

any water having a temperature exceeding 60°C (140°F) be discharged under pressure directly into any part of a drainage system. Pipes from boilers shall discharge by means of indirect waste piping, as determined by the Authority Having Jurisdiction or the boiler manufacturer's recommendations. Such pipes shall be permitted to be indirectly connected by discharging into an open or closed condenser or an intercepting sump of an approved type that will prevent the entrance of steam or such water under pressure into the drainage system. Closed condensers or sumps shall be provided with a vent that shall be taken off the top and extended separately, full size above the roof. Condensers and sumps shall be properly trapped at the outlet with a deep seal trap extending to within 15cm (6 in.) of the bottom of the tank. The top of the deep seal trap shall have an opening equal to 20mm (3/4 in.) located at the highest point of the trap to serve as a siphon breaker. Outlets shall be taken off from the side in such a manner as to allow a water line to be maintained that will permanently occupy not less than 1/2 the capacity of the condenser or sump. Inlets shall enter above the water line. Wearing plates or baffles shall be installed in the tank to protect the shell. The sizes of the blowoff line inlet, the water outlets, and the vent shall be as shown in Table 8-1. The contents of condensers receiving steam or hot water under pressure must pass through an open sump before entering the drainage system.

**810.2** Sumps, condensers, or intercepting tanks that are constructed of concrete shall have walls and bottom not less than 100mm (4 in.) in thickness, and the inside shall be cement plastered not less than 15mm (1/2 in.) in thickness. Condensers constructed of metal shall be not less than No. 12 U.S. standard gauge 2.77mm (0.109 in.), and such metal condensers shall be protected from external corrosion by an approved bituminous coating.

**TABLE 8-1**  
**Pipe Connections in Blowoff**  
**Condensers and Sumps**

<b>Boiler Blowoff</b>	<b>Water Outlet</b>	<b>Vent</b>
20mm*	20mm*	50mm
25mm	25mm	65mm
32mm	32mm	80mm
40mm	40mm	100mm
50mm	50mm	125mm
65mm	65mm	150mm

\*To be used only with boilers of 9m<sup>2</sup> of heating surface or less.  
SI: 1mm = 0.04 in.

**810.3** Sumps and condensers shall be provided with a suitable means of access for cleaning and shall contain a volume of not less than twice the volume of water removed from the boiler or boilers connected thereto when the normal water level of such boiler or boilers is reduced not less than 100mm (4 in.).

**810.4 Strainers.** Every indirect waste interceptor receiving discharge-containing particles that would clog the receptor drain shall have a readily removable beehive strainer.

### **811.0 Chemical Wastes.**

**811.1** Chemical or industrial liquid wastes that are likely to damage or increase maintenance costs on the sanitary sewer system, detrimentally affect sewage treatment, or contaminate surface or subsurface waters, and shall be pretreated to render them innocuous prior to discharge into a drainage system. Detailed plans and specifications of the pretreatment facilities shall be required by the Authority Having Jurisdiction.

Piping conveying industrial, chemical, or process wastes from their point of origin to sewer-connected pretreatment facilities shall be of such material and design as to adequately perform its intended function to the satisfaction of the Authority Having Jurisdiction. Drainage discharge piping from pretreatment facilities or interceptors shall conform to standard drainage installation procedures.

Copper tube and galvanized steel pipe shall not be used for chemical or industrial wastes as defined in this section.

**811.2** Each waste pipe receiving or intended to receive the discharge of any fixture into which acid or corrosive chemical is placed, and each vent pipe connected thereto, shall be constructed of Chlorinated Polyvinyl-chloride (CPVC), Polypropylene (PP), Polyvinylidene Fluoride (PVDF), chemical-resistant glass, high-silicon iron pipe, or lead pipe with a wall thickness of not less than 3mm (1/8 in.); an approved type of ceramic glazed or unglazed vitrified clay; or other approved corrosion-resistant materials.

**811.3** Joining materials shall be of approved type and quality.

**811.4** Wherever practicable, piping shall be readily accessible and installed with the maximum of clearance from other services.

**811.5** The owner shall make and keep a permanent record of the location of piping and venting carrying chemical waste.

**811.6** No chemical vent shall intersect vents for other services.

**811.7** Chemical wastes shall be discharged in a manner approved by the Authority Having Jurisdiction.