



Coffee Break Training - Fire Protection Series

Hazardous Materials: Well Drilling Operations

No. FP-2010-46 November 16, 2010

Learning Objective: The student shall be able to list special fire protection features required for petroleum well drilling operations.

While many people dream of having an oil well in their backyard to bring them riches, the environmental and fire protection risks are high.

Where operations extract crude petroleum from the earth, the following fire safety features should be employed:

- Storage tanks or boilers, fired heaters, open-flame devices, or other sources of ignition (not including engines used in drilling) should not be located within 25 feet (7,620 mm) of well heads.
- Wells should not be drilled within 75 feet (22,860 mm) of any dedicated public street, highway, or nearest rail of an operating railway.
- Wells should not be drilled within 100 feet (30,480 mm) of buildings that are not part of the well operation.
 - Wells should not be drilled within 300 feet (91,440 mm) of any buildings that contains an assembly, educational, or institutional occupancy.
- New buildings should not be constructed within these distances of existing wells.
- Liquids that contain crude petroleum or its constituents should not be discharged into or on streets, highways, drainage canals or ditches, storm drains, or flood control channels.
- Storage tanks used in conjunction with well drilling operations should meet the International Fire Code[®] or National Fire Protection Association (NFPA) 30, *Flammable and Combustible Liquids Code* requirements for tanks.
- Storage tanks should be marked with signs identifying the name of the owner or operator, or the lease information, and the telephone number where a responsible person can be reached at any time.
- If soundproofing materials are installed to minimize the impact of noise on the surrounding neighborhood, the soundproofing should be made from noncombustible materials.



Oil well drilling operations like this provide a special set of fire protection challenges.

For additional information, refer to International Fire Code[®], Chapter 34, or NFPA 30, *Flammable and Combustible Liquids Code*.



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