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RULE-MAKING ORDER PERMANENT RULE ONLY

CR-103P (December 2017) (Implements RCW 34.05.360)

OFFICE OF THE CODE REVISER STATE OF WASHINGTON FILED

DATE: December 27, 2023 TIME: 10:24 AM

WSR 24-02-037

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

Effective date of rule:

- **Permanent Rules**
- □ 31 days after filing.
- Other (specify) <u>December 27, 2024</u> (If less than 31 days after filing, a specific finding under RCW 34.05.380(3) is required and should be stated below)

Purpose: L&I adopted a new Part B to chapter 296-67 WAC, Safety standards for process safety management of highly hazardous chemicals, which pertains specifically to process safety management (PSM) in petroleum refineries. The new Part B includes existing PSM requirements applicable to refineries updated with new requirements based on the best available evidence learned since the PSM rule was first adopted in 1992. Please see below for an overview of the adopted language in chapter 296-67 WAC, Part B.

Amended Section:

WAC 296-67-001 Process safety management of highly hazardous chemicals

- Updated the purpose and scope section of the current rule to identify WAC 296-67-001 through 296-67-293 as Part A of the chapter 296-67 WAC.
- Added an exemption from Part A for petroleum refineries under Part B.

New Sections:

WAC 296-67-300 Purpose and scope – Part B

- This section identifies WAC 296-67-300 through 296-67-387 as Part B of chapter 296-67 WAC that applies to petroleum refineries.
- Clarified that Part B supersedes Part A of this chapter as it relates to petroleum refineries.

WAC 296-67-307 Definitions

Included definitions for the following: Affected person, Change, Damage mechanism, Decontamination, Employee representative, Facility, Feasible, Flammable gas, Flammable liquid, Hierarchy of hazard controls, Highly hazardous chemical or material, Hot work, Human factors, Independent protection layers (IPLs), Inherent safety, Initiating cause, Isolate, Lagging indicators, Leading indicators, Major change, Must, Process, Process equipment, Process safety culture, Process safety hazard, Process safety incident, Process safety management (PSM), Process safety performance indicators, Qualified operator, Reactive substance, Recognized and generally accepted good engineering practices (RAGAGEP), Replacement-in-kind, Safeguard, Safety instrumented system, Temporary pipe or equipment repair, Toxic substance, Turnaround, and Utility.

WAC 296-67-311 Process safety management program

• Outlined the requirements employers must follow to develop and maintain an effective written process safety management program that needs to be reviewed and updated at least once every three years.

WAC 296-67-315 Employee collaboration

• Outlined the requirements employers must follow to develop and maintain a written plan to provide for employee collaboration throughout all PSM phases.

WAC 296-67-319 Process safety information

• Outlined the requirements employers must follow to develop and maintain a compilation of written process safety information before performing any PSM phase.

WAC 296-67-323 Hazard analyses

• Outlined the requirements employers must follow in order to document an effective process hazard analysis to identify and control hazards associated with each process.

WAC 296-67-327 Operating procedures

• Outlined the requirements employers must follow to develop and maintain written operating procedures. This includes minimum standards, steps of each operating phase or mode or operation, operating limits, safety and health considerations and safety systems.

WAC 296-67-331 Training

• Outlined requirements that each affected employee must be trained in an overview of the process and in applicable operating procedures, as well as being trained in an overview of the process in the hazards and safe work practices related to the process. Includes which training materials are applicable to the employee's job tasks.

WAC 296-67-335 Contractors

- Outlined requirements regarding refinery employer responsibilities when selecting a contractor. They must evaluate the contract employer's safety performance, require any contractor to use a skilled and trained workforce and must ensure the contractor informs their employees of potential process safety hazards, as well as applicable safety rules and applicable provisions of this chapter.
- Outlined requirements that the refinery employers must develop and maintain effective written procedures, periodically evaluate the performance of contractors and document that the requirements of this section are being completed by the contractor. The refinery employer must also ensure a copy of the contractor's injury and illness log is available to the Division of Occupational Safety and Health (DOSH) upon request.
- Set requirements that are the contractor's responsibility, including that a contractor must inform its employees of applicable refinery safety rules.

WAC 296-67-339 Pre-startup safety review

- Outlined requirements that the employer must perform a pre-startup safety review (PSSR) for new or modified processes, for partial or unplanned shutdowns/outages and for all turnaround work performed on a process.
- Outlined requirements that a PSSR must contain all of the requirements prior to the introduction of highly hazardous chemicals or materials to a process.
- Outlined requirements that the employer must ensure experienced operating or maintenance employees that are affected by a change are included in the PSSR, and an operating employee currently working in the process must be designated as the employee representative.

WAC 296-67-343 Mechanical integrity

 Outlined requirements that employers must ensure the mechanical integrity of process equipment by developing and maintaining effective written procedures, which must provide clear instructions for safely performing maintenance on process equipment. These documents developed under this section must be readily accessible to employees and employee representatives.

WAC 296-67-347 Damage mechanism review

 Outlined requirements that the employer must perform a damage mechanism review (DMR) for each new and existing process, as well as determine the priority order for performing DMRs. These DMRs must be revalidated every five years, and if a major change occurs on a process that a DMR exists, it must be reviewed before the change is approved. The employer must retain all DMR reports for the life of the process.

WAC 296-67-351 Hot work

• Outlined requirements that the employer must develop and maintain effective written procedures for the issuance of hot work permits, and the permit must be issued prior to the commencement of operations. The employer must also keep hot work permits on file for one year.

WAC 296-67-355 Management of change

 Outlined requirements that a written management of change (MOC) must be developed and maintained by the employer to assess and manage change of process chemicals, technology, procedures, process equipment, and facilities. Qualified personnel and appropriate methods for all MOCs must be used by the employer based on hazard, complexity and type of change. If any change that is covered in this section changes the process safety information (PSI), information must be amended timely prior to implementation of the change.

WAC 296-67-359 Management of organizational change

 Outlined that a team must be designated by the employer to perform a management of organizational change (MOOC) assessment prior to reducing staffing levels. The MOOC is needed for changes with a duration exceeding 90 calendar days affecting operations. A description of the change must be included in the written MOOC assessment, factors evaluated by the team, and the team's findings and recommendations.

WAC 296-67-363 Incident investigation – Root cause analysis

• Outlined the written procedures that the employer must develop to investigate any incident that could end in a safety incident, and how to report on it promptly. The employer must also initiate the investigation no later than 48 hours after the incident occurs, and that the report must also include a method for performing a root cause analysis.

WAC 296-67-367 Emergency planning and response

- Outlined that the employer must develop and maintain an effective emergency response plan for the entire plant in accordance with WAC 296-24-567 Employee emergency plans and fire prevention plans and also chapter 296-824 WAC, Emergency response.
- Outlined that if the incident exceeds the capability of the internal emergency response team, the written plan must detail how an emergency response would be executed.
- Outlined that the employer must document any agreement with external emergency response teams that are expected to assist in an emergency.

WAC 296-67-371 Compliance audits

- Outlined that the employer must perform an effective compliance audit every three years and must prepare a written report documenting the findings of the audit. The employer must consult with a person who has expertise and experience from each process audited and document the findings and recommendations from the consultations in the written report.
- Outlined that the employer must make the report available to employees and employee representatives, and if any written comments regarding the report are received by employees, the employer must respond in writing within 60 days. The employer must also keep the three most recent compliance audit reports.

WAC 296-67-375 Process safety culture assessment

- Outlined that the employer must develop and maintain an effective process safety culture assessment (PSCA) program, and that within 18 months following the effective date of Part B of this chapter and at least every five years thereafter, the employer must perform an effective PSCA. A team with at least one person knowledgeable with refinery operations must develop and implement a PSCA, and the team must consult with at least one other individual with expertise assessing process safety culture.
- Outlined that the employer must prioritize recommendations and implement corrective actions, with the assistance of the PSCA team, within 24 months of completing the written report. The PSCA team must perform a written assessment of the implementation and effectiveness of each corrective action within three years of completing the PSCA report. If it is found that the corrective action is ineffective, the employer must implement changes.
- Outlined that PSCA reports and corrective action plans must be made available to all affected employees within 60 calendar days of completion. Any participating contractors must provide PSCA reports and corrective action plans to their employees and employee representatives within 14 days of receipt.

WAC 296-67-379 Human factors

- Outlined that within 18 months of the effective date of Part B of this chapter, the employer must develop and maintain an effective written human factors program. The employer must also include a written analysis of human factors which must contain a description of the selected methodologies and criteria for their use.
- Outlined that the employer must assess human factors in existing procedures and revise them accordingly. 50 percent of assessments and revisions must be completed by the employer within three years of the effective date of Part B of this chapter, and 100 percent within five years.
- Outlined that the employer must include an assessment of human factors in new and revised procedures, and the employer must train affected operating and maintenance employees in the written human factors program. Also, upon request, the employer must make a copy of the written human factors report available to affected employees.

WAC 296-67-383 Corrective action program

- Outlined that the employer must develop and maintain an effective written corrective action program that includes all of the process methods included in this section. The team performing the analysis must provide all findings and recommendations to the employer. The employer may reject the team's recommendation if the employer can demonstrate in writing that the recommendation meets certain criteria.
- Outlined that if the employer can demonstrate in writing that an alternative method would provide an equivalent or higher order of safety, the employer may change the team's recommendation. When a recommendation is rejected or changed, it must be communicated to on-site and off-site team members for comment. All comments received regarding a changed or rejected recommendation must be documented.
- Outlined that the employer must complete all corrective actions and comply with all completion dates required by this section. All completion dates must be available upon request to any affected employees and employee representatives.

- Outlined, with a couple of exceptions, any corrective action that does not require a process shut down, must be completed within 30 months after the analysis or review are completed unless an employer demonstrates in writing that this isn't feasible.
- Outlined that within 18 months of the audit being completed, each corrective action from the compliance audit must be completed, unless the employer demonstrates in writing that it isn't feasible. Within 18 months of the investigation being completed, the corrective action of the incident investigation must be completed, unless the employer demonstrates in writing that it isn't feasible.
- Outlined that if a corrective action cannot be implemented within the required time limits of this section, the employer must ensure interim safeguards are sufficient in ensuring employee safety and health. The employer must document the decision and include all information required in the rule.

WAC 296-67-387 Trade secrets

- Outlined that employers must make all information available as necessary to comply with all requirements of Part B in this chapter.
- Outlined that nothing in this section precludes the employer from requiring the people to whom the information is made available under this section to enter into confidentiality agreements not to disclose the information.

Citation of rules affected by this order:

New: WAC 296-67-300, 296-67-307, 296-67-311, 296-67-315, 296-67-319, 296-67-323, 296-67-327, 296-67-331, 296-67-335, 296-67-339, 296-67-343, 296-67-347, 296-67-351, 296-67-355, 296-67-359, 296-67-363, 296-67-367, 296-67-371, 296-67-375, 296-67-379, 296-67-383, and 296-67-387 Repealed:

Amended: WAC 296-67-001

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 23-13-127 on June 21, 2023 (date).

Describe any changes other than editing from proposed to adopted version:

WAC 296-67-307 Definitions.

- Employee representative. Updated definition to include that an employee representative must be "on-site".
- Major change. Removed subsection (d) from the definition.
- **Nonroutine**. Removed this definition and placed this language in WAC 296-67-327(1)(a)(viii) and also renumbered all definitions after it. This is to ensure the rule is clear and having the term defined in the applicable section will reduce the need for a separate definition section to be referenced when trying to understand the rule.
- Process. Updated definition to include "transfer using" before "piping" to provide clarity on what activities are included in a process.
- **Qualified operator**. Updated to provide clarity on what training requirements must be met to be a qualified operated by adding a reference to WAC 296-67-331.
- **RAGAGEP**. Removed "The employer should also consider informative sources of industry practices as appropriate" from the definition. This change is consistent with Cal/OSHA's PSM refinery rule.

WAC 296-67-319 Process safety information.

- Removed "implement" from subsection (1). This change is consistent with Cal/OSHA's PSM refinery rule.
- Removed language cross-referencing the employee collaboration section of the rule to streamline the rule and remove repetitive language.

WAC 296-67-323 Hazard analyses.

 Removed language cross-referencing the employee collaboration section of the rule to streamline the rule and remove repetitive language.

WAC 296-67-327 Operating procedures.

- To provide clarity updated language regarding "nonroutine work" to "Any other operating condition not described in subsection (1)(a) of this section."
- Removed language cross-referencing the employee collaboration section of the rule to streamline the rule and remove repetitive language.

WAC 296-67-331 Training.

- Removed "including employees of contractors" from subsection (1) since contractors have their own training section. This change is consistent with Cal/OSHA's PSM refinery rule. Also added a reference to WAC 296-67-327.
- Added "affected" before "employees of contractors" in subsection (1)(b) for consistency throughout the rule.

 Removed language cross-referencing the employee collaboration section of the rule to streamline the rule and remove repetitive language.

WAC 296-67-335 Contractors.

- Removed subsection (2)(a) and adjusted numbering of the subsections under (2). This change is consistent with Cal/OSHA's PSM refinery rule. Added a reference to chapter 296-71 WAC.
- Removed "and procedures" from subsection (3)(a)(ii). This change is consistent with Cal/OSHA's PSM refinery rule.
- Removed language cross-referencing the employee collaboration section of the rule to streamline the rule and remove repetitive language.

WAC 296-67-339 Pre-startup safety review.

• Removed language cross-referencing the employee collaboration section of the rule to streamline the rule and remove repetitive language.

WAC 296-67-343 Mechanical integrity.

- Added the word "affected" in front of "employees of contractors" in subsection (1)(c) for consistency throughout the rule.
- Updated language regarding timing of inspections and tests of equipment. This change is consistent with Cal/OSHA's PSM refinery rule.
- Added "including certification, when applicable" to provide clarity that documentation required under the rule includes certifications.
- Updated language regarding temporary repairs by consolidating subsections to provide clarity and streamline the rule.
- Removed language cross-referencing the employee collaboration section of the rule to streamline the rule and remove repetitive language.

WAC 296-67-347 Damage mechanism review.

- Updated "contractor employees" to "affected employees of a contractor" in subsection (12) for consistency throughout the rule.
- Removed language cross-referencing the employee collaboration section of the rule to streamline the rule and remove repetitive language. Renumbered remaining subsection.

WAC 296-67-351 Hot work.

• Removed language cross-referencing the employee collaboration section of the rule to streamline the rule and remove repetitive language.

WAC 296-67-355 Management of change.

• Removed language cross-referencing the employee collaboration section of the rule to streamline the rule and remove repetitive language.

WAC 296-67-359 Management of organizational change.

• Removed language cross-referencing the employee collaboration section of the rule to streamline the rule and remove repetitive language.

WAC 296-67-363 Incident investigation – Root cause analysis.

• Removed language cross-referencing the employee collaboration section of the rule to streamline the rule and remove repetitive language.

WAC 296-67-367 Emergency planning and response.

• Removed language cross-referencing the employee collaboration section of the rule to streamline the rule and remove repetitive language.

WAC 296-67-371 Compliance audits.

• Removed language cross-referencing the employee collaboration section of the rule to streamline the rule and remove repetitive language.

WAC 296-67-375 Process safety culture assessment.

• Removed language cross-referencing the employee collaboration section of the rule to streamline the rule and remove repetitive language.

WAC 296-67-379 Human factors.

• Removed "in that, at a minimum, represents industry RAGAGEP relevant to" to ensure clarity. This change is consistent with Cal/OSHA's PSM refinery rule.

- Replaced "as relevant" with a cross-reference to WAC 296-67-315 to provide clarity. This change is consistent with Cal/OSHA's PSM refinery rule.
- Removed language cross-referencing the employee collaboration section of the rule to streamline the rule and remove repetitive language.

WAC 296-67-383 Corrective action program.

- Added cross-reference to WAC 296-67-355 to provide clarity on the standard that needs to be met. This change is consistent with Cal/OSHA's PSM refinery rule.
- Removed language cross-referencing the employee collaboration section of the rule to streamline the rule and remove repetitive language.

WAC 296-67-387 Trade secrets.

• Added "all requirements contained in" before Part B in subsection (1), and removed "pursuant to WAC 296-901-14018 Trade secrets" from the end of the subsection to provide clarity.

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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Other:

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.

The number of sections adopted in order to compl	ly with:								
Federal statute:	New		Amended		Repealed				
Federal rules or standards:	New		Amended		Repealed				
Recently enacted state statutes:	New		Amended		Repealed				
The number of sections adopted at the request of a nongovernmental entity:									
	New		Amended		Repealed				
The number of sections adopted on the agency's own initiative:									
	New	<u>22</u>	Amended	<u>1</u>	Repealed				
The number of sections adopted in order to clarify, streamline, or reform agency procedures:									
	New	<u>22</u>	Amended	<u>1</u>	Repealed				

The number of sections adopted using:							
Negotiated rule making:	New		Amended		Repealed		
Pilot rule making:	New		Amended		Repealed		
Other alternative rule making:	New		Amended		Repealed		
Date Adopted: December 27, 2023	S	ignature:					
Name: Joel Sacks		D_l darbs					
Title: Director		porto dez					