



MBAA Safety Toolbox Talk

Risk Management Program and Process Safety Management

Overview

Under the authority of the Clean Air Act, the Environmental Protection Agency (EPA), and the Occupational Safety & Health Administration (OSHA), if a tank, drum, container, pipe, or other *process* at your brewery contains any of the extremely hazardous, toxic, and flammable substances listed in the Code of Federal Regulations (CFR) at [40 CFR Part 68](#) in an amount above the threshold quantity (TQ) specified for that substance, you are required to develop and implement a Risk Management Program (RMP). “Process” is defined as any activity including use, storage, manufacturing, handling, or on-site movement of regulated substances, or a combination of these activities. Like the RMP, if your brewery contains toxic and reactive highly hazardous chemicals (HHCs) that present a potential for a catastrophic event at or above the threshold quantities listed in [29 CFR 1910.119](#), you are required to develop and implement a Process Safety Management (PSM) program. Although the two programs have significant overlap, each has its own focus. The RMP standard is enforced by the EPA and is in place to protect the *environment and surrounding community* from potential hazardous chemical releases. The PSM standard is enforced by OSHA and protects *workers* from the potential of a hazardous chemical release. Another difference is that the chemicals may have different threshold quantities depending on which standard’s list you’re looking at; so, you may trigger only RMP, only PSM, or both. Anhydrous ammonia is the most common of the hazardous chemicals (TQ 10,000 lb) that breweries exceed. The following sections will provide a general overview of each program.

EPA’s Risk Management Program

A source that has more than the TQ in a *single process* must prove that their facility has implemented the RMP standard. A “*single process*” also includes any group of vessels that are interconnected, or separate vessels that are located such that a regulated substance could be involved in a potential release, i.e., ammonia refrigeration systems. The Risk Management Program standard requires an employer to include the following elements in the RMP:

1. Hazard Assessment — A documented evaluation of possible consequences of an

accidental release. This must include worst-case and alternate-case scenarios showing hospitals, schools, and other public/environmentally sensitive areas.

2. Five-Year Accident History — A list of accidental releases of the regulated substance that has occurred at the facility over the previous 5 years.
3. Release Prevention Program — SOPs, training, investigations, audits, preventive maintenance, etc., documented for each covered process.
4. Emergency Response Program — Documented procedures for informing the public and local responders of an accident/release and providing proper first aid or emergency medical treatment.
5. Submit the RMP to the EPA — Summary of the written RMP plan sent to the EPA at least every five years (6 months after major changes to process/program) using the RMPe-Submit online portal.

OSHA’s Process Safety Management

OSHA included PSM as part of their National Emphasis Program (NEP) Directive in January 2017. The directive stated that programmed inspections will be conducted in facilities that are known to, or believed to, have a risk of catastrophic releases of HHCs and unprogrammed inspections will take place in PSM-covered facilities. In order to be compliant with the PSM standard, there are 14 elements (like those of the RMP) that your brewery must prove it has addressed:

1. Employee Participation — You must develop a written program outlining how the employees will be involved in hazard analysis and other PSM elements.
2. Process Safety Information (PSI) — Employer’s process hazard information including: physical hazard data, toxicity information, operating limits, etc.
 - a. Common forms of PSI are safety data sheets (SDS) and standard operating procedures (SOP).
3. Process Hazard Analysis (PHA) — Listed scenarios of potential hazards arising from hypothetical situations.
4. Operating Procedures — Detailed process operating procedures must be developed, implemented, and maintained for each regulated process, including all phases.

5. Training — Documents must be kept showing all employees involved in working with covered processes are trained in operational/safety procedures.
6. Contractor Safety — Documentation of contractor awareness of hazards resulting from the covered process. The contractor’s safety performance, OSHA 300 logs, and periodic performance evaluations are also required.
7. Emergency Planning & Response — Facility emergency action plan and training must be a living document.
8. Pre-Startup Safety Reviews (PSSR) — Proof that equipment/construction meets the design specifications and training/PHAs have been completed.
9. Mechanical Integrity (MIT) — Documenting inspections, maintenance programs, etc.
10. Hot Work Permit — An authorization and permit program for welding, cutting, brazing near the process must be developed/maintained.
11. Management of Change (MOC) — Develop/implement detailed procedures to manage change in chemicals, equipment, technology, etc.
12. Incident Investigation — Documentation of procedures, reports, and guidelines for responding to any incident that did, or could have, occurred (near miss).
13. Compliance Safety Audits — Every 3 years documented audits of the facility’s RMP program must be completed.
14. Trade Secrets — (As needed) must be made available to any employee to perform the duties of the PSM program safely.

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[RMP links through EPA website](#)
[PSM Chemicals](#)

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THE MBAA BREWERY SAFETY
WEBSITE AT:

<http://www.mbaa.com/brewresources/brewsafety>