

uncovered and ventilated for at least twenty-four hours, and if a steam-boiler is available the tank shall be blown out with steam. The cleaning may be proceeded with afterwards, from the outside if possible. If cleaning is indispensable and cannot be done from the outside, unless self-contained breathing-apparatus is worn, only one workman shall be employed in any tank at one time, in which case the workman shall be secured by a rope, and shall be attended by a supervisor and another workman.

269. Outlets of adequate dimensions for ventilation shall be placed in the roof and near the bottom of every iron tank. The ventilation and blowing-out of every larger tank shall be continued until it is safe for the workmen to enter.

270. Every well in which boring has been suspended, and which produces a considerable volume of gas, shall have its outlets so constructed that gas may be conducted therefrom through pipes to prepared gasometers. No gasometers shall be constructed within 33 yards of any operative well, building containing fireplace or stove, or any public road.

271. A separate gasometer shall not be compulsory if oil and gas is conducted from a well to a separator which is more than 33 yards from any operative well, building having a fireplace or stove, or a public road.

272. If a pipe-line connects with a gas-main of equal diameter, conveying gas from another gasometer, a separate gasometer is not compulsory.

273. The above regulations do not apply to gasometers which are in existence at the time these regulations become operative. Gasometers and gas-separators shall be of adequate capacity and strength, and shall be provided with two approved safety-valves.

274. Gas-pipes from any gasometer to a boiler shall be free from oil.

275. Every pipe-line connecting any well with a gasometer or separator shall be provided near such gasometer or separator with a valve, which shall be closed in the event of the pipe-line becoming disconnected.

Heating of Steam Boilers.

276. All gas used for boiler-heating shall be dry or free from oil.

277. Gas-pipes shall be maintained in good repair and provided with valves or cocks, placed both within and without the boiler-house, in proximity to the gasometer.

278. There shall be placed in each pipe-line from the gasometer two safety wire gauzes having at least 784 apertures to 1 square inch, at each side of which there shall be valves for shutting off the supply of gas. All gauzes shall be cleaned periodically.

279. The conveyance of gas direct from any well to a boiler is prohibited.

280. After every stoppage, previous to turning on gas for steam-production in a boiler-house, a fire shall be made in the firebox to prevent the forming of an inflammable mixture of gas and air. The cock of the gas-pipe line shall be opened gradually.

281. The spraying system only shall be permitted when oil is used for heating boilers.

282. For storing fuel oil there shall be erected, at least 11 yards from the boiler-house, two tanks, one above the other, together not exceeding in capacity 7,000 gallons. In the construction of these tanks the following specification shall be observed:—

- (a.) The upper tank, from which oil flows by gravitation to the sprayer, shall be completely oiltight, and provided in the top with an opening for the escape of gas, which shall be protected with wire gauze. This tank shall be filled only through the pipe-line.
- (b.) The upper tank shall be connected to the lower tank by an overflow-pipe.
- (c.) There shall be attached to the bottom of the upper tank a sludge-pipe, which may be opened for cleaning purposes.
- (d.) The tanks shall be so arranged that the ground in the vicinity shall be kept free of oil, and that the sprayer will receive nothing but pure oil.
- (e.) The pipe through which the oil flows to the sprayer from the tank shall be kept at a suitable height above the bottom of the tank, and shall have its inlet, in the interior of the tank, protected with a wire gauze. Outside of the tank, but in proximity to it, this pipe shall be provided with a valve.
- (f.) The pipes which convey the oil and steam to the sprayer shall both be placed on the same side of the boiler. For regulating the flow of oil and steam such pipes shall be provided with valves which may be safely manipulated.
- (g.) The arrangements and connections of all oil-pipes shall permit them to be blown out with steam.
- (h.) All pipes and fittings shall be tightly joined.
- (i.) All openings in the firebox and its door, with the exception of the door of the ash-box, shall be provided with gauze safety protectors containing at least 784 apertures per square inch.
- (j.) Unless the wall of the boiler-house opposite the door of the firebox is made of fire-proof material it shall be covered with sheet iron.
- (k.) For covering spilled or burning oil there shall be kept in the boiler-house, or in proximity thereto, an adequate supply of dry sand.

Shutting off and Withdrawal of Water.

283. In every well, subterranean water shall be isolated by casing to prevent it from penetrating into the oil stratum. No casing shall be removed without written authority from the Inspector. After each permeable bed is penetrated the water therefrom shall be immediately isolated, and the method of such isolating shall be shown on the working sections. After subterranean water is isolated, if water is introduced into the borehole under pressure the well-operators of adjoining wells shall have power