

PROCESS SAFETY MANAGEMENT

Process Safety Management (PSM) is a set of OSHA regulations designed to manage hazards associated with processes involving highly hazardous chemicals. It applies to facilities that handle specific chemicals in quantities above threshold limits. The OSHA standards contains requirements for preventing or minimizing the consequences of catastrophic releases of toxic, reactive, flammable, or explosive chemicals that could lead to serious incidents such as fires, explosions, or toxic exposures.

14 Key Elements of PSM

- 1. Employee Participation: Workers must be involved in the development and implementation of PSM programs.
- 2. Process Safety Information (PSI): Maintain detailed information on chemicals, equipment, and processes.
- 3. Process Hazard Analysis (PHA): Identify and analyze potential hazards and risks.
- 4. Operating Procedures: Develop and implement written safe operating processes.
- 5. Training: Provide employees with necessary knowledge and skills.
- 6. Contractors: Evaluate and ensure contractors follow safety practices.
- 7. Pre-Startup Safety Review (PSSR): Conduct reviews before starting new or modified processes.
- 8. Mechanical Integrity: Maintain the integrity of critical equipment through inspections and testing.
- 9. Hot Work Permits: Implement safeguards against ignition sources through a formal hot work permitting process.
- 10. Management of Change (MOC): Evaluate and manage changes to processes, equipment, or procedures.
- 11. Incident Investigation: Investigate incidents promptly to identify root causes and prevent recurrence.
- 12. Emergency Planning and Response: Develop, update, and train employees on emergency response procedures.
- 13. Compliance Audits: Audit the PSM program at least every 3 years to ensure effectiveness.
- 14. Trade Secrets: Ensure access to necessary information while protecting proprietary data.

Training

OSHA mandates that employers provide training to employees involved in operating a process covered by PSM. Key requirements include:

1. Initial Training:

- a. Employees must receive training before being involved in operating a covered process.
- b. Training must cover process-specific procedures, safety and health hazards, emergency operations, and safe work practices.

2. Refresher Training

- a. Must be provided at least every three years.
- b. More frequent training may be required if there are changes in the process or if performance issues are identified.

3. Documentation

- a. Employers must document employees have received and understood the training.
- b. Records should include the employee's name, date of training, and means used to verify understanding.

4. Contractor Training

- a. Contractors working on or near covered processes must be trained on:
 - i. Hazards of the process
 - ii. Applicable safety rules
 - iii. Emergency procedures

For contractors, PSM means understanding the specific hazards of the processes you may be working near or on, following all site safety procedures, and being trained in emergency response protocols. Contractors must be aware of the risks, comply with all safety rules, and communicate effectively with site personnel to ensure safe operations.

Our training program follows OSHA 1910.119 and is designed for persons who enter and conduct work in covered process areas, involving highly hazardous chemicals. Why train? To prevents catastrophic incidents, to protects workers, the public, and the environment and to ensure compliance with federal regulations. Site specific training will also be needed.

GCSC Resources

Safety Training: 6:00am – 3:00pm / Questions? csr@mygcsc.com Process Safety Management (PSM) – A08PSM

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