Agency: Department of Labor & Industries (L&I)

Effective date of rule:
Permanent Rules
☐ 31 days after filing.
☒ Other (specify) January 15, 2024. (If less than 31 days after filing, a specific finding under RCW 34.05.380(3) is required and should be stated below)

Any other findings required by other provisions of law as precondition to adoption or effectiveness of rule?
☐ Yes  ☒ No  If Yes, explain:

Purpose: In September 2020, L&I received a petition for rulemaking requesting immediate rulemaking to address the hazards associated with wildfire smoke. Wildfire smoke presents hazards that employers and workers in affected regions must understand. Smoke from wildfires contains chemicals, gases and fine particles that can harm health. Proper protective equipment, exposure controls, and training are needed for employees working in wildfire regions.

L&I issued emergency rules in the summer of 2021 and 2022, and began the permanent rulemaking process. A CR-101 (Preproposal) was filed on October 20, 2020. Prior to the issuance of the emergency rule in summer 2021, there were no regulations to address the hazard of wildfire smoke inhalation among outdoor workers in Washington State.

Created a new chapter, Chapter 296-820 WAC, Wildfire Smoke, and duplicated these new requirements into Chapter 296-307 WAC, Safety Standards for Agriculture.

WAC 296-820-805 and 296-307-09805 Purpose and scope. This section sets the scope of the rule, including exemptions.
WAC 296-820-810 and 296-307-09810 Definitions. Added applicable definitions relating to wildfire smoke, including a note on proposed revisions to the AQI from the Environmental Protection Agency (EPA).
WAC 296-820-815 and 296-307-09815 Identification of harmful exposures. This section addresses methods that can be used by the employer to determine employee exposures to PM$_{2.5}$.
WAC 296-820-820 and 296-307-09820 Hazard communication. This section requires employers to establish and implement a system for communicating wildfire smoke hazards in a form readily understandable by all affected employees, including provisions designed to encourage employees to inform the employer of wildfire smoke hazards at the worksite without fear of reprisal.
WAC 296-820-825 and 296-307-09825 Information and training. This section requires employers to provide all workers with effective information and training regarding wildfire smoke before work that exposes the worker to a PM$_{2.5}$ concentration of 20.5 µg/m$^3$ (AQI 69) or more. In addition, this training must be provided annually.
WAC 296-820-830 and 296-307-09830 Exposure symptom response. This section requires employers to:
- Monitor employees displaying symptoms of wildfire smoke exposure.
- Allow employees to seek medical assistance.
- Have effective provisions made in advance for prompt medical assistance of employees who display symptoms of wildfire smoke exposure.
- Ensure workers experiencing symptoms requiring medical attention be moved to a location that ensures sufficient clean air.
WAC 296-820-835 and 296-307-09835 Exposure controls. This section outlines when employers are implement exposure controls. This includes:
- Encouraging employers to implement exposure controls where the current PM$_{2.5}$ is 20.5 µg/m$^3$ (AQI 69) or more.
- Requiring employers to implement exposure controls where the current PM$_{2.5}$ is 35.5 µg/m$^3$ (AQI 101) or more.
WAC 296-820-840 and 296-307-09840 Respiratory protection. This section requires employers to provide respiratory protection. This includes:
- Encouraging employers to provide respirators at no cost to employees upon request where the current PM$_{2.5}$ is 20.5 µg/m$^3$ (AQI 69) to 35.4 µg/m$^3$ (AQI 100).
• Requiring employers to provide N95 filtering-facepiece respirators at no cost to all exposed employees where the current PM$_{2.5}$ is 35.5 µg/m$^3$ (AQI 101) to 250.4 µg/m$^3$ (AQI 300).
• Requiring employers to distribute N95 filtering-facepiece directly to each exposed employee where the current PM$_{2.5}$ is 250.5 µg/m$^3$ (AQI 301) to 500.3 µg/m$^3$ (AQI 499).
• Requiring employers to have employees enrolled in a complete respiratory program in accordance with chapter 296-842 WAC. Respirators, where the current PM$_{2.5}$ is 500.4 µg/m$^3$ (AQI 500) to 554.9 µg/m$^3$ (beyond the AQI). The employer must provide and require to be worn a respirator with an assigned protection factor (APF) of 25 or more, equipped with P100 filters where the current PM$_{2.5}$ is 555 µg/m$^3$ (beyond the AQI) or more.
• Requiring respirators to be NIOSH-approved devices.
• Requiring respirators to be cleaned, stored, maintained, and replaced and are in good working order.

WAC 296-820-845 and 296-307-09845 Measuring PM$_{2.5}$ levels at the worksite.
This section allows employers to use a direct-reading particulate monitor to identify harmful exposures as an alternative to WAC 296-820-815 and 296-307-09815, Identification of Harmful Exposures.
• If used, the monitor must comply with this section and the monitor cannot underestimate employee exposures to wildfire smoke; or the employer has obtained information on a possible error of the monitor and has manufacturer or published literature to account for the possible error.
• The monitor must be designed and manufactured to measure the concentration of airborne particle sizes.
• The monitor must be calibrated, maintained, and used in accordance with the manufacturer’s instructions.
• The person supervising, directing, or evaluating workplace monitoring must have the training or experience necessary to ensure the correct use of the monitor and can interpret the results.

This section includes:
• The health effects and symptoms of wildfire smoke exposure.
• The importance of informing the employer when the employee is experiencing adverse symptoms of wildfire smoke exposure.
• The right to obtain medical assistance without fear of reprisal.
• Add a table summarizing the key requirements of the adopted rule.
• How employees can obtain the current PM$_{2.5}$, and the employer’s methods to communicate the current PM$_{2.5}$.
• The employer’s response plan for wildfire smoke including methods to protect employees from wildfire smoke, and the exposure symptom response procedures.
• The importance, limitations, and benefits of using a properly fitted respirator when exposed to wildfire smoke.
• The risks and limitations of using an unfitted respirator, and the risks of wearing a respirator without a medical evaluation.
• How to properly put on, use, and maintain the respirators provided by the employer.

WAC 296-820-860 and 296-307-09860 Appendix B: Calculating the air quality index for PM$_{2.5}$ (nonmandatory).
This section provides a calculation relating to the AQI for PM$_{2.5}$.

Citation of rules affected by this order:
Repealed: 
Amended: 
Suspended: 

Statutory authority for adoption: RCW 49.17.010, 49.17.040, 49.17.050 and 49.17.060

Other authority: Chapter 49.17 RCW

PERMANENT RULE (Including Expedited Rule Making)
Adopted under notice filed as WSR 23-11-029 on May 10, 2023, (date).
Describe any changes other than editing from proposed to adopted version:
Throughout both chapters the following changes were made:
• Ensured consistent formatting of internal and external rule references.
• Ensured consistent use of “PM$_{2.5}$” and “current PM$_{2.5}$”.
• Ensured consistent use of “NowCast AQI for PM$_{2.5}$”.
• Corrected grammatical errors. Ensured consistent hyphenation of terms.
• Renumbered certain sections where the language was modified.

• Added to the list exemptions a subsection (4) relating to workers performing prescribed burns.

• Removed definition of “Adverse symptoms requiring medical attention”.
• Clarified note under “Current PM$_{2.5}$” referred to “NowCast AQI”.

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• Clarified the note relating to the recent proposed revisions to the AQI from the Environmental Protection Agency (EPA).

• Added "of public and occupational health concern" to the definition of "Wildfire smoke".

• Clarified language introducing the PM_{2.5}/AQI table to reflect that the NowCast AQI may be used to comply with the wildfire smoke rule, but it is not equivalent to the current PM_{2.5}.
• Updated table headings for clarity.

WAC 296-820-825 and 296-307-09825 Information and training.
• Clarified that the wildfire smoke response plan must include the employer’s methods of determining the current PM_{2.5}.

• Clarified employer obligations to reduce exposure to employees experiencing symptoms of wildfire smoke exposure.

WAC 296-820-835 and 296-307-09835 Exposure controls.
• Clarified "exposures to" to the language in subsection (3)(e) for clarity.

• Added "N95 filtering-facepiece" for clarity.

WAC 296-820-845 and 296-307-09845 Measuring PM_{2.5} levels at the worksite.
• Clarified that "this section" refers to WAC 296-820-845 and 296-307-09845.
• Ensured the terms "sensor" and "monitor" are used consistently.

• Rewrote, reorganized, and renumbered this section for clarity, consistency, readability, and technical accuracy.

• Deleted this section and moved the requirements to WAC 296-820-845 and 296-307-09845.

WAC 296-820-860 and 296-307-09860 Appendix C: Calculating the air quality index for PM_{2.5} (nonmandatory).
• Changed the title of this section to Appendix B.

If a preliminary cost-benefit analysis was prepared under RCW 34.05.328, a final cost-benefit analysis is available by contacting:

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Address: Department of Labor & Industries
Division of Occupational Safety and Health
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**Note:** If any category is left blank, it will be calculated as zero.
No descriptive text.

Count by whole WAC sections only, from the WAC number through the history note. A section may be counted in more than one category.

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<td>December 14, 2023</td>
<td>Joel Sacks</td>
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**Signature:**

[Signature]

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