

3745-104-28

**Program three prevention program: mechanical integrity.**

(A) Application. Paragraphs (B) to (F) of this rule apply to the following process equipment:

- (1) Pressure vessels and storage tanks;
- (2) Piping systems (including piping components such as valves);
- (3) Relief and vent systems and devices;
- (4) Emergency shutdown systems;
- (5) Controls (including monitoring devices and sensors, alarms, and interlocks); ~~and~~;
- (6) Pumps.

(B) Written procedures. The owner or operator shall establish and implement written procedures to maintain the on-going integrity of process equipment.

(C) Training for process maintenance activities. The owner or operator shall train each employee involved in maintaining the on-going integrity of process equipment in an overview of that process and its hazards and in the procedures applicable to the employee's job tasks to assure that the employee can perform the job tasks in a safe manner.

(D) Inspection and testing.

(1) Inspections and tests shall be performed on process equipment with procedures following recognized and generally accepted good engineering practices.

~~(2) Inspection and testing procedures shall follow recognized and generally accepted good engineering practices.~~

~~(3)~~(2) The frequency of inspections and tests of process equipment shall be consistent with applicable manufacturers' recommendations and good engineering practices, and more frequently if determined to be necessary by prior operating experience.

~~(4)~~(3) The owner or operator shall document each inspection and test that has been performed on process equipment. ~~The documentation shall that~~ identify/identifies the date of the inspection or test, the name of the person who performed the inspection or test, the serial number or other identifier of the equipment on which the inspection or test was performed, a description of the inspection or test performed, and the results of the inspection or test.

(E) Equipment deficiencies. The owner or operator shall correct deficiencies in equipment that are outside acceptable limits (defined by the process safety information in rule 3745-104-24 of the Administrative Code) before further use or in a safe and timely manner when necessary means are taken to assure safe operation.

(F) Quality assurance. The owner or operator shall do the following:

- (1) In the construction of new plants and equipment, ~~the owner or operator shall~~ assure that the equipment as it is fabricated, is suitable for the process application for which it will be used.
- (2) Perform Appropriate ~~appropriate~~ checks and inspections ~~shall be performed~~ to assure that equipment is installed properly and consistent with design specifications and the manufacturer's instructions.
- (3) ~~The owner or operator shall assure~~ Assure that maintenance materials, spare parts and equipment are suitable for the process application for which they will be used.

Effective:

Five Year Review (FYR) Dates: 4/9/2021

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Certification

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Date

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