

Manganese Advisory Committee October Meeting Minutes October 2, 2019 and October 17, 2019

Location: Oregon OSHA Portland Metro (Tigard) Field Office

Those Present, by Date (time):

October 2, 2019 (10:00 AM – 12:00 noon):

Natasha Allen (Rightline Equipment)	Matt Kaiser (Oregon OSHA)
Heather Case (Oregon OSHA)	Kathleen Kincade (Oregon OSHA)
Andy Collins (REFA/Fought)	Dave McLaughlin (Oregon OSHA)
Jenny Dresler (Oregon Farm Bureau)	Larisa Palmentere (Bullseye Glass Co.)
Barb Epstein (AGC)	Kevin Rohrer (Gunderson)
Ken Fisher (ITW/Hobart)	Lon Steel (Schuff Steel)
Anthony Hannan (Schiff Steel)	Auden Strealy (PGE)
Jeff Jackson (Oregon OSHA)	

By Teleconference:

Waylon Buchan (Oregon Trucking)
Susan Fiori (Hobart)
Taylor Lucey (Oregon Forestry Counsel)

October 17, 2019 (12:00 noon – 2:00 PM):

Natasha Allen (Rightline Equipment)	Ron Gross (Hobart Brothers)
Joe Bray (Harder Mechanical)	Jeff Jackson (Oregon OSHA)
Heather Case (Oregon OSHA)	Kathleen Kincade (Oregon OSHA)
Eric Connelly (SAIF)	Dave McLaughlin (Oregon OSHA)
Jenny Dresler (Oregon Farm Bureau)	Larisa Palmentere (Bullseye Glass)
Steve Eversmeyer (NW Natural)	Kevin Rohrer (Gunderson)
Jeff Green (Oregon OSHA)	

(By Teleconference):

Alden Strealy (PGE)

GENERAL DISCUSSION ABOUT THE TWO OCTOBER MEETINGS AND THE CURRENT DRAFT OF RULE CHANGES:

The dates for the two October meetings were chosen because an electronic “doodle poll” showed that no single date worked for a majority of participants. The solution was to have two meetings with the same agenda, with participants looking at the same draft of rule changes, and offering an equivalent opportunity for participants to provide feedback on the fiscal impact of the draft rule changes.

Kathleen reminded the advisory group that their most valuable assistance to us -- at this point in the rulemaking -- is to provide information about the fiscal impact of the draft rule changes, for example:

- How much money would a new/ modified requirement cost you at your specific type of workplace? (...preferably calculated on a per-employee basis.)
 - Would you need any new equipment (such as engineering controls or personal protective equipment) in order to comply?
 - Would any new/ modified record-keeping or administrative tasks require additional time to accomplish? How much extra time?
- Conversely, how much would the draft changes to the requirements save you in time and/ or money?
- Which of the new/ modified requirements are you already doing?

Documents provided at both meetings -- and on Oregon OSHA's website at the [Manganese PEL Advisory Committee Topic Page](#) -- provided a draft version of the rules under discussion with a side-by-side comparison to the rules currently in effect. Kathleen explained that the most recent draft includes suggestions initiated at the previous meeting and an additional effort to simplify compliance by putting requirements into active language. The group commented that it was not always easy to remember how the draft versions have evolved.

The discussion at the both meetings was focused on the financial impact of the draft rules as written and how any suggested changes would affect those costs.

It was noted that Oregon OSHA hopes to begin wrapping up the pre-proposal discussion of the financial impact of the draft rules at these October meetings and to be ready to submit our recommendations to Oregon OSHA's core managers by the end of 2019.

WELCOME AND INTRODUCTIONS:

Group members present and on teleconference at each meeting introduced themselves.

RULE DISCUSSION:

Kathleen led the group through the latest draft of potential changes to rule language or requirements including the Permissible Exposure Limit (PEL) for Manganese in the Air Contaminant Rules in Divisions 2, 3, and 4; and to the Oregon Administrative Rules (OARs) included within Oregon OSHA's *Division 2/Q Welding, Cutting, and Braising* rules for General Industry.

The Manganese Permissible Exposure Limit (PEL)

Division 2/Z, 437-002-0382 Oregon Rules for Air Contaminants

...

Division 3/Z, 437-003-1000 Oregon Rules for Air Contaminants

...

Division 4/Z, 437-004-9000 Oregon Rules for Air Contaminants

The current draft changes to the Permissible Exposure Limit (PEL) number(s) for Manganese and Manganese fume in the Air Contaminant rules, remained at 0.1 mg/m³, as an 8-hour Time-Weighted Average (TWA-8).

The ceiling level (C) of 5.0 mg/m³ -- the current PEL in effect – was also retained in the draft. (It is mathematically possible to reach the ceiling level once during an 8-hour shift and still comply with the proposed TWA-8.) The group discussed the pros and cons of maintaining a ceiling level with the new 8-hour PEL.

Because the fiscal impact of a new PEL would be affected by the accompanying changes to the Oregon Administrative Rules (OARS), we moved on to a discussion of the current draft changes by OAR number including a synopsis of the committee member's comments about the fiscal impact of the changes, by meeting date:

(OAR) 437-002-0280 - Adoption by Reference. A correction of numerical typos (two rule number references) and a change to a note directing readers to a newly drafted Definitions rule, in this "adopt by reference" rule for Division 2 Subdivision Q.

October 2: No fiscal impact anticipated.

October 17: No fiscal impact anticipated.

437-002-0282 - Job Planning and Layout. Wording modified, but the requirements of the rule are the same.

October 2: No fiscal impact anticipated.

October 17: No fiscal impact anticipated.

437-002-0283 - Additional Protective Clothing Requirements. Removed the requirements for different types of goggles and side shields (eye protection is covered in another rule). Left in requirements for use of appropriate types of fabrics and other ways to protect the skin when performing hot work; changed the title of the rule to reflect the content and to emphasize that the OAR is an addition to the Federal OSHA requirements in Subdivision 2/Q.

October 2: No fiscal impact anticipated.

October 17: No fiscal impact anticipated.

437-002-0284 - Additional Specifications for Eye and Face Protection. The rule draft had been made less "prescriptive" by removing requirements for specific types of protective equipment for the eyes and face; the title was changed to emphasize that these specifications are for the protection of the eyes and face are in addition to other rule requirements.

October 2: During a discussion of the welding hazards covered by the rule, some suggested that a welder wearing a lift front hood needed some type of safety glasses when the helmet was lifted; and, therefore, the current language in 437-002-0284 that requires additional protection under a lift front helmet should be retained. (Others noted that safety glasses are already required as basic protection for everyone in their workplaces.)

Comparing these requirements with those in the general industry PPE rules, some noted that the requirement for the employer to provide all necessary equipment is not new and would not affect the cost of compliance.

October 17: Those present discussed the advantages of leaving in the more “prescriptive” requirements for eye protection in the rule, and agreed that this additional protection against flying particles would often be necessary when the welding hood was lifted.

Some suggested that this rule was “duplicative” and discussed the option of a note cross-referencing to the personal protective equipment (PPE) rules instead of having this separate rule in place. Others asked how welders looking at a more general PPE rule reference would know how to protect themselves. They suggested a specific requirement was better than sending “the reader” to search for other rules.

A discussion followed about the meaning of the word “appropriate”, and some suggested that a better phrase would be “appropriate to the hazard”.

Committee members from various industries stated that because the use is required in the current rule, they are already requiring eye protection under helmets, and that either way, no fiscal impact was anticipated.

437-002-0285 - Additional Special Precautions. This rule has the same requirements but was changed to “active voice”, the title clarified that these precautions are in addition to others in Subdivision 2/Q.

October 2: No fiscal impact anticipated.

October 17: No fiscal impact anticipated.

437-002-0286 -- Flammable Preservative Coatings and **437-002-0287- Toxic Preservative Coatings**. Previously, the group had considered putting both “-0286” and “-0287” into one rule, combining the requirements for both toxic and flammable coatings. Subsequently, it was reasoned that the two rules should remain separate, because they address two distinct types of hazards with different ways to mitigate and control those hazards.

More terms are defined and a requirement for an evaluation by a competent person was added to the flammable coatings rule.

The current draft added “in confined and other enclosed spaces,” to the toxic coatings rule. It also restored the requirement to strip coatings at least 4 inches from the weld, but now allows the use of artificial cooling and/or respiratory protection as alternatives to stripping.

October 2: The group asked for an exception for weld-able coatings in “-0287” due to confusion about their potential toxicity. (Some asserted that a requirement to remove those coating 4 inches away from the weld would result in “a huge fiscal impact.” However, with an exception for weld-able coatings, they stated that there would be no additional fiscal impact.) The group requested a note be added “where coating is labeled as weld-able, follow manufacturer’s instructions.”

The group also discussed the definition of the word toxic and the difference between confined and enclosed spaces. Kathleen noted that these could be included in the new draft Definitions rule (# 437-002-XXXZ) which will provide definitions applicable to the 2/Q rules.

October 17: This group agreed that the rules should remain separate.

They discussed how to identify toxic coatings and suggested some form of an exception for weldable coatings. Some suggested adding “or restricted spaces” to language specifying confined spaces; others stated that the “toxic coating” rule should apply in all spaces and that the requirements should not be restricted to confined or enclosed spaces.

437-002-0288- Additional General Health Protection and Table OR Q-1. Language regarding feasibility was added to the required preference for ventilation and other engineering-type controls; the accompanying Table OR-1 (that references both ventilation and respiratory protection) was arranged into alphabetical order, by contaminant name, and, references to applicable substance-specific rules were added.

October 2: The group discussed whether the rule should reference *potential exposure* or *potential over-exposure*, noting that this would affect the scope of the requirements.

October 17: The group recommended changing the rule language at (4) about protecting nearby works be changed to “the same or an equivalent level of exposure”. In this case, no fiscal impact would be anticipated.

437-002-0297- Welding or Cutting Containers. Narrowed the requirements of the rule to containers that were used for toxic or flammable substances or that could produce flammable or toxic vapors when heated. Added a note stating that a container large enough to enter would be covered by the confined space rules.

October 2: The group commented that the current language (“that have contained”) gives the impression that the employer would need to know the history of the tank; and suggested that this language be changed to the present tense simply requiring that the tank “does not contain” those hazardous substances. They also suggested adding the words “To ensure this, do (a)-(d)” and suggested use of the phrase “... including, but not limited to” at the end of the first paragraph.

The group discussed situations when atmospheric testing may not be needed specifically, when standard operating procedures (SOPs) are used. The group stated that an SOP would have data showing that the tank had been cleaned, especially if the cleaning process is done off site or by another company.

Some increased administrative costs would likely come with the requirement to document and retain the record for a year but could be minimized with the use of technology. The need for a competent person could be an increased cost in some workplaces.

October 17: This group also stated that “have contained” should be changed to reflect a present hazard ; and supported clarifying the testing requirements with the added phrase: “may include but are not limited to” -- in reference to the paragraphs (a)-(d). In addition, they suggested that “in and” be added to “near” the container in paragraph (c). The group discussed how to determine the parameters of flammability with atmospheric testing.

Some increased, but not significant administrative costs were anticipated with the requirement to document and retain the record for a year.

437-002-0298 -- Supplied Air Respiratory Equipment. Title changed to up-date the name of the type of respiratory protection it references. The rule was also updated to reference the National Institute for Occupational Safety and Health (NIOSH) as the agency that approves respiratory protection and to cross-reference the hazards to the existing definition for immediately dangerous to life and health (IDLH).

October 2: No fiscal impact anticipated.

October 17: The group discussed whether this rule is needed when respiratory protection rules are already in place. If it is retained, they suggested standardizing the language when referencing another rule, by using the language: “In accordance with....” or “Follow the requirements of....” No fiscal impact was anticipated.

437-002-XXXX-- Additional Confined Space requirements. This is a new (not yet assigned a number) rule with additional requirements for welding in confined spaces. This rule came from the suggestions generated during the confined space subcommittee meetings and is intended to clarify the requirements that apply when the only confined space hazards are due to the welding process (when the confined space rules at 437-002-0146 do not apply.)

October 2: The group discussed the draft requirement to retain records for 5-years -- if it is not an “exposure record.” The suggestion was made to change this retention period to one year -- the same requirement that is in the confined space rules.

The group discussed adding the phrase “If no exposures are recorded” to differentiate these recordkeeping requirements from those in the *Access to Exposure and Medical Records* rules at 1910.1020. Relating to exposure, the group also discussed using the phrase: “above normal background level” and the meaning of the phrase “recognized as safe.” They suggested referencing the confined space rules or adding definitions in the draft Definitions rule.

The group noted that ozone can be generated by arc welding and discussed what is generally monitored during welding processes with no additional (non-welding-related) hazards. Kathleen mentioned that the current draft of the Definitions rule provides a standard order of testing for atmospheric testing in a confined or other enclosed space.

October 17: This group agreed that the retention period for non-exposure records should be one year instead of five years. They discussed exposure monitoring and the 1910.1020 recordkeeping requirements and clarified that paragraph (d) specifies no exposure. The group suggested that OSHA include the ranges of what is considered safe in paragraph (3) or to put that in the definitions.

They suggested that we ensure that our definition of exposure is in alignment with federal OSHA's definition for the purposes retaining exposure records under 1910.1020.

437-002-XXXV- Manganese and **Table OR Q-2**. This is another new rule allowing the use of a specific level of respiratory protection as an alternative to monitoring for Manganese exposure. The welding tasks described in the Table were put into standard, recognizable terms, and alphabetized in the Table. (Definitions for the tasks were added in the new Definitions rule.)

October 2: The group noted that "SMAW" is an abbreviation for "Shielded Metal Arc Welding", and that "Flux Core" could also be called "Dual Shield" -- a common trade name. Kathleen asked that the group review the definitions in the new Definitions rule and let her know of any other changes needed, preferably in writing, to ensure accuracy.

Kathleen reminded the group that Table OR Q-2 is intended as an alternative to air monitoring, and that it is not mandatory. The group suggested that the title for this table specify that it is non-mandatory and suggested that an equal sign be used to clarify that one column is for an APF of 10 (APF = 10)" and that the other is for an APF of 25 (APF=25). It was clarified that the data used to develop the maximum durations for exposures in the table were calculated for a maximum exposure of 0.02 mg/m³ for Manganese – about 20% of the draft PEL; and that neither the table nor the draft PEL distinguishes between respirable and inhalable particulate.

Although Oregon OSHA is still requiring the "hierarchy of controls", some in the group said this would "push" the use of Powered Air-Purifying Respirators (PAPRs) They thought that the two examples provided in the rule clarified the intent. The group agreed that because this table is NOT mandatory, potential costs should not be included in the fiscal impact assessment.

October 17: In Paragraph (1)(b)(A), the group suggested that the phrase "for that employee" be added to "for that shift," for clarity. The group discussed the examples used in the rule and less structured situations – such as for maintenance and repair work when a welder or employer may not know how long the welding activity will take. They also group discussed whether OR Q-2 would encourage the use of respiratory protection and discourage ventilation. No fiscal impact was anticipated.

437-002-XXXZ-- Definitions for terms used in Division 2/Q. This is another new rule that provides definitions that will apply to Division 2/Q -- filling a gap created when the federal definitions rule (1910.251) was repealed as part of the previous adoption of **437-002-2253 Oxygen-fuel gas welding and cutting**. (The Oxy Fuel rule has a definitions section, but states that they only apply to that rule, not to any other rules in the subdivision and not to other Divisions that may be referred to the Division 2 rules.) Kathleen asked the group to let her know if they thought of other definitions that should be included.

October 2: Related to the section on the standard order of testing, the group discussed whether exposure monitoring was necessary if the requirements for local exhaust ventilation in 1910.252 (100 ft. /min) is maintained. The group ultimately agreed that employers could not rely (exclusively) on local exhaust ventilation as a "safe harbor."

October 17: The group mentioned adding ozone and CO₂ to the definitions.

ROUNDTABLE DISCUSSION:

Kathleen asked each member of the group to share their thoughts about the draft language, the fiscal impact of the changes, and any suggestions they have for next steps. The following points were noted:

October 2:

- A sample written exposure control plan or some sort of templates for employers would be helpful. A primer on units of measure (micrograms vs. milligrams) should be part of that.
- Employers would likely be tempted to use the OR-Q-2 “shelter” table, and never plan to do air monitoring or to use ventilation.
- Small employers would benefit from some sort of guidance documentation for the new manganese rules, either a fact sheet or best practices. Some employers did surveys of either their groups or other group members, and found no huge fiscal impact, most employers already have things in place to help reduce general welding fume that would also “translate” to a lower Manganese PEL.
- Some small employers would consider these controls expensive.
- There is a cost associated with a respiratory protection program including respirator maintenance.
- Larger employer representatives also liked the idea of a fact sheet, and pointed out they are already implementing many of these controls. [Some group members have already provided cost estimates for the controls -- per welder to Oregon OSHA. Others stated that they would send some data to Oregon OSHA.]
- Some said that there could be a 15-20 percent increase in costs of raw materials to get a low enough manganese composition to bring exposure under the new PEL. There would also likely be an additional cost for hoods, wire, and overhead ventilation if not already in place.
- Some commended the group for their persistence and commitment to seeing through these rule changes.

October 17:

- Some stated they currently did not have any cost numbers to share, but would work on some cost numbers to send Kathleen electronically.
- Some mentioned that they are already moving toward ventilation in their company, mostly because it was difficult to get employees to shave properly for respirator use.
- Many are already in the habit of documenting exposures and retaining those records.
- Considering the cost of PAPRs, filters, lens replacement, batteries and other “consumables”, one employer estimated that they currently spend about \$3,000 per month now. (No information provided on the number of employees that covered.)
- Jeff J. brought up the idea of a phase-out date for the respirator table, to motivate employers to use engineering controls.
- The group also discussed implementation/enforcement dates and how to provide education on the new rules for employers. They requested information about what type of controls would be considered “feasible.”

Action Items:

Oregon OSHA will post the following on the Manganese PEL Advisory Committee Topic page:

- These minutes.
- Handouts that were made available at this meeting.

Kathleen thanked those who had already provided information about their workplace costs of compliance for the rule changes and reminded others who intended to do so to send their information to her electronically.

Next Meeting: To be determined, if necessary.