Ohio Administrative Code

Rule 3745-104-25 Program three prevention program: process hazard analysis.

Effective: August 5, 2021

[Comment: For dates of non-regulatory governmentpublications, publications of recognized organizations and associations,federal rules, and federal statutory provisions referenced in this rule, seeparagraph (C) of rule 3745-104-01 of the Administrative Code titled"Referenced materials."]

(A) The owner or operator shall perform an initial process hazard analysis (hazard evaluation) on processes covered by this chapter. The process hazard analysis shall be appropriate to the complexity of the process and shall identify, evaluate, and control the hazards involved in the process. The owner or operator shall determine and document the priority order for conducting process hazard analyses based on a rationale which includes such considerations as extent of the process hazards, number of potentially affected employees, age of the process, and operating history of the process. The process hazard analysis shall be conducted as soon as possible, but not later than June 21, 1999. Process hazards analyses completed to comply with 29 CFR 1910.119(e) are acceptable to meet requirements of this paragraph as initial process hazards analyses.

(B) The owner or operator shall use one or more of the following methodologies that are appropriate to determine and evaluate the hazards of the process being analyzed.

(1) What - if.

(2) Checklist.

(3) What - if/checklist.

(4) Hazard and operability study (HAZOP).

(5) Failure mode and effects analysis (FMEA).

(6) Fault tree analysis.

(7) An appropriate equivalent methodology.

(C) The process hazard analysis shall address the following:

(1) The hazards of the process.

(2) The identification of any previous incident which had a likely potential for catastrophic consequences.

(3) Engineering and administrative controls applicable to the hazards and their interrelationships such as appropriate application of detection methodologies to provide early warning of releases. Acceptable detection methods include process monitoring and control instrumentation with alarms, and detection hardware such as hydrocarbon sensors.

(4) Consequences of failure of engineering and administrative controls.

(5) Stationary source siting.

(6) Human factors.

(7) A qualitative evaluation of a range of the possible safety and health effects of failure of controls.

(D) The process hazard analysis shall be performed by a team with expertise in engineering and process operations that includes at least one employee who has experience and knowledge specific to the process being evaluated and one member knowledgeable in the specific process hazard analysis methodology being used.

(E) The owner or operator shall establish a system to:

(1) Promptly address the team's findings and recommendations.

(2) Assure that the recommendations are resolved in a timely manner and that the resolutios is

documented.

(3) Document what actions are to be taken.

(4) Complete actions as soon as possible.

(5) Develop a written schedule of when these actions are to be completed.

(6) Communicate the actions to operating, maintenance and other employees whose work assignments are in the process and who may be affected by the recommendations or actions.

(F) At least every five years after the completion of the initial process hazard analysis, the process hazard analysis shall be updated and revalidated by a team meeting the requirements in paragraph (D) of this rule, to assure that the process hazard analysis is consistent with the current process. Updated and revalidated process hazard analyses completed to comply with 29 CFR 1910.119(e) are acceptable to meet the requirements of this paragraph.

(G) The owner or operator shall retain process hazards analyses and updates or revalidations for each process covered by this rule, as well as the documented resolution of recommendations described in paragraph (E) of this rule for the life of the process.