

WAC 296-307-41035 Construction and installation of dehydrators.

The vaporizer section of vaporizer-burners used for dehydrators or dryers must be located outdoors; they must be constructed and installed as follows:

(1) Vaporizer-burners must have a minimum design pressure of 250 psig with a factor safety of five.

(2) Manually operated positive shut-off valves must be located at the containers to shut off all flow to the vaporizer-burners.

(3) Minimum distances between storage containers and vaporizer-burners must be as follows:

Water capacity per container (gallons)	Minimum distances (feet)
Less than 501	10
501 to 2,000	25
Over 2,000	50

(4) The vaporizer section of vaporizer-burners must be protected by a hydrostatic relief valve. The relief valve must be located where it is not subjected to temperatures over 140°F. The start-to-discharge pressure setting must protect the components involved, and be at least 250 psig. The discharge must be directed upward and away from component parts of the equipment and away from operating personnel.

(5) Vaporizer-burners must have means for manually turning off the gas to the main burner and pilot.

(6) Vaporizer-burners must have automatic safety devices to shut off the flow of gas to the main burner and pilot in the event the pilot is extinguished.

(7) Pressure regulating and control equipment must be located or protected so that the temperatures surrounding this equipment shall not exceed 140°F.

Exception: Equipment components may be used at higher temperatures if designed to withstand such temperatures.

(8) Pressure regulating and control equipment when located downstream of the vaporizer must be designed to withstand the maximum discharge temperature of the vapor.

(9) Fusible plugs are prohibited on the vaporizer section of vaporizer-burners.

(10) Vaporizer coils or jackets must be made of ferrous metal or high temperature alloys.

(11) Equipment utilizing vaporizer-burners must have automatic shutoff devices upstream and downstream of the vaporizer section connected so as to operate in the event of excessive temperature, flame failure, and, if applicable, insufficient airflow.

[Statutory Authority: RCW 49.17.010, 49.17.040, 49.17.050, and 49.17.060. WSR 20-21-091, § 296-307-41035, filed 10/20/20, effective 11/20/20. WSR 97-09-013, recodified as § 296-307-41035, filed 4/7/97, effective 4/7/97. Statutory Authority: RCW 49.17.040, [49.17.]050 and [49.17.]060. WSR 96-22-048, § 296-306A-41035, filed 10/31/96, effective 12/1/96.]