



PROCESS SAFETY MANAGEMENT FACT SHEET

What is process safety management?

The major objective of process safety management (PSM) is to prevent unwanted releases of certain “highly hazardous” chemicals into locations that could expose employees and others to serious hazards. An effective process safety management program requires a systematic approach to evaluating the whole chemical process. Using this approach, the process design, process technology, process changes, operational and maintenance activities and procedures, nonroutine activities and procedures, emergency preparedness plans and procedures, training programs, and other elements that affect the process are all considered in the evaluation.

The OSHA Process Safety Management of Highly Hazardous Chemicals Standard is found at 29 CFR 1910.119.

When does the Process Safety Management Standard apply?

The standard applies to companies that handle any of more than 130 specific toxic and reactive chemicals in quantities equal to or greater than those listed in Appendix A of the standard; it also includes flammable liquids and gases in quantities of 10,000 pounds (4,535.9 Kg) or more in a covered process.

What is a covered process?

“Process” means any activity involving a highly hazardous chemical including using, storing, manufacturing, handling, or moving such chemicals at the site, or any combination of these activities. For purposes of this definition, any group of vessels that are interconnected and separate vessels located in a way that could involve a highly hazardous chemical in a potential release are considered a single process.

What does the Process Safety Management Standard require?

The key provision of PSM is process hazard analysis (PHA)—a careful review of what could go wrong and what safeguards must be implemented to prevent releases of hazardous chemicals. Covered employers must identify those processes that pose the greatest risks and begin evaluating those first.

PSM clarifies the responsibilities of employers and contractors involved in work that affects or takes place near covered processes to ensure that the safety of both plant and contractor employees is considered. The standard also mandates written operating procedures, employee training, pre-startup safety reviews, evaluation of mechanical integrity of critical equipment and written procedures for managing change. PSM specifies a permit system for hot work; investigation of incidents involving releases or near misses of covered chemicals; emergency action plans; compliance audits at least every three years; and trade secret protection.



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Are there any exemptions?

The PSM Standard does not apply to the following:

- Retail facilities;
- Oil or gas well drilling or servicing operations;
- Normally unoccupied remote facilities;
- Hydrocarbon fuels used solely for workplace consumption as a fuel (e.g., propane used for comfort heating, gasoline for vehicle refueling), if such fuels are not a part of a process containing another highly hazardous chemical covered by this standard; or
- Flammable liquid stored in atmospheric tanks or transferred, which are kept below their normal boiling point without benefit of chilling or refrigerating and are not connected to a process.

Where can I find more information?

Please review our [Process Safety Management Subject Index](#).