## **Preventing Chemical Accidents**

OSHA Process Safety Management Standard Compliance Checklist

> Process Safety Management Training from the NJ Work Environment Council



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The New Jersey Work Environment Council is an alliance of labor, community, and environmental organizations working together for safe, secure jobs and a healthy, sustainable environment. WEC links workers, communities, and environmentalists through training, technical assistance, grassroots organizing, and public policy campaigns to promote dialogue, collaboration, and joint action.

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Use this checklist to help determine employer compliance with the *Process Safety Management Standard* issued by the Occupational Safety and Health Administration. **Please note that the checklist does not include all of the standard's requirements and does not reflect all OSHA interpretations in particular situations.** 

– Doe	s the workplace have any of the following:	Υ	Ν
•	A process which involves a chemical at or above the specified threshold quantities listed in Appendix A to this section; or A process which involves a flammable liquid or gas (as defined in 1910.1200(c) of this part) on site in one location, in a quantity of 10,000 pounds (4535.9 kg) or more. Note: there are other interpretations that <i>may</i> exempt your facility from PSM coverage.		
	** IF THE WORKPLACE HAS ANY OF THESE OPERATIONS OR		

1910.119(c) Employee Participation		
<ol> <li>Does the Employer have a written plan of action regarding the implementation of the employee participation?</li> </ol>	Y	Ν
2. Does the employer consult with employees and their representatives on the conduct and development of process hazards analyses and on the development of the other elements of process safety management in this standard?	Y	Ν
3. Does the employer provide to employees and their representatives access to process hazard analyses and to all other information required to be developed under this standard?	Y	Ν

1910.119(d) Process Safety Information		
4. Has the employer completed a compilation of written process safety information before conducting any process hazard analysis required by the standard?	Y	Ν
5. Does this information include the hazards of the highly hazardous chemicals in the process (Material Safety Data Sheets may be used)?	Y	Ν
6. Does this information include the technology?	Y	Ν
7. Does this information include the equipment in the process?	Υ	Ν

1910.119(e) Process Hazard Analysis			
8. Has the employer performed an initial process hazard analysis (ha	azard Y	N	
evaluation) on processes covered by this standard?			

9. Has the employer used one or more of the following methodologies that		
are appropriate to determine and evaluate the hazards of the process:		
What-If;	Υ	Ν
What-If/Checklist;	Υ	Ν
<ul> <li>Hazard and Operability Study (HAZOP);</li> </ul>	Υ	Ν
Failure Mode and Effects Analysis (FMEA);	Υ	Ν
Fault Tree Analysis; or	Υ	Ν
• An appropriate equivalent methodology (even if not mentioned in the	Υ	Ν
standard)?		
10. Has the process hazard analysis addressed the following:		
<ul> <li>The hazards of the process;</li> </ul>	Υ	Ν
The identification of any previous incident which had a likely potential		
for catastrophic consequences in the workplace;	Υ	Ν
Engineering and administrative controls applicable to the hazards and		
their interrelationships such as appropriate application of detection	v	
methodologies to provide early warning of releases;	Y	Ν
Consequences of failure of engineering and administrative controls;	Y	Ν
Facility siting; Human factors;	T	IN
• A qualitative evaluation of a range of the possible safety and health	Y	Ν
effects of failure of controls on employees in the workplace?	-	
1. Was the process hazard analysis performed by a team with expertise in	Υ	Ν
engineering and process operations, and included at least one employee		
who has experience and knowledge specific to the process being evaluated?		
12. Did the employer establish a system to:		
<ul> <li>Promptly address the team's findings and recommendations;</li> </ul>	Y	Ν
<ul> <li>Assure that the recommendations are resolved in a timely manner and</li> </ul>	Ŷ	N
that the resolution is documented;	•	
<ul> <li>Document what actions are to be taken;</li> </ul>	Υ	Ν
<ul> <li>Complete actions as soon as possible;</li> </ul>	Ŷ	Ň
<ul> <li>Develop a written schedule of when these actions are to be</li> </ul>		
completed;	Υ	Ν
<ul> <li>Communicate the actions to operating, maintenance, and other</li> </ul>		
employees whose work assignments are in the process and who may	Υ	Ν
be affected by the recommendations or actions?		
13. Has the process hazard analysis been updated and revalidated at least	Y	Ν
every five (5) years?		
14. Does the employer have process hazards analyses and updates or	Υ	Ν
revalidations for each process?		
15. Does the employer have the documented resolution of recommendations	Υ	Ν
described in paragraph (e)(5)?		
1910.119(f) Operating Procedures		
16. Does the employer have written operating procedures for each covered		
process including steps for each operating phase:		
<ul> <li>Initial startup;</li> </ul>	Y	Ν

<ul> <li>Normal operations;</li> <li>Temporary operations;</li> <li>Emergency shutdown;</li> <li>Emergency Operations;</li> <li>Normal shutdown; and,</li> <li>Startup following a turnaround or after an emergency shutdown?</li> </ul>	Y Y Y Y Y Y	N N N N
17. Does the employer have written operating limits meeting criteria in 1910.119(f)(1)(ii)(A) -1910.119(f)(4)?	Y	Ν
18. Does the employer have operating procedures addressing special situations involved with a covered process? For example, there may need to be procedures to prevent forklift damage in a refrigerated warehouse with ammonia refrigeration equipment.	Y	Ν

1910.119(g) Training		
19. Has the employer provided to each employee presently involved in operating a process, and each employee before being involved in operating a newly assigned process, initial training in an overview of the process and in the operating procedures as specified in paragraph (f) of the standard?	Y	Ν
20. Does the training include emphasis on the specific safety and health hazards, emergency operations including shutdown, and safe work practices applicable to the employee's job tasks?	Y	Ν
21. Does training include discussion of human factors, such as excessive overtime and fatigue, and process siting, such as safe distance of control rooms or temporary maintenance facilities from processes using highly hazardous chemicals?	Y	Ν
22. Refresher training - Has the employer provided refresher training at least every three years, and more often if necessary?	Y	Ν
23. Has the employer consulted with the employees involved in operating the process to determine the appropriate frequency of refresher training?	Y	Ν
24. Training documentation - Has the employer documented that each employee has been trained and understood training?	Y	Ν

1910.119(h) Contractors Safety		
25. Did the employer, when selecting a contractor, obtain and evaluate information regarding the contract employer's safety performance and programs?	Y	Ν
26. Did the employer inform contract employers of the known potential fire, explosion, or toxic release hazards related to the contractor's work and the process?	Y	Ν
27. Did the employer explain to contract employers the applicable provisions of the emergency action plan?	Y	Ν
28. Did the employer develop and implement safe work practices?	Υ	Ν
29. Did the employer periodically evaluate the performance of contract employers?	Y	Ν

30. Did the employer maintain a contract employee injury and illness log?	Υ	Ν
31. Contract employer responsibilities - Did the contract employer assure that	Υ	Ν
each contract employee is trained?		

1910.119(i) Pre-startup Safety Review		
32. Did the employer perform a pre-startup safety review for new facilities	Υ	Ν
and for modified facilities?		

1910.119(j) Mechanical Integrity of Process Equipment		
33. Does the employer have written procedures to maintain the on-going integrity of process equipment?	Y	Ν
34. Has the employer trained each employee involved in maintaining the on- going integrity of process equipment?	Y	Ν
35. Have inspections and tests been performed on process equipment?	Υ	Ν
36. Are the frequency of inspections and tests of process equipment consistent with applicable manufacturers' recommendations and good engineering practices?	Y	Ν
37. Has the employer documented each inspection and test that has been performed on process equipment?	Y	Ν
38. Has the employer corrected deficiencies in equipment that are outside acceptable limits?	Y	Ν
39. Quality assurance - Has the employer assured that fabricated equipment is suitable for the process application for which they will be used?	Y	Ν
40. Have appropriate checks and inspections been performed to assure that equipment is installed properly and is consistent with design specifications and the manufacturer's instructions?	Y	Ν
41. Has the employer assured that maintenance materials, spare parts, and equipment are suitable for the process application for which they will be used?	Y	Ν

1910.119(k) Hot Work Permits		
42. Has the employer issued a hot work permit for hot work operations	Υ	Ν
conducted on or near a covered process?		

1910.119(I) Management of Change in Operations		
43. Has the employer established and implemented written procedures to	Y	Ν
manage changes?		
44. Do the procedures assure that the following considerations are		
addressed prior to any change:		
<ul> <li>The technical basis for the proposed change;</li> </ul>	Y	Ν
<ul> <li>Impact of change on safety and health;</li> </ul>	Y	Ν
<ul> <li>Modifications to operating procedures;</li> </ul>	Y	Ν
<ul> <li>Necessary time period for the change; and</li> </ul>	Y	Ν
Authorization requirements for the proposed change?	Y	Ν

45. Have employees involved in operating a process and maintenance and	Υ	Ν
contract employees whose job tasks will be affected by a change in the		
process been informed of, and trained in, the change prior to start-up of		
the process or affected part of the process?		

1910.119(m) Incident Investigations		
46. Has the employer investigated each incident, which resulted in, or could reasonably have resulted in, a catastrophic release of highly hazardous chemical in the workplace?	Y	Ν
47. Has an incident investigation been initiated as promptly as possible, but not later than 48 hours following the incident?	Y	Ν
48. Has the investigation team consisted of at least one person knowledgeable in the process involved, including a contract employee if the incident involved work of the contractor, and other persons with appropriate knowledge and experience?	Y	Ν
49. Have reports been prepared at the conclusion of the investigation including documented resolutions and corrective actions?	Y	Ν
50. Have reports been reviewed with all affected personnel whose job tasks are relevant to the incident findings including contract employees where applicable?	Y	Ν
51. Have incident investigation reports been retained for five years?	Y	Ν

1910.119(n) Emergency Planning and Response Programs		
52. Has the employer established and implemented an emergency action plan for the entire plant in accordance with the provisions of 29 CFR 1910.38?	Y	Ν

1910.119(o) Compliance Audits		
53. Has the employer certified that they have evaluated compliance with the provisions of this section at least every three years?	Y	Ν
54. Has the employer retained the two (2) most recent compliance audit reports?	Y	Ν

1910.119(p) Trade Secrets		
55. Has the employer made all information necessary to comply with the	Y	Ν
section available to those persons responsible for compiling the process		
safety information?		
56. Have employees and their designated representatives had access to	Υ	Ν
trade secret information contained within the process hazard analysis and		
other documents required to be developed by this standard?		