



SECTION 4

CHAPTER – 27

PROCESS SAFETY MANAGEMENT OF HIGHLY HAZARDOUS CHEMICALS (PSM) POLICY

Purpose

To ensure a safe work environment in a PSM covered facility and comply with OSHA 29 CFR 1910.119, Gravity Oilfield Services will follow all PSM requirements.

Scope

This document applies to all employees who operate in environments where Highly Hazardous Chemicals are present.

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General Policies

Purpose To ensure a safe work environment in a PSM covered facility and comply with OSHA 29 CFR 1910.119, Gravity Oilfield Services will follow the requirements listed below.

Company Responsibilities

- Ensure that each employee receives at least an awareness level training in the elements of PSM. (The contract employer shall document that each employee has received and understood the required training. The contract employer shall prepare a record which contains the identity of the contract employee, the date of training and the means used to verify that the employee understood the training).
- Ensure that each employee is trained in the work practices needed to safely perform the job.
- Ensure that each employee has been instructed in the known potential fire, explosion, and toxic release hazards of the PSM covered process and the job.
- Ensure that each employee has been instructed on what to do if an emergency arises.
- Ensure that each employee follows the PSM covered facility's safety rules and safe work practices (i.e., lockout/tagout, confined space, entrance/exit control, vehicle entry, etc.).
- Advise the facility's supervisor of any unique hazards caused by the work of Gravity Oilfield Services employees. Any additional hazards found by employees will be reported immediately.

*This policy does not apply to employees performing incidental services (i.e., janitorial work, food or drink services, laundry, delivery/supply services, etc.) that do not influence the safety of the covered process.



**Preventative
release
measures**

The purpose of PSM is to prevent or minimize the consequences of a catastrophic release of toxic, reactive, flammable, or explosive chemicals.

**PSM applies to
processes which
involve:**

- chemicals at or above specific threshold quantities listed in Appendix A of 29 CFR 1910.119
 - flammable liquids or gases in quantities of 10,000 pounds or more
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PSM uses 14 elements to prevent unwanted chemical releases

PSM uses 14 elements in a systematic approach to prevent unwanted releases of highly hazardous chemicals into locations that could expose employees and others to serious hazards. The elements and key points of PSM are:

1. **Employee Participation** - Each facility must develop and implement a plan that ensures employee participation in the development of processes/procedures required by the PSM standard.
2. **Process Safety Information** - Each facility must establish an organized method for maintaining written information pertaining to chemicals used or produced by the process, technology of the process, and equipment in the process.
3. **Process Hazard Analysis** - The PHA study must identify, evaluate, and address the control of hazards involved in the process. The PHA must be revalidated every 5 years.
4. **Operating Procedures** - Each facility must develop written procedures that provide clear instructions for safely conducting activities in the process area. Procedures must be reviewed annually, and the employer shall certify that the procedures are current and accurate.
5. **Training** - Each facility must establish a training and certification process for personnel who operate equipment in the process. Refresher training and recertification is required at least every three years.
6. **Contractors** - Contractor safety performance and programs must be evaluated. Company (facility owner/operator) safety policies must be communicated to the contractors. Contractors must meet or exceed Company safety requirements.
7. **Pre-Startup Safety Review** - The PSSR must ensure that equipment for new facilities or modified facilities is properly installed, procedures are in place, hazards are identified and addressed, and affected personnel are properly trained prior to start up.
8. **Mechanical Integrity**- Requires the employer to maintain on-going mechanical integrity of the process equipment by periodic maintenance, testing and inspecting the equipment according to recognized good engineering practices and/or manufacturer's recommendations.



9. **Hot Work** - Requires the use of a permitting process for all "hot work" activities on or near a covered process.

10. **Management of Change** - Requires written procedures to manage change (except for replacement in kind) to the process chemicals, technology, equipment, and procedures.

11. **Incident Investigation** -An investigation must be initiated as soon as possible, but within 48 hours of the incident (or near miss) that resulted in (or could have reasonably resulted in) a catastrophic release of highly hazardous chemicals or flammables in the covered process. The incident investigation with corrective actions must be documented and maintained for 5 years.

12. **Emergency Planning and Response** - An emergency action plan must be established and implemented for reasonably anticipated emergency situations.

13. **Compliance Audits** - Requires the employer to certify that they have evaluated compliance with the provisions of PSM at least every three years. The two most recent audit reports must be retained.

14. **Trade Secrets**- Generally, production operations do not have processes that involve trade secrets. However, each facility should review its operations to identify if any exist.

Supervisors of a PSM covered facility are responsible for:

- Knowing and understanding the elements of PSM
- Providing PSM training for their people
- Ensuring that the elements of PSM are properly implemented
- On-going monitoring of their operations to maintain compliance

Incident Reporting

- Incidents (i.e., near misses) must be reported immediately when safe to do so

*All Gravity information is confidential