

Proposed Process Safety Management Requirements for Petroleum Refineries



Catastrophic events related to highly hazardous chemicals at petroleum refineries across the U.S. have tragically claimed the lives of many workers, including 13 in Washington State since 1998. Six workers died at the former Equilon refinery in Anacortes in 1998, and seven workers died at the former Tesoro Refinery in Anacortes in 2010. These tragedies led to significant discussion about what could be done to prevent them.

The Washington State Department of Labor & Industries (L&I) proposed updates to process safety management (PSM) requirements for petroleum refineries to reduce the risk of tragedy occurring again.

Proposed new refinery PSM requirements include:

- Conduct Damage Mechanism Reviews for processes that result in equipment or material degradation. Corrosion and mechanical wear are common technical causes of serious process failures.
- Conduct a Hierarchy of Hazard Controls Analysis to identify and choose the most effective hazard prevention and control measures.
- Implement a Human Factors Program, analyzing things like staffing levels, task complexity, training, fatigue and other effects of shift work.
- Develop Management of Organizational Change procedures to ensure that plant safety remains consistent during personnel changes.
- Utilize Root Cause Analysis when investigating any incident that results in, or could have reasonably resulted in, a process safety incident.

- Perform and document a Process Hazard Analysis of the effectiveness of safeguards that apply to particular processes and identify, evaluate, and control hazards associated with each process.
- Provide for employee collaboration throughout all PSM elements, maintain stop work authority, and implement an anonymous hazard report process.
- Implement an effective Process Safety Culture Assessment program to understand the values and behaviors that can prioritize process safety over production.

Stakeholder Involvement

Through 5 p.m. on Aug. 24, 2023, the public can submit written comments or testify at a public hearing:

Email: Tari.Enos@Lni.wa.gov

Mail: Tari Enos, Administrative Regulations Analyst
Department of Labor & Industries
Division of Occupational Safety and Health
PO Box 44620 Olympia, WA 98504-4620

In-Person Public Hearings

- **Aug. 10, 2023**
Four Points Sheraton, Fairhaven Room
714 Lakeway Drive, Bellingham WA 98229
 - Pre-hearing overview at 9:00 a.m.
 - Public hearing at 10:00 a.m.

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Division of Occupational Safety and Health
www.Lni.wa.gov/go/F417-303-000 | 1-800-423-7233



Washington State Department of
Labor & Industries

- **Aug. 16, 2023**
Majestic Inn & Spa
419 Commercial Ave, Anacortes WA 98221
 - Pre-hearing overview at 5:30 p.m.
 - Public hearing at 6:30 p.m.
- **Aug. 17, 2023**
Four Points Sheraton, Fairhaven Room
714 Lakeway Drive, Bellingham WA 98229
 - Pre-hearing overview at 9:00 a.m.
 - Public hearing at 10:00 a.m.

Virtual hearing

Aug. 15, 2023

- Pre-hearing overview at 12:30 p.m.
- Public hearing at 1:30 p.m.

To join electronically:

- <https://lni-wa-gov.zoom.us/j/87947049101?pwd=ejNaTy9VMWp4Qk9wR0lyc2xKS1ROUT09>
- Password (if prompted): PSM@1230

To join by phone (audio only):

- 253-215-8782 or 253-205-0468
- Meeting ID: 879 4704 9101
- Passcode: 43800387

A pre-hearing overview will occur one hour prior to the start of each public hearing.

For more information, please visit L&I's Process Safety Management Rulemaking page at www.Lni.wa.gov/safety-health/safety-rules/rulemaking-stakeholder-information/process-safety-management-psm-rulemaking.

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