002 Coal tar pitch volatiles, interpretation of term, published 1/21/83, Federal Register, vol. 43, p. 2768.¶
(4) 29 CFR 1910.1003 13 Carcinogens, published 3/26/12, FR vol. 77, no. 58, p. 17574.¶
(5) 29 CFR 1910.1004 See 1910.1003, 13 Carcinogens.¶
(6) Reserved for 29 CFR 1910.1005.¶
(7) 29 CFR 1910.1006 See 1910.1003, 13 Carcinogens.¶
(8) 29 CFR 1910.1007 See 1910.1003, 13 Carcinogens.¶
(9) 29 CFR 1910.1008 See 1910.1003, 13 Carcinogens.¶
(10) 29 CFR 1910.1009 See 1910.1003, 13 Carcinogens.¶
(11) 29 CFR 1910.1010 See 1910.1003, 13 Carcinogens.¶
(12) 29 CFR 1910.1011 See 1910.1003, 13 Carcinogens.¶
(13) 29 CFR 1910.1012 See 1910.1003, 13 Carcinogens.¶
(14) 29 CFR 1910.1013 See 1910.1003, 13 Carcinogens.¶
(15) 29 CFR 1910.1014 See 1910.1003, 13 Carcinogens.¶
(16) 29 CFR 1910.1015 See 1910.1003, 13 Carcinogens.¶
(17) 29 CFR 1910.1016 See 1910.1003, 13 Carcinogens.¶
(18) 29 CFR 1910.1017 Vinyl chloride, published 5/14/19, FR vol. 84, no. 93, p. 21416.¶
(19) 29 CFR 1910.1018 Inorganic arsenic, published 5/14/19, FR vol. 84, no. 93, p. 21416.¶
(20) 29 CFR 1910.1020 Access to Employee Exposure and Medical Records, published 6/8/11, Federal Register, vol. 76, no. 110, p. 33590.¶
Appendix A: Sample Authorization Letter.¶
Appendix B: Availability of NIOSH RTECS.¶
(21) 29 CFR 1910.1025 Lead, published 5/14/19, FR vol. 84, no. 93, p. 21416.¶
(22) 29 CFR 1910.1026 Chromium (VI), published 5/14/19, FR vol. 84, no. 93, p. 21416.¶
(23) 29 CFR 1910.1027 Cadmium, published 2/18/20, FR vol. 85, no. 32, p. 8726-8746.¶
(24) 29 CFR 1910.1028 Benzene, and Appendices A, B, C, D, and E, published 5/14/19, FR vol. 84, no. 93, p. 21416.¶
(25) 29 CFR 1910.1029 Coke oven emissions, published 5/14/19, FR vol. 84, no. 93, p. 21416.¶
(26) 29 CFR 1910.1030 Bloodborne pathogens, published 5/14/19, FR vol. 84, no. 93, p. 21416.¶
(27) 29 CFR 1910.1043 Cotton dust, published 5/14/19, FR vol. 84, no. 93, p. 21416.¶
(28) 29 CFR 1910.1044 1,2 dibromo-3 chloropropane, published 5/14/19, FR vol. 84, no. 93, p. 21416.¶
(29) 29 CFR 1910.1045 Acrylonitrile, published 5/14/19, FR vol. 84, no. 93, p. 21416.¶
(30) 29 CFR 1910.1047 Ethylene oxide, published 5/14/19, FR vol. 84, no. 93, p. 21416.¶
(31) 29 CFR 1910.1048 Formaldehyde, and Appendices A, B, C, D and E, published 5/14/19, FR vol. 84, no. 93, p. 21416.¶
(32) 29 CFR 1910.1050 Methylenedianiline (MDA), published 5/14/19, FR vol. 84, no. 93, p. 21416.¶
(33) 29 CFR 1910.1051 1,3-Butadiene, published 5/14/19, FR vol. 84, no. 93, p. 21416.¶
(34) 29 CFR 1910.1052 Methylene Chloride, published 5/14/19, FR vol. 84, no. 93, p. 21416.¶
Note: 29 CFR 1910.1101 Asbestos, was repealed by Federal Register, vol. 57, no. 110, issued 6/8/92, p. 24330.¶
(35) 29 CFR 1910.1096 Ionizing radiation, published 6/20/96, FR vol. 61, no. 46, p. 31427.¶
(36) 29 CFR 1910.1200 Hazard communication, published ~~2/8/13~~5/20/24, FR vol. ~~78~~9, no. ~~27~~98, p. ~~931~~44144-4446~~1~~.¶
(37) 29 CFR 1910.1201 Retention of DOT Markings, Placards and Labels, published 7/19/94, Federal Register, vol. 59, p. 36700.¶

(38) 29 CFR 1910.1450 Occupational Exposure to Hazardous Chemicals in Laboratories, published 1/22/13, FR vol. 78, no. 14, p. 4324.¶
(39) 29 CFR 1910.1499 Removed. Published 3/7/96, Federal Register, vol. 61, no. 46, p. 9245.¶
(40) 29 CFR 1910.1500 Removed. Published 3/7/96, Federal Register, vol. 61, no. 46, p. 9245.¶
These standards are available at the Oregon Occupational Safety and Health Division, Oregon Department of Consumer and Business Services, and the United States Government Printing Office.
Statutory/Other Authority: ORS 654.025(2), 656.726(4)
Statutes/Other Implemented: ORS 654.001 - 654.295

AMEND: 437-002-0378

RULE SUMMARY: OAR 437-002-0378 – Throughout the rule and in the title, the spelling of 'labelling" is corrected to "labeling" to align with the spelling in 1910.1200. Added outlining to (2) Definitions to create (a) through (e). In (2)(c) Definitions, updates the definition of "Physical Hazard" to align with federal OSHA changes in the 1910.1200 Hazard Communication standard. In (4)(b) there is an outlining change; no change in content but deletes (A) and folds that language into (b) to conform with Secretary of State outlining standards. At the end of the rule "NOTE" is changed to "Note."

CHANGES TO RULE:

437-002-0378
Oregon Rules for Pipe Label~~l~~ing ¶

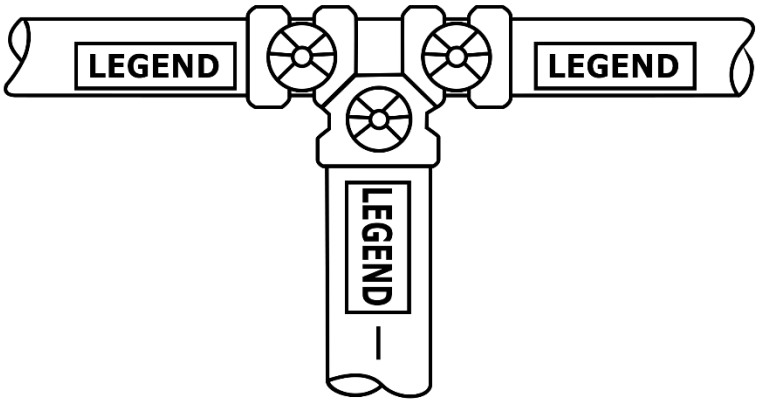
(1) Scope and Application. This division shall apply to all piping systems containing hazardous substances or that use asbestos as a pipe insulation material in buildings, structures and workplaces. This division does not apply to buried piping.¶
(2) Definitions.~~¶~~
¶
(a) Hazardous substances: any substance which is a physical or health hazard.~~¶~~
¶
(b) Health ~~H~~hazard: A chemical which is classified as posing one of the following hazardous effects: acute toxicity (any route of exposure); skin corrosion or irritation; serious eye damage or eye irritation; respiratory or skin sensitization; germ cell mutagenicity; carcinogenicity; reproductive toxicity; specific target organ toxicity (single or repeated exposure); or aspiration hazard. The criteria for determining whether a chemical is classified as a health hazard are detailed in Appendix A to 1910.1200 - Health Hazard Criteria.~~¶~~
¶
(c) Physical ~~H~~hazard: A chemical that is classified as posing one of the following hazardous effects: explosive; flammable (gases, ~~aerosols,~~ liquids, or solids); aerosols; oxidizer (gases, liquid~~,~~s, or solid ~~or gas~~); self-reactive; pyrophoric (liquid or solid); self-heating; organic peroxide; corrosive to metal; gas under pressure; ~~or~~ in contact with water emits flammable gas~~. See Appendix B to 1910.1200 - Physical Hazard Criteria.¶~~
; or desensitized explosive. The criteria for determining whether a chemical is classified as a physical hazard are detailed in Appendix B - Physical Hazard Criteria (Mandatory) to 1910.1200.¶
(d) Piping system: includes pipes, single or multiple, of any kind and, in addition, valves and pipe coverings.~~¶~~
¶
(e) Pipes: conduits for the transport of gases, liquids, semiliquids or fine particulate dusts.¶
(3) Purpose. The purpose of this division is to prescribe minimum label~~l~~ing requirements for all piping systems which contain hazardous substances, transport substances in a hazardous state, or which use asbestos as a pipe insulation material.¶
(4) Label~~l~~ing.¶
(a) Pipes and piping systems which contain hazardous substances or transport substances in a hazardous state shall be label~~l~~ed in accordance with subsections (A), (B), (C) and (D) or other- wise identified in accordance with subsection (c) of this rule:¶
(A) Positive identification of the hazardous contents of a piping system shall be by lettered labels. The label shall give the name of the contents in full or abbreviated form.¶
(B) Contents shall be identified by label~~l~~ing with sufficient detail to identify the hazard.¶
(C) Label wording shall be brief, informative and simple.¶
(D) Label~~l~~ing shall be accomplished by stencilling, the use of tape, adhesives, markers or approved alternative means.¶
(b) Pipes or piping systems which use asbestos as a pipe insulation material shall be label~~l~~ed in accordance with ~~subsection (b)(A)~~the following language, or otherwise identified in accordance with subsection (c) below:~~¶~~
~~(A).~~ The label for pipe insulation containing asbestos shall include the following:~~¶~~
DANGER~~¶~~
CONTAINS ASBESTOS FIBERS~~¶~~
MAY CAUSE CANCER~~¶~~
CAUSES DAMAGE TO LUNGS~~¶~~
DO NOT BREATHE DUST~~¶~~
AVOID CREATING DUST¶

(c) The employer may use signs, placards, process sheets, batch tickets, operating procedures, or other such written materials in lieu of affixing labels to individual pipes, as long as the alternative method identifies the pipe(s) to which it is applicable and conveys the information required by this rule. The written materials shall be readily accessible to the employees in their work areas during each shift. (OAR 437, Division 2/Z, Hazard Communication, 1910.1200.)¶
(5) Location of Labelling.¶
(a) Labelling shall be applied where confusion may occur, such as close to valves or flanges and adjacent to changes in direction, branches and where pipes pass through walls, floors or ceilings.¶
(b) Labelling shall be applied, at a minimum, at the beginning and end of continuous pipe runs.¶
(c) For asbestos insulation, labelling shall be at a minimum, on unobstructed continuous pipe runs, every 75 feet.
Illustration: 1.¶
[Insert Illustration 1]¶
(6) Visibility.¶
(a) Where pipes are located above or below the normal line of vision, the lettering shall be placed below or above the horizontal centerline of the pipe.¶
(b) Where pipes are inaccessible and/or at a distance which precludes clear identification of the letters on labelling, alternatives to the labelling which meet all other requirements of this rule may be used (i.e., schematics posted on walls in work areas). Appendix.¶
NOTE A for Pipe Labeling (Non-Mandatory).¶
Note: Former division 153, Pipe Labelling, has been redesignated, renumbered, and amended as Oregon-initiated Rule 437-002-0378, to continue coverage not provided in federal standards.¶
[Insert Appendix A for Pipe Labeling (Non-Mandatory)]
Statutory/Other Authority: ORS 654.025(2), 656.726(4)
Statutes/Other Implemented: ORS 654.001 - 654.295

OAR 437-002-0378 Illustration and Appendix

Filing Attachment for Proposed Rule - 9/23/24

Illustration 1 Location of Labeling



Appendix A for Pipe Label[ł]ing (Non-Mandatory)

Table 1
Classification of Hazards of Materials and Suggestions of Colors

Classification	Color Field**	Color of Letters For Legends
Materials Inherently Dangerous		
Flammable or Explosive	Yellow	Black
Chemically Active or Toxic	Yellow	Black
Extreme Temperatures or Pressures	Yellow	Black
Radioactive	Yellow	Magenta
Materials of Inherently Low Hazard		
Liquid or Liquid Admixture	Green	White
Gas or Gaseous Admixture	Blue	White

** Alternatives to the colors suggested by Table 1 may be acceptable if they meet all other requirements of this appendix and are used consistently on all pipes in a given location.

(1) Color may be displayed on the piping by any physical means, but when it is used it shall be in combination with labels.
(2) Color may be used in continuous, total length, or in intermittent displays.

Types and Sizes of Letters
(1) Contrast shall be provided between color field and letters for readability.
(2) Use of letters of block lettering in sizes 1/2 inch (13 mm) and larger, is recommended. (Table 2)

Table 2
Types and Styles of Letters

Outside Diameter of Pipe or Covering		**Length of Color Field**		**Size of Letters**	
in.	**mm.**	**in.**	**mm.**	**in.**	**mm.**
3/4 to 1-1/4	19 to 32	8	200	1/2	13
1-1/2 to 2	38 to 51	8	200	3/4	19
2-1/2 to 6	64 to 150	12	300	1-1/4	32
8 to 10	200 to 250	24	600	2-1/2	64
over 10	over 250	32	800	3-1/2	89

(3) For identification of materials in pipes less than 3/4 inch (19 mm.) in diameter, and for value and fitting identification, the use of a legible tag is recommended.

Stat. Auth: ORS 654.025(2) and 656.726(4).
Stats. Implemented: ORS 654.001 through 654.295.
Hist: WCD Admin. Order, Safety 8-1986, f. 9/4/86, ef. 10/1/87.
OR-OSHA Admin. Order 12-1993, f. 8/20/93, ef. 11/1/93.
OR-OSHA Admin. Order 5-2012, f. 9/25/12, ef. 9/25/12.
OR-OSHA Admin. Order X-XXXX, f. XX/XX/XXXX, ef. XX/XX/XXXX

AMEND: 437-004-0100

RULE SUMMARY: OAR 437-004-0100 – In (1)(n), updates the definition of “Flammable”; and, in (1)(q) updates the definition of “Hazardous Chemical” to align with federal OSHA changes in the 1910.1200 Hazard Communication standard. “NOTE” is changed to “Note” throughout.

CHANGES TO RULE:

437-004-0100
Universal Definitions ¶

(1) These definitions apply throughout Division 4, Agriculture, except that the definitions in Subdivision 4/W, adopted from 40 CFR 170, Worker Protection Standard, apply to the rules within that Subdivision.¶
(a) Accepted - Something is accepted if:¶
(A) A nationally recognized testing laboratory has inspected it and found it to conform to specified plans or to procedures of applicable codes; or¶
(B) It is verified by design, evaluation, or inspection by a registered professional engineer; or¶
(C) It is acknowledged by the authority having jurisdiction, the agency, office, or organization that is responsible for approving specific equipment, materials, installations, or procedures. (Examples of such authorities include the U.S. Department of Transportation, the U.S. Coast Guard, the Oregon Building Codes Division, and the Office of the State Fire Marshal.)¶
(b) Agricultural employer - means any person, corporation, association, or other legal entity who meets the definition of an employer in ORS 654.005(5) and who:¶
(A) Owns or operates an agricultural establishment; or¶
(B) Recruits and supervises employees who work for an agricultural establishment; or¶
(C) Is responsible for the management or condition of, or exercises direction and control over the production on, an agricultural establishment.¶
(c) Agricultural establishment - means a farm, ranch, nursery, greenhouse, or production facility that is a place of employment and is engaged in the activities described in Division 4/A, 437-004-0002 Scope.¶
(d) Approved - means acceptable for the purposes of rule compliance, under the following criteria:¶
(A) It is accepted, or certified, or listed, or labeled or otherwise determined to be safe by a nationally recognized testing laboratory; or¶
(B) If an installation or equipment is of a kind which no nationally recognized testing laboratory accepts, certifies, lists, labels, or determines to be safe, it has been inspected or tested by another authority having jurisdiction and found to be in compliance with the provisions of the applicable code; or¶
(C) Custom-made equipment or related installations that are designed and fabricated for a certain intended use by its manufacturer. The employer must keep and make available the test data that is used as the basis of this approval, for inspection.)¶
(e) Boiling point - The temperature at which the liquid form of a substance changes into a vapor, at a standard atmospheric pressure. The initial boiling point of a substance is determined according to test methods specified in Appendix B to Division 2/Z, 1910.1200, Hazard Communication Standard.¶
(f) CAS - is the Chemical Abstracts Service Registry Number, a unique numerical identifier assigned by the Chemical Abstracts Service to every chemical described in the open scientific literature.¶
(g) Capacity - is the maximum load or severity of service (determined by the manufacturer or a qualified engineer) that a tool, machine, equipment, structure, or material is expected to withstand without failure, deformation, separation or fracture.¶
(h) Certified - is something that:¶
(A) Was tested and found by a nationally recognized testing laboratory to meet recognized standards or to be safe for use in a specified manner, or¶
(B) Is of a kind whose production is periodically inspected by a nationally recognized testing laboratory, and¶
(C) Shows a label, tag, or other record of certification.¶
(i) Combustible - A substance or material that is able or likely to catch fire and burn.¶
(j) Combustible liquid - The "combustible liquid" classification is no longer used in Division 4 rules because it was eliminated by the globally harmonized classification and labeling system (GHS) adopted in OSHA's Hazard Communication Standard. Any liquid with a flash point of 199.4□F (93 degrees C.) or less is considered to be one of the four categories of flammable liquids. (See "Flammable liquids," below.)¶
N~~OTE~~ote: The term "combustible liquid" is still used by the National Fire Protection Association (NFPA) system of classification and by the Oregon State Fire Marshal to classify liquids that will burn but do not ignite as easily as flammable liquids. The NFPA system defines some chemicals as "combustible liquids" that would be included as a

category of "flammable liquid" in the OSHA/GHS classification system. (See Appendix A to Subdivision 4/H, 437-004-0720 Flammable Liquids, for a comparison of the GHS and NFPA systems of classification of flammable/combustible liquids.)¶
(k) Competent person - is a person who, because of training and experience, can identify existing and predictable hazards in equipment, material, conditions or practices; and, who has the knowledge and authority to take corrective steps.¶
(l) Explosive - something capable of causing damage to the surroundings by chemical reaction. Explosives are defined in Appendix B to 1910.1200 - Physical Hazard Criteria at B.1 EXPLOSIVES.¶
(m) Farming - Is the production of agricultural field crops, tree crops; horticultural specialties, greenhouse crops; and the production of livestock and animal specialties. Farming includes farm labor and management services; agricultural services and support activities (such as soil preparation; crop cultivation, protection, and harvesting;) and, the basic preparation of the crop or commodity for market. The farming production process is typically completed at the "farm gate" - that is, at the point of first sale or price determination.¶
N~~OTE~~ote: Throughout this division, the term "farming," "agriculture," "production agriculture," and "agricultural operations" are synonymous.¶
(n) Flammable - Capable of being easily ignited, burning intensely, or having a rapid rate of flame spread. Flammable substances are defined in Appendix B to 1910.1200 - Physical Hazard Criteria at B.2 FLAMMABLE GASES, B.3 FLAMMABLE AEROSOLS AND CHEMICALS UNDER PRESSURE, B.6 FLAMMABLE LIQUIDS, and B.7 FLAMMABLE SOLIDS.¶
(o) Flammable liquids - are liquids having a flash point at or below 199.4 degrees F. (93 degrees C.) As defined in the globally harmonized system of classification and labeling (GHS) adopted in OSHA's Hazard Communication Standard, flammable liquids are divided into four categories as follows:¶
(A) Category 1 includes liquids that have a flashpoint below 73.4 degrees F. (23 degrees C.) and have a boiling point at or below 95 degrees F. (35 degrees C.)¶
(B) Category 2 includes liquids that have a flashpoint below 73.4 degrees F. (23 degrees C.) and have a boiling point above 95 degrees F. (35 degrees C.)¶
(C) Category 3 includes liquids that have a flashpoint in a temperature range from at or above 73.4 degrees F. (23 degrees C.) to at or below 140 degrees F. (60 degrees C.)¶
(D) Category 4 includes liquids that have a flashpoint in a temperature range from above 140 degrees F. (60 degrees C.) to at or below 199.4 degrees F. (93 degrees C.)¶
N~~OTE~~ote: Examples of some common flammable liquids are:¶
Category 1: Diethyl ether (solvent sometimes used in starting fluid).¶
Category 2: Gasoline (Benzene, Ethanol).¶
Category 3: Kerosene, Stoddard Solvent.¶
Category 4: Diesel fuel, Naphthalene.¶
(p) Flashpoint - is the minimum temperature at which a liquid gives off vapor within a test vessel in sufficient concentration to form an ignitable mixture with air near the surface of the liquid, as determined by specific testing methods. These test methods are specified in Appendix B to Division 2/Z, 1910.1200, Hazard Communication Standard.¶
(q) Hazardous Chemical - is any chemical which is classified, under the requirements of the Hazard Communication Standard, as a physical hazard or a health hazard, a simple asphyxiant, combustible dust, ~~pyrophoric gas,~~ or hazard not otherwise classified.¶
N~~OTE~~ote: See Division 2/Z, 1910.1200 Hazard Communication Standard, for more information.¶
(r) Ignition source - the origin of something that results in a fire or an explosion. Examples include open flames; smoking; cutting and welding; hot surfaces and radiant heat; frictional heat; static, electrical, and mechanical sparks; chemical and physical-chemical reactions; spontaneous ignition; and lightning.¶
(s) Labeled - Something is labeled if:¶
(A) It has an attached label, symbol, or other identifying mark of a nationally recognized testing laboratory that makes periodic inspections of the production of such equipment; or¶
(B) The attached information indicates compliance with nationally recognized standards or tests to determine safe use in a specified manner.¶
(t) Listed - is something mentioned in a list that:¶
(A) Is published by a nationally recognized laboratory that makes periodic inspection of the production of such equipment, and¶
(B) States such equipment meets nationally recognized standards or was tested and found safe for use in a specified manner.¶
(u) Nationally Recognized Testing Laboratory - (NRTL) is defined in 1910.7 Definition and Requirements for a Nationally Recognized Testing Laboratory and OAR 437-002-0007 Oregon Rule on Testing and Certification Program. (Examples of organizations in this category are Factory Mutual Engineering Corporation, and

Underwriters' Laboratories.)¶
(v) Place of employment - is every place (fixed, movable or moving) where an employee works or is intended to work. It includes every place where (either temporarily or permanently) there is any activity related to an employer's business, including a labor camp.¶
N~~OTE~~ote: "Place of employment" does not include a place where the only employment involves nonsubject workers employed in or about a private home; or a farm where only the farm's family members are employed.¶
(w) Qualified person - is a person who has a recognized degree, certification, professional standing, knowledge, training or experience; and has successfully demonstrated the ability to perform the work, or solve or resolve problems relating to the work, subject matter, or project.¶
(x) Reasonable means - is what a prudent person, familiar with the circumstances of the industry would do to work in a safe and healthful manner.¶
(y) Safeguard - is any form of safety device or equipment; personal protective equipment; guard or barricade; warning device, sign, or method; or a process prescribed or adopted for the protection of an employee.¶
(z) Substantial - means constructed with sufficient strength or installed to provide ample support to withstand loads to which the structure or device may be subjected.¶
(aa) Worker - is identical in every respect to "employee" as defined in ORS 654.005(4) including:¶
(A) Any individual, including a minor, whether lawfully or unlawfully employed, who engages to furnish services for a remuneration, financial or otherwise, subject to the direction and control of an employer; and¶
(B) Any individual who is provided with workers' compensation coverage as a subject worker pursuant to ORS chapter 656, whether by operation of law or by election.¶
(bb) Workplace - See "Place of Employment," above.¶
(2) Reserved.
Statutory/Other Authority: ORS 654.025(2), 656.726(~~3~~4)
Statutes/Other Implemented: ORS 654.001 - 654.295

AMEND: 437-004-9800

RULE SUMMARY: OAR 437-004-9800 – (10) is changed to reflect new federal requirements and effective dates in the 1910.1200 Hazard Communication standard. (11)(y) definition of “Hazardous chemical,” is modified; (11)(nn) definition of “physical hazard” is updated; and (11)(ss) Pyrophoric gas is removed, as a result the outlining is updated in the remainder of the rule after (ss). “NOTE” is changed to “Note” throughout.

CHANGES TO RULE:

437-004-9800
Hazard Communication Standard for Agricultural Employers ¶

N~~OTES~~otes: The Division 4, Hazard Communication Standard for Agricultural Employers (OAR 437-004-9800), focuses on those parts of the General Industry Hazard Communication Standard (Division 2/Z, 1910.1200) that describe the employer's responsibility to establish a workplace program and to communicate information to workers about the hazards of the chemicals used in their workplace. The Division 4 standard does not include the parts of the Division 2, Hazard Communication Standard that apply only to producers, distributors, and importers of chemicals because these are not typical activities for agricultural employers. As stated in 437-004-9800(2) Scope and application, any agricultural employer who produces, imports, or distributes chemical products must follow the more detailed rules that apply to those general industry activities in Division 2/Z, 1910.1200. The requirements of this Division 4, Hazard Communication Standard, are intended to be consistent with the Hazard Communication Standard for general industry as aligned with the provisions of the United Nations Globally Harmonized System of Classification and Labeling of Chemicals (GHS.)¶
(1) Purpose. The purpose of this Division 4 Hazard Communication Standard (HCS) is to ensure that agricultural employers provide appropriate information to their employees about the hazardous chemicals to which they can be exposed at their workplaces. The responsibility of chemical manufacturers, importers, and distributors to provide this information is described in Division 2/Z, 1910.1200. The HCS for agricultural employers describes how this information is to be provided: through a comprehensive hazard communication program, including container labels and other forms of warning, safety data sheets and employee training.¶
(2) Scope and application.¶
(a) This standard applies to agricultural employers when a hazardous chemical is known to be present in the workplace in a way that employees may be exposed under normal conditions of use or in a foreseeable emergency.¶
(b) This standard also applies to agricultural employers engaged in crop- or product-related quality control- or quality assurance-type laboratory work.¶
N~~OTE~~ote: See Division 4/Z, 437-004-9860, Hazardous Chemicals in Laboratories, for rules that apply to other types of laboratory activities.¶
(c) Division 2/Z, 1910.1200, the Hazard Communication Standard for General Industry, including all mandatory appendices, applies to any agricultural employer who is a producer, importer, or distributor of hazardous chemicals, as those activities are defined in this standard.¶
(d) The following types of hazardous substances are exempted from the requirements of this standard, under the stated conditions or circumstances:¶
(A) Any hazardous waste defined by the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act of 1976, as amended (42 U.S.C. 6901 et seq.), when subject to regulations issued under that Act by the Environmental Protection Agency;¶
(B) Any hazardous substance as such term is defined by the Comprehensive Environmental Response, Compensation and Liability ACT (CERCLA) (42 U.S.C. 9601 et seq.), when the hazardous substance is the focus of remedial or removal action being conducted under CERCLA (such as a "Superfund" site) in accordance with Environmental Protection Agency regulations;¶
(C) Tobacco or tobacco products;¶
(D) Wood or wood products, including lumber if it will not be processed, where the manufacturer or importer has established that the only hazard posed to employees is the potential for combustibility;¶
N~~OTE~~ote: Wood and wood products that are treated with a hazardous chemical covered by this standard (such as chemically pressure-treated wood); and wood that will later be sawed, cut or sanded, generating dust, is covered by this standard.¶
(E) Articles as defined in OAR 437-004-9800(11);¶
(F) Food or alcoholic beverages sold, used, or prepared in a retail establishment (such as a grocery store, restaurant, or drinking place), and foods intended for personal consumption by employees while at work;¶
(G) Any drug, defined in the Federal Food, Drug, and Cosmetic Act (21 U.S.C. 301 et seq.), when it is in solid, final

form for direct administration to the patient (e.g., tablets or pills); drugs packaged by the chemical manufacturer for sale to consumers in a retail establishment (e.g., over-the-counter drugs); and drugs intended for personal consumption by employees while at work (e.g., first aid supplies);¶
(H) Cosmetics which are packaged for sale to consumers or intended for personal consumption by employees while in the workplace;¶
(I) Any consumer product or hazardous substance, defined in the Consumer Product Safety Act (15 U.S.C. 2051 et seq.) and Federal Hazardous Substances Act (15 U.S.C. 1261 et seq.) respectively, where the employer can show that it is used in the workplace for the purpose intended by the chemical manufacturer or importer of the product, and the use results in a duration and frequency of exposure not more than the range of exposures that could reasonably be experienced by consumers;¶
(J) Nuisance particulates where the chemical manufacturer or importer has established that they do not pose any physical or health hazard covered under this standard;¶
N~~OTE~~ote: Nuisance particulate is synonymous with "particulate not otherwise regulated" (PNOR.) PNOR includes all inert or nuisance dusts, whether mineral, inorganic, or organic, that are not specifically listed in Division 4/Z, OAR 437-004-9000, Oregon Rules for Air Contaminants.¶
(K) Ionizing and non-ionizing radiation; and,¶
(L) Biological hazards.¶
N~~OTES~~otes: In addition to these exempted hazardous substances, the general industry Hazard Communication Standard [at 1910.1200(b)(5)] lists additional types of hazardous chemicals whose manufacturers are not covered by the Hazard Communication labeling requirements, because the products are already regulated by other labeling regulations. (For example, labeling of consumer products is regulated by the Consumer Product Safety Commission; and labeling of pesticide products is regulated by the Environmental Protection Agency.) Nonetheless, employers must ensure that hazardous chemicals are properly identified in their workplaces, as described in 437-004-9800(5).¶
(3) Reserved.¶
(4) Written hazard communication program.¶
(a) Employers must develop, implement, and maintain an effective written hazard communication program that is specific to their workplace. It must include the following:¶
(A) A list of all the hazardous chemicals in the workplace using a product identifier that allows cross-referencing to both the product label and a Safety Data Sheet. (Lists may be developed for individual work areas, but the program-required list must include all hazardous chemicals present in the workplace to which the written hazard communication program applies.)¶
(B) A description of their procedures or methods for meeting the requirements of this Hazard Communication Standard for Agricultural Employers including paragraphs (5) Labels and other forms of warning, (6) Safety data sheets, and (7) Employee information and training.¶
(C) A description of the methods for informing their employees about the hazards of nonroutine tasks and the hazards associated with chemicals contained in any unlabeled pipes in their work areas.¶
(b) At multi-employer workplaces, employers who use or store hazardous chemicals in a way that may expose other employer's workers must also ensure that their hazard communication program includes their methods for:¶
(A) Making safety data sheets available to the workers of other employers;¶
(B) Informing other employer(s) of any precautionary measures needed for the other employer to protect their employees during normal operating conditions and foreseeable emergencies;¶
(C) Informing other employer(s) about the labeling system and other forms of warning in use. This includes how the employer will notify other employer(s) about areas where pesticides will be or are being applied and areas under a Restricted Entry Interval.¶
(c) Upon request, the employer must make their written hazard communication program available to employees, the employee's designated representatives, and the Administrator.¶
N~~OTE~~ote: Where employees work at more than one workplace, the written hazard communication program may be kept at the primary workplace as long as the information is made available for routine reference during the employee's regular shift and is readily available in an emergency.¶
(5) Labels and other forms of warning.¶
N~~OTE~~ote: Chemical producers, importers, and distributors have responsibilities for labeling products that are shipped and for providing those labels to end-users.¶
(a) Workplace labeling. The employer must ensure that the primary (shipped) labels are legible, in English, and prominently displayed on the container in the work area. Employers with employees who communicate in languages other than English may include information in the other languages, as long as it is also in English.¶
(b) Except as provided in (5)(d), (5)(e), and (5)(f), the employer must ensure that each container of hazardous chemicals is labeled, tagged or marked with either:¶

(A) The same elements required on the shipped label:¶
(i) Product identifier,¶
(ii) Signal word,¶
(iii) Hazard statement(s),¶
(iv) Pictogram(s),¶
(v) Precautionary statement(s), and¶
(vi) Name, address, and telephone number of the chemical manufacturer, importer, or other responsible party; OR¶
(B) The product identifier (that allows cross-referencing with the product's safety data sheet), and¶
(i) Words, pictures, symbols, or a combination that provide at least general information about the hazards of the chemical;¶
(ii) This alternative in conjunction with the other information readily available to employees under the employer's hazard communication program, must provide employees with specific information about the hazards of the chemical and appropriate protective measures.¶
(c) If an employer becomes aware of new information from an up-dated, product label about the hazards of a chemical, or ways to protect against the hazards, affected employees must be trained on this new information before the chemical is used again in the workplace.¶
(d) The employer may use signs, placards, or other written materials instead of labels on individual, stationary process containers. This alternative method must identify the specific container, meet the requirements in (5)(a) and (b) and be readily accessible to the employees in their work area.¶
(e) Labels are not required on portable, secondary containers of hazardous chemicals that are for immediate use.¶
(f) Pesticide application equipment (such as spray tanks and backpack-type sprayers) do not require labeling if the pesticide handlers have access to the pesticide product label during handling activities.¶
(6) Safety data sheets.¶
(a) Employers must have a safety data sheet (SDS) for each hazardous chemical that is used or present in the workplace in a way that may expose employees under normal conditions of use or in a foreseeable emergency. This includes residual pesticides encountered by workers doing field hand-labor operations.¶
(b) SDSs must be readily accessible to all employees on all shifts. Where employees work at more than one workplace, the SDSs may be kept at the primary workplace.¶
(c) SDSs may be kept electronically if they are readily accessible to employees during their work shifts and available at all times, especially during an emergency such as a power failure.¶
(d) SDSs must be in English. Employers with employees who communicate in other languages may maintain copies of SDSs in other languages as well.¶
(e) Where complex mixtures of chemical products have similar hazards and contents (for example, the chemical ingredients are the same, but the specific composition varies from mixture to mixture), the employer may use one SDS to apply to all of these essentially similar mixtures. The product identifier of each mixture, as identified on the product label, must be cross-referenced to the SDS used.¶
(f) If an employer becomes aware of new information from an up-dated SDS about the hazards of a chemical or about ways to protect employees from the hazards, affected employees must be trained on this new information before the chemical is used again in the workplace.¶
(g) Safety data sheets as employee exposure records. In accordance with Division 4/A, OAR 437-004-0005, Access to Employee Medical and Exposure Records, employers must retain either the SDS or some record of the identity of the substance or agent, where it was used, and when it was used; and, make this record available upon request to employees, employee's designated representatives, and to the Administrator.¶
N~~OTE~~ote: OAR 437-004-0005 refers employers to Division 2/Z 1910.1020. For more information about this requirement, see 1910.1020(d)(1)(ii)(B).¶
(7) Employee information and training.¶
(a) Give employees effective information and training on hazardous chemicals in their work area at the time of their initial assignment, and when a new physical or health hazard is introduced into their work area. Information and training may cover categories of hazards (examples include flammable liquids and pesticides) or specific chemicals.¶
(A) Chemical-specific information must always be available through labels and safety data sheets. Agricultural employees who mix, load, or apply pesticides; or otherwise handle hazardous chemicals must receive the full information and training required by this standard.¶
(B) If employees only handle chemicals in sealed, unopened containers, give them training to the extent necessary to protect them in the event of a spill or leak of a hazardous chemical from a sealed container.¶
(b) Inform employees of:¶
(A) The requirements of this training paragraph;¶
(B) Any operations in their work area where hazardous chemicals are present; and,¶

(C) The location and availability of the written hazard communication program, including the required list(s) of hazardous chemicals, and safety data sheets.¶
(c) Employee training must include at least:¶
(A) Methods and observations to detect the presence or release of a hazardous chemical in the work area (such as monitoring done by the employer, alarm systems, or characteristic odors;)¶
(B) The physical and health hazards of the chemicals in the work area;¶
(C) The measures employees can take to protect themselves from these hazards, including specific procedures the employer has implemented to protect employees from exposure to hazardous chemicals, such as appropriate work practices, emergency procedures, and personal protective equipment; and,¶
(D) The details of the hazard communication program as it relates to the employee's work activities, including an explanation of any alternative labeling or warning systems, possible exposures from non-routine tasks, and how employees can get and use the right hazard information.¶
(d) Agricultural employers must give all of their employees a copy of, or provide them with training that covers the information in the Oregon OSHA publication #1951 "Safe Practices When Working Around Hazardous Agricultural Chemicals."¶
(e) For employees doing only field hand-labor operations where their only potential exposure is to residual pesticides, employers may meet the training and information requirements of this rule by:¶
(A) Giving each employee a copy of or providing training that covers the information in the Oregon OSHA publication #1951, "Safe Practices When Working Around Hazardous Agricultural Chemicals"; and¶
(B) Providing information about the location and availability of, and ensuring that employees have access to safety data sheets.¶
(8) Trade secrets. There are special standards about the relationship of this standard to trade secrets. If those circumstances apply, follow Division 2/Z, 1900.1200(i) and its Appendix E.¶
N~~OTE~~ote: Division 2/Z 1910.1200(i) provides guidance for emergency medical personnel who need to obtain more detailed safety and health information about products with Trade Secret-protected ingredients. Appendix E to Division 2/Z, 1910.1200, Definition of Trade Secret, sets out the criteria to be used in evaluating trade secret claims.¶
(9) Subpoenas, citations, penalties.¶
(a) The Oregon Occupational Safety and Health Division has the authority under ORS Chapter 654 to issue a subpoena or any protective orders.¶
(b) Agency actions under ORS Chapter 654 and this Hazard Communication Standard for Agricultural Employers are enforceable by the issuance of additional citations and penalties pursuant to 654.071(4), 654.086(1)(d), or 654.086(3). The Oregon Occupational Safety and Health Division may refer the matter to the Circuit Court in the county in which the proceedings are pending for enforcement of the subpoena.¶
(10) ~~Phase-in dates for new rule requirements.¶~~
~~(a) By Februar~~Dates - ¶
(a) Effective date. This section shall become effective July 19, 20~~15, agricultural employers must train their employees about the new label elements (product identifier, signal word, hazard statements, pictograms, and precautionary statements); and, about the new, standardized, 16-section, safety data sheet (SDS) format. After this phase-in date has passed, this information must be included in the initial employee training in accordance with paragraph (7)¶~~
~~NOTES: Chemical producers have until June 1, 2015 to~~24.¶
(b) Substances. ¶
(A) Manufacturers, importers, and distributors, evaluating substances shall be in compliance with all modified provisions of this section no later than January 19, 2026.¶
(B) For substances, all employers shall, as necessary, update any alternative workplace labeling, update the hazard communication program, and provide any additional employee training for newly identified physical hazards, or health hazards or other hazards covered under this section no later than July 20, 2026.¶
(c) Mixtures. ¶
(A) Chemical manufacturers, importers, and distributors evaluating mixtures shall be in compliance with all ~~the~~ modified provisions of the~~ Division 2/Z Hazard Communication Standard (1910.1200) including those concerning classification, labeling, and safety data sheets~~is section no later than July 19, 2027.¶
(~~b~~B) ~~By June 1, 2016,~~For mixtures, all employers ~~must~~shall, as necessary, ~~based on any new hazards identified by chemical manufacturers on updated labels and SDSs:¶~~
~~(A) Update their workplace hazard communication program, as required by paragraph (4); and¶~~
~~(B) Update any alternative workplace labeling used under~~update any alternative workplace labeling, update the hazard communication program, and provide any additional employee training for newly identified physical hazards, health hazards, or other hazards covered under this section no later than January 19, 2028.¶
(d) Compliance. Between May 20, 2024 and the dates specified in paragraph ~~(5); and¶~~

~~(C) Provide additional employee training in accordance with paragraph (7)~~s 10(b) and (c) of this section, as applicable, chemical manufacturers, importers, distributors, and employers may comply with either this section or the previous version of this section or both during the transition period.¶
(11) Definitions.¶
(a) Agricultural employer - See definition in Division 4/B, OAR 437-004-0100. Also, see "Employer" below.¶
(b) Article - A manufactured item other than a fluid or particle:¶
(A) Formed to a specific shape or design during manufacture; and¶
(B) With end use function(s) dependent in whole or in part on its shape or design during end use; and¶
(C) That under normal conditions of use does not release more than minute or trace amounts of a hazardous chemical and does not pose a physical hazard or health risk to employees.¶
(c) Administrator - The Administrator of the Oregon Occupational Safety and Health Division, or their designee.¶
(d) Biological hazard (or biohazard) - An infectious or other biological agent (bacteria, virus, fungus, etc.) presenting a risk of death, injury or illness to employees. (Biohazards are excluded from the requirements of the HCS.)¶
(e) Chemical - Any element, chemical compound or mixture of elements or compounds. Chemicals may be in solid, liquid, or gaseous form.¶
(f) Chemical name - The scientific designation of a chemical according to the nomenclature system developed by the International Union of Pure and Applied Chemistry (IUPAC) or the Chemical Abstracts Service (CAS) rules of nomenclature, or a name that clearly identifies the chemical for the purpose of conducting a hazard classification.¶
(g) Classification - The process of identifying the relevant data about the hazards of a chemical; reviewing that data to determine the hazards or effects associated with the chemical; and deciding whether the chemical meets the criteria and definitions in this standard. Classification for health and physical hazards includes the determination of the degree of hazard, where appropriate, by comparing the data with the criteria for the health and physical hazard categories.¶
(h) Container - Any bag, barrel, bottle, box, can, cylinder, drum, reaction vessel, storage tank, or the like that contains a hazardous chemical. Pipes or piping systems, and engines, fuel tanks, or other operating systems in a vehicle, are not considered to be containers.¶
(i) Crop- or product-related quality control - or quality assurance-type laboratory work - The sampling or testing of crops or agricultural products to discover defects, with the goal of improving or stabilizing production standards. This type of laboratory work at agricultural workplaces is covered by the requirements of the HCS.¶
N~~OTE~~ote: See Division 4/Z, 437-004-9860, Hazardous Chemicals in Laboratories, for rules that apply to other types of laboratory work.¶
(j) Designated representative - Any individual or organization to whom an employee gives written authorization to exercise such employee's rights. A recognized or certified collective bargaining agent is automatically a designated representative without regard to written employee authorization.¶
(k) Distributor - Any business, other than a chemical manufacturer or importer, that supplies hazardous chemicals to other distributors or to employers.¶
(l) Employee - For the purpose of this rule, any worker who may be exposed to hazardous chemicals under normal conditions of use or in a foreseeable emergency. (Also, see definition of "Worker" in Division 4/B, OAR 437-004-0100.)¶
(m) Employer - For the purposes of this rule, any person, corporation, association, or other legal entity, including a contractor or subcontractor, engaged in a business where employees may be exposed to chemicals. (Also, see definition of "Agricultural employer" in Division 4/B, OAR 437-004-0100.)¶
(n) Exposure or exposed - An occurrence when an employee is subjected, in the course of employment, to a chemical that is a physical, health, or other listed hazard, including accidental or reasonably anticipated exposure. "Subjected" in terms of health hazards includes any route of entry into the body, including inhalation, ingestion, percutaneous, and skin contact or absorption.¶
(o) Field hand-labor operations - Agricultural work done by hand or with hand tools, including the cultivation, weeding, planting, and harvesting of crops (including mushrooms) and the packing of produce into containers, whether done on the ground, on a moving machine, or in a temporary packing shed in the field.¶
(p) Flammable liquids - See definition in Division 4/B, OAR 437-004-0100.¶
(q) Foreseeable emergency - Any potential event that could result in an uncontrolled release of a hazardous chemical into the workplace. Examples include equipment failure, rupture of containers, or failure of control equipment.¶
(r) GHS - Globally Harmonized System - The United Nations' system of classification and labeling of chemicals; an international approach to hazard communication that provides specific criteria for classification of chemical hazards and a standardized approach to label elements and safety data sheets. In 2012, OSHA revised the Hazard Communication Standard (29 CFR 1910.1200) to be consistent with the GHS.¶

(s) Hand-labor operations - See, Field hand-labor operations.¶
(t) Handler (or Pesticide Handler) - includes any person, who is employed for any type of compensation by an agricultural establishment and who:¶
(A) Mixes, loads, transfers, or applies pesticides;¶
(B) Disposes of pesticides or pesticide containers;¶
(C) Handles opened containers of pesticides;¶
(D) Acts as a flagger for equipment or aircraft applying pesticides;¶
(E) Cleans, adjusts, handles, or repairs the parts of mixing, loading, or application equipment that may contain pesticide residues;¶
(F) Assists with the application of pesticides; or¶
(G) Performs other activities included within the definition of Handler by the Environmental Protection Agency.¶
N~~OTE~~ote: For more information, see the pesticide Worker Protection Standard in Division 4/W, §170. The term "handler" does not include an employee who only handles sealed, unopened pesticide containers or empty pesticide containers.¶
(u) Hazard category - The divisions within a hazard class that compare the degree or severity of the hazard. For example, the chemical hazard classifications "oral acute toxicity" and "flammable liquid" both include four hazard categories based on specific criteria. Categories within a hazard class should not be compared with the categories of different hazard classes.¶
(v) Hazard class - Describes the nature and effect of a physical or health hazard, such as "flammable solid", "carcinogen", and "oral acute toxicity". (Also, see "Classification".)¶
(w) Hazard not otherwise classified (HNOC) - An adverse physical or health effect identified through evaluation of scientific evidence during the manufacturer's classification process that does not meet the specified criteria for the physical and health hazard classes addressed in Division 2/Z. 1910.1200. This does not extend coverage to adverse physical and health effects for which there is a hazard class addressed in 1910.1200, but the effect either falls below the cut-off value/concentration limit of the hazard class or is under a GHS hazard category that has not been adopted by OSHA. (One example is Category 5 oral acute toxicity.)¶
(x) Hazard statement - A statement assigned to a hazard class and category that describes the nature of the hazards of a chemical, including, where appropriate, the degree of hazard.¶
(y) Hazardous chemical - Any chemical ~~that~~which is classified as a physical hazard or a health hazard, a simple asphyxiant, combustible dust, ~~pyrophoric gas,~~ or hazard not otherwise classified.¶
N~~OTE~~ote: Division 2/Z, 1910.1200, Appendices A and B describe the criteria producers must use for determining whether or not a chemical is a health or physical hazard for purposes of this standard.¶
(z) Hazard warning - The words, pictures, symbols, or combination on a label (or other appropriate form of warning) that communicate the specific physical and health hazards of the chemical(s) in the container. (See the definitions for "physical hazard" and "health hazard" to determine the hazards which must be covered by the manufacturer.)¶
(aa) HCS - The Hazard Communication Standard.¶
(bb) Health hazard - A chemical that is classified as posing one of the following hazardous effects: acute toxicity (any route of exposure); skin corrosion or irritation; serious eye damage or eye irritation; respiratory or skin sensitization; germ cell mutagenicity; carcinogenicity; reproductive toxicity; specific target organ toxicity (single or repeated exposure); or aspiration hazard.¶
N~~OTE~~ote: The criteria for determining whether a chemical is classified as a health hazard are detailed in Appendix A to 1910.1200 - Health Hazard Criteria.¶
(cc) Identity - See Product Identifier.¶
(dd) Immediate use - For the purpose of this rule, describes when a hazardous chemical will be used only within the work shift in which it is transferred, be under the control of and used only by the person who transfers it from a labeled container. Under these specific conditions, a portable, secondary container is exempted from the requirement for a workplace label. (See 437-004-9800(5)(e).)¶
(ee) Importer - The first business with employees within the Customs Territory of the United States that receives hazardous chemicals made in other countries for the purpose of supplying them to distributors or employers within the United States.¶
(ff) Label - An appropriate group of written, printed or graphic information elements concerning a hazardous chemical that is affixed to, printed on, or attached to the immediate container of a hazardous chemical, or to the outside packaging.¶
(gg) Label elements - The specified product identifier, pictogram(s), hazard statement(s), signal word, and precautionary statement(s) that correlate to each chemical product's hazard class and category. Also, labels must identify and provide contact information for the product's manufacturer or other responsible party.¶
(hh) Manufacturer - See Producer.¶
(ii) Material Safety Data Sheet (MSDS) - See, "Safety Data Sheet (SDS)".¶

(jj) Mixture - A combination or a solution composed of two or more substances in which they do not react.¶
(kk) Nonroutine task - A work activity that occurs infrequently or that varies from what is considered a regular, standard, or normal task.¶
(ll) Pesticide handler - See Handler.¶
(mm) Pesticide, residual - See Residual pesticide.¶
(nn) Physical hazard - A chemical that is classified as posing one of the following hazardous effects: explosive; flammable (gases, ~~aerosols,~~ liquids, or solids); aerosols; oxidizer (gases, liquid~~,~~s, or solid ~~or ga~~s); self-reactive; pyrophoric (liquid or solid); self-heating; organic peroxide; corrosive to metal; gas under pressure; ~~or~~ in contact with water emits flammable gas.~~¶~~
~~NOTE~~; or desensitized explosive.¶
Note: Physical Hazard Criteria is available in Appendix B to Division 2/Z, 1910.1200.¶
(oo) Pictogram - A composition that includes a red bordered square set on its point, enclosing a black symbol on a white background that is intended to convey specific information about the hazard of a chemical. Eight pictograms are designated under this standard for application to specific hazard categories.¶
(pp) Precautionary statement - A phrase that describes recommended measures that should be taken to prevent or minimize adverse effects resulting from exposure to, or improper storage or handling of a hazardous chemical.¶
(qq) Producer - For the purposes of this rule, an employer with a workplace where chemicals are manufactured, processed, extracted, generated, formulated, or repackaged for use or for distribution.¶
N~~OTE~~ote: If you mix or blend chemical products for use in your own workplace, and the resulting mixture has no new chemical ingredients or new hazardous characteristics, you can use the SDSs for the component ingredients and you are not considered to be a "producer." (An example is mixing granular fertilizers together for application on your own property.) However, if the combined chemicals react to create a new ingredient or the combination creates a new hazard, you become a "producer" and you must follow the more detailed rule requirements in the Division 2/Z, 1910.1200, Hazard Communication Standard.¶
(rr) Product identifier - The unique name or number used on the label and in the SDS that provides a means by which the user can identify the hazardous chemical. (Examples include the chemical name, Chemical Abstracts Service (CAS) Registry Number, or other precise designation of the substance.) The product identifier must allow cross-referencing of the product's label with the product's SDS, and the list of hazardous chemicals in the employer's written hazard communication program.¶
(ss) ~~Pyrophoric gas - A chemical in a gaseous state that will ignite spontaneously in air at a temperature of 130 degrees F (54.4 degrees C) or below.¶~~
~~(tt)~~ Residual pesticide - Pesticide residue that remains on crops, soil, equipment or other work surfaces, after a pesticide application is completed and any label-required restricted entry interval (REI) has expired. For the purpose of providing hazard information, a Safety Data Sheet must be available for any pesticide that has been used at the workplace within the previous 30 days.¶
(~~uu~~tt) Responsible party - As used on a Label or Safety Data Sheet, someone who can provide additional information on the hazardous chemical and appropriate emergency procedures, if necessary.¶
(~~vv~~uu) Restricted entry interval (REI) - The time period that immediately follows a pesticide application (as specified on the product label) during which only trained and protected employees may enter into the treated area. (The treated area is the physical location where a pesticide is being or has been applied.)¶
(~~ww~~vv) Safety data sheet (SDS) - Written or printed information about a hazardous chemical that is prepared (generally by the manufacturer) in accordance with paragraph (g) of and Appendix D to Division 2/Z, 1910.1200.¶
(~~xx~~ww) Signal word - A word used to alert the reader of the product label to a potential hazard. The signal words used in this section are DANGER'' and WARNING'' DANGER'' is used for the more severe hazards, while WARNING'' is used for the less severe. These words are chosen by the manufacturer based on the classification and categorization of the chemical's hazards.¶
N~~OTE~~ote: The EPA has jurisdiction over manufacturers of pesticides and currently has its own system of signal words used on pesticide labels.¶
(~~yy~~xx) Simple asphyxiant - A substance or mixture that displaces oxygen in the ambient atmosphere, and can thus cause oxygen deprivation in those who are exposed, leading to unconsciousness and death.¶
(~~zz~~yy) Specific chemical identity - See "Product identifier".¶
(~~aaa~~zz) Substance - Chemical elements and their compounds in the natural state or obtained by any production process, including any additive necessary to preserve the stability of the product and any impurities deriving from the process used, but excluding any solvent which may be separated without affecting the stability of the substance or changing its composition.¶
(~~bbb~~aaa) Trade secret - A confidential formula, pattern, process, device, information or compilation of information that is used in an employer's business, and that gives the employer an opportunity to obtain an advantage over competitors who do not know or use it.¶
N~~OTE~~ote: Division 2/Z 1910.1200(i) provides guidance for emergency medical personnel who need to obtain

more detailed safety and health information about products with Trade Secret-protected ingredients. Appendix E to Division 2/Z, 1910.1200 - Definition of Trade Secret, sets out the criteria to be used in evaluating trade secret claims.¶
(~~ccc~~bbb) Use - To handle, apply, transfer, or generate as a by-product, any hazardous chemical covered by the requirements of this rule.¶
(~~ddd~~ccc) Work area - A room or defined space in a workplace where hazardous chemicals are used, and where there are employees.¶
(~~eee~~ddd) Workplace - An establishment, job site, or project, at one geographical location with one or more work areas.¶
~~[ED. NOTE~~Note: Appendices ~~referenced are available from the agency.]¶~~
~~[Publications: P~~and publications referenced are available from the agency.~~]~~
Statutory/Other Authority: ORS 654.025(2), 656.726(4)
Statutes/Other Implemented: ORS 654.001 - 654.295

AMEND: 437-004-9850

RULE SUMMARY: OAR 437-004-9850 – In (2), updates the definition of “physical hazard” to align with federal OSHA changes in the 1910.1200 Hazard Communication standard. “NOTE” is changed to “Note” throughout. Text references to the Illustration and Appendix A (Non-mandatory) are added.

CHANGES TO RULE:

437-004-9850
Pipe Label~~l~~ing ¶

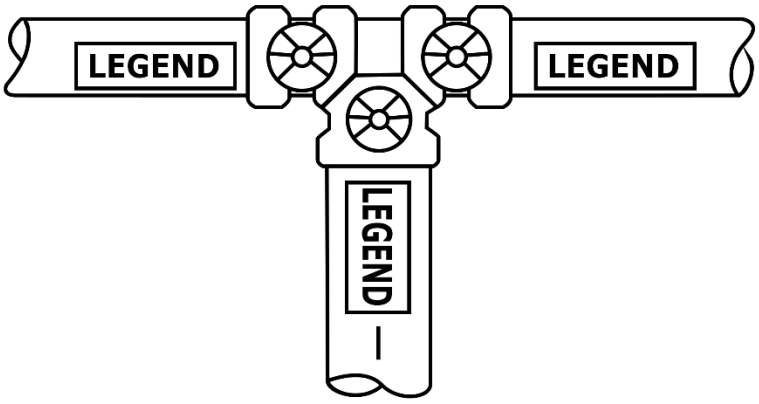
(1) Scope and application. This rule applies to all pipes and piping systems that contain hazardous substances, transport substances in a hazardous state, or that use asbestos as insulation material. This rule does not apply to buried pipe.¶
(2) Definitions:¶
(a) Asbestos: includes chrysoltile, amosite, crocidolite, tremolite asbestos, anthophyllite asbestos, actinolite asbestos and any of these minerals that have been chemically treated or altered.¶
(b) Hazardous substances: any substance that is a physical or health hazard.¶
(c) Health hazard: A chemical that is classified as posing one of the following hazardous effects: acute toxicity (any route of exposure); skin corrosion or irritation; serious eye damage or eye irritation; respiratory or skin sensitization; germ cell mutagenicity; carcinogenicity; reproductive toxicity; specific target organ toxicity (single or repeated exposure); or aspiration hazard. The criteria for determining whether a chemical is classified as a health hazard are detailed in Appendix A to 1910.1200 - Health Hazard Criteria, in Division 2/Z.¶
(d) Physical hazard: A chemical that is classified as posing one of the following hazardous effects: explosive; flammable (gases, ~~aerosols,~~ liquids, or solids); aerosols; oxidizer (gases, liquid~~,~~s, or solid ~~or gas~~); self-reactive; pyrophoric (liquid or solid); self-heating; organic peroxide; corrosive to metal; gas under pressure; ~~or~~ in contact with water emits flammable gas; or desensitized explosive. The criteria for determining whether a chemical is classified as a physical hazard are detailed in Appendix B ~~to 1910.1200 -~~ Physical Hazard Criteria (Mandatory) to 1910.1200, in Division 2/Z.¶
(e) Piping system: includes single or multiple pipes of any kind in addition to valves and pipe coverings.¶
(3) Labeling.¶
(a) Label pipes that contain hazardous substances or transport substances in a hazardous state according to (A), (B), (C) and (D) below or otherwise identify them according to (3)(b) below:¶
(A) Positive identification of the hazardous contents of pipe must be by lettered labels. The label must give the name of the contents in full or abbreviated form.¶
(B) The label must identify the contents with enough detail to identify the hazard.¶
(C) Label wording must be brief, informative and simple.¶
(D) Use stenciling, tape, adhesives, markers or effective alternative means for labels.¶
N~~OTE~~ote: Substances "transported in a hazardous state" typically refer to the hazards of pressure and temperature. Examples include compressed air, hot water or steam, and cryogenic liquids or gases.¶
(b) The employer may use an alternative warning method, instead of affixing labels to individual pipes, if that method identifies the pipe(s) to which the warning applies and conveys the hazard information required by this rule. Examples include signs, placards, process sheets, or schematics posted on walls in the work area; or other such written materials. These alternative written materials must be readily accessible to the employees in their work areas during each shift.¶
N~~OTE~~ote: See OAR 437-004-9800(5) Labels and other forms of warning for other related requirements.¶
(c) Label pipes or piping systems that use asbestos insulation material to include the following statements:¶
(A) DANGER CONTAINS ASBESTOS FIBERS~~¶~~
MAY CAUSE CANCER DO NOT BREATHE DUST AVOID CREATING DUST¶
(B) Or, otherwise identify them according to (3)(b), above.¶
N~~OTE~~ote: See OAR 437-004-9800, Hazard Communication for Agricultural Employers and OAR 437-004-9050, Asbestos, for additional requirements.¶
(4) Location of labeling.¶
(a) Place the labeling near valves or flanges; adjacent to changes in direction or branches; where pipes pass through walls, floors or ceilings; and where confusion about the contents of the piping system may occur.¶
(b) Labeling must be applied, at a minimum, at the beginning and end of continuous pipe runs.¶
(c) For asbestos insulation, labeling on unobstructed continuous pipe runs must be at least every 75 feet.
Illustration 1.¶
[Insert Illustration 1]¶

(5) Visibility.¶
(a) Where pipes are located above or below the normal line of vision, put the lettering below or above the horizontal centerline of the pipe, to facilitate visibility.¶
(b) If pipes are inaccessible, or at a distance that makes clear identification of the letters on a label difficult, use alternatives to labeling that meet all other requirements of this rule.¶
~~[ED. NOTE: Illustrations referenced are available from the agency~~ Appendix A for Pipe Labeling (Non-Mandatory).¶
[Insert Appendix A for Pipe Labeling (Non-Mandatory).]
Statutory/Other Authority: ORS 654.025(2), 656.726(4)
Statutes/Other Implemented: ORS 654.001 - 654.295

OAR 437-004-9850 Illustration and Appendix

Filing Attachment for Proposed Rule - 9/23/24

Illustration 1 Location of Labeling



Appendix A for Pipe Labeling (Non-Mandatory)

Table 1
Classification of Hazards of Materials and Suggestions of Colors

Classification	Color Field**	Color of Letters For Legends
Materials Inherently Dangerous		
Flammable or Explosive	Yellow	Black
Chemically Active or Toxic	Yellow	Black
Extreme Temperatures or Pressures	Yellow	Black
Radioactive	Yellow	Magenta
Materials of Inherently Low Hazard		
Liquid or Liquid Admixture	Green	White
Gas or Gaseous Admixture	Blue	White

** Alternatives to the colors suggested by Table 1 may be acceptable if they meet all other requirements of this appendix and are used consistently on all pipes in a given location.

(1) Color may be displayed on the piping by any physical means, but when it is used it shall be in combination with labels.

(2) Color may be used in continuous, total length, or in intermittent displays.

Types and Sizes of Letters

(1) Contrast shall be provided between color field and letters for readability.

(2) Use of letters of block lettering in sizes 1/2 inch (13 mm) and larger, is recommended. (Table 2)

Table 2

Types and Styles of Letters

Outside Diameter of Pipe or Covering		Length of Color Field		Size of Letters	
in.	**mm.**	**in.**	**mm.**	**in.**	**mm.**
3/4 to 1-1/4	19 to 32	8	200	1/2	13
1-1/2 to 2	38 to 51	8	200	3/4	19
2-1/2 to 6	64 to 150	12	300	1-1/4	32
8 to 10	200 to 250	24	600	2-1/2	64
over 10	over 250	32	800	3-1/2	89

(3) For identification of materials in pipes less than 3/4 inch (19 mm.) in diameter, and for value and fitting identification, the use of a legible tag is recommended.

Stat. Auth: ORS 654.025(2) and 656.726(4).
Stats. Implemented: ORS 654.001 through 654.295.
Hist: OSHA 4-1998, f. 8-28-98, cert. ef. 10-1-98
OSHA 4-2012, f. 9-19-12, cert. ef. 1-1-13
OSHA 3-2014, f. & cert. ef. 8-8-14