



Ohio Administrative Code

Rule 4101:4-4-04 Steam boiler blowoff systems.

Effective: March 1, 2013

(A) The blowoff from boilers may be discharged directly to any place such as a lake, swamp, stream, sump, or open pit provided there is no hazard to life or property. Where a safe place of discharge is not available, a blowoff tank shall be used. The tank shall be designed to separate the flash steam from the water and shall be flashed to a lower pressure system or vented to the atmosphere. The vent shall be large enough to prevent a steam pressure greater than five psig in the blowoff tank. The water from the blowoff tank may be discharged into a building drain or building sewer provided the water temperature does not exceed one hundred forty degrees Fahrenheit.

(B) When a blowoff tank is elevated above the lowest point of a boiler, provisions shall be made for draining water from the boiler.

(C) The shell thickness of a blowoff tank shall be not less than one-fourth inch and shall be constructed for a pressure of not less than twenty five per cent of the allowed pressure of the boilers connected to it for boilers up to and including four hundred psig. For boiler pressure greater than four hundred psig, use "Table 4-4-04(C)" for the blowoff tank allowable pressure. Construction of the blowoff tank shall comply with section VIII, division 1, of the "ASME Boiler and Pressure Vessel Code" as referenced in rule 4101:4-3-01 of the Administrative Code and as modified in this rule.

| Maximum allowable working pressure of boiler (psig) | Blowoff tank allowable pressure (psig) |
|---|--|
| 3000 | 400 |
| 2250 | 325 |
| 1500 | 275 |
| 1000 | 200 |
| 750 | 165 |
| 500 | 125 |



(D) Blowoff piping between the boiler blowoff valve and the blowoff tank or other safe place of discharge, where the pressure is approximately atmospheric and when there are no intervening valves, shall be constructed in accordance with "Table 4-4-04(D)". All boiler blowoff pipe fittings shall be steel.

| Boiler pressure (psig) | Piping pressure (psig) |
|------------------------|------------------------|
| 1501 to 2000 | 900 |
| 901 to 1500 | 600 |
| 601 to 900 | 400 |
| 250 to 600 | 250 |
| Below 250 | 150 |

(E) In lieu of the design requirements of paragraphs (C) and (D) of this rule, the "National Board" publication entitled "NB-27, A Guide for Blowoff Vessels" as referenced in rule 4101:4-3-01 of the Administrative Code may be used for the design, construction, and arrangement of boiler blowoff equipment.