

regulation shall not apply to any station in existence as at the 3rd August, 1915.

241. Every oil-pumping station shall be kept perfectly clean and adequately ventilated.

242. The doors of all buildings situated in the precincts of any well shall open outwardly.

243. Adequate light and ventilation shall be maintained in the derrick, the buildings connected therewith, and in all working-places.

244. All buildings in the precincts of any well or oil-tank shall be covered with fireproof material, and spark-arresters, not constructed of wire gauze, shall be placed on all smithy chimneys.

245. Within the precincts of any well no person shall sleep in any other than a recognized dwelling-house.

246. No person shall be admitted to any building used in connection with well operations, except on business.

247. There shall be submitted to the Inspector for his approval, not less than one month previous to the commencement of the installation of any gas or electrical motor or dynamo, unless required for lighting purposes only, complete working drawings and specifications of such installations.

248. All parts of electric installations shall be covered or otherwise protected from accidental injury.

249. Electric installations, when not specially provided for in these regulations, shall be subject to the Regulations for the Installation of Electricity, under the Mining Act, 1908.

250. There shall be attached to every gas-engine an automatic starting-device.

251. All moving and rotating parts of engines and other machinery, also all steam-pipes and electric-current conductors, shall be protected from accidental damage.

252. No inflammable material shall be used for protecting or covering steam-pipes in the vicinity of well operations.

253. All pipe-lines shall be of adequate strength, and securely jointed.

254. Workmen employed about the engine shall not wear loose-fitting outer garments.

255. Belts shall not be attached by hands to moving pulleys.

256. No person shall lubricate any machinery while in motion, except when machinery may not be adequately lubricated when stationary.

257. All engines shall be started and stopped with care, and such starting or stoppage shall be indicated by signals which may be seen or heard by the workmen employed thereon.

Oil and Gas Tanks.

258. Every oil-tank at well operations shall be efficiently protected and closed. Wooden tanks, if not sunk into the ground, shall be completely embanked with earth; the roofs of every tank shall be fireproof, and shall contain a strong fireproof and hinged door provided with a lock.

259. Iron tanks shall be encircled by a high and strong embankment, constructed at an adequate distance from such tank. The open space between embankment and tank shall be kept clean and free from obstruction.

260. The roof of each tank from which gases are not led away through pipes shall contain a ventilator, which shall be covered with a copper gauze having at least 784 apertures per square inch. The cocks and valves of the oil-outlets of every tank exceeding 3,000 gallons in capacity shall be enclosed in masonry boxes with hinged lids; every tank of such capacity shall be provided with an arrangement by which the outlet-pipe may be closed from the inside of the tank.

261. To all tanks exceeding 16 ft. in depth there shall be attached a strong iron ladder. If the roof of the tank is concave, access to the manhole shall be secured by means of iron railing.

262. Every iron tank exceeding 3,000 gallons in capacity shall be provided with a lightning-conductor, which shall be erected by a competent person.

263. Oil which has consolidated shall be heated with steam only; fire on no account shall be used.

264. A burning tank shall not be extinguished with water, but oil within the tank shall be withdrawn through the outlet-pipes to other tanks or pits. Smaller tanks or barrels, if burning, shall be covered with sand, wet sacking, or other suitable material.

265. No oil-tanks exceeding 3,000 gallons in capacity shall be constructed or placed within 40 yards of any building containing a fire, or any public road. For any smaller tank the distance shall be at least 20 yards. This regulation shall not apply to any tank in position on the 3rd August, 1915.

266. The cleaning of all tanks shall be carried out in the following manner: Wooden oil-tanks and oil-pits shall, after the extraction of the oil, be partially 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.

267. 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.

268. 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.

269. 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.

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

271. The above regulations do not apply to gasometers which are in existence on the 3rd August, 1915. Gasometers and gas-separators shall be of adequate capacity and strength, and shall be provided with two approved safety-valves.

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

273. 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.

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

275. 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.

276. There shall be placed in each pipe-line from the gasometers 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.

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

278. 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.

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

280. 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 airtight, 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 ashbox, 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 fireproof 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.