

Wellhead Standards




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Definitions

- "Wellhead" means the upper terminal of the well including adapters, ports, valves, seals, and other attachments (15A NCAC 02C .0100).
- "Christmas Tree" means the set of valves, spools and fittings connected to a wellhead to direct and control the flow of formation fluids from the well. (Modified from Schlumberger.)

Wellhead Equipment

- API 6A: Specification for Wellhead and Christmas tree Equipment (Reference)
- Wellhead and Christmas tree equipment must meet most recent and relevant API standards
- (Ohio) “All surface equipment must be pressure rated to withstand operating pressures to which it is subjected.”
- (15A NCAC 05D .0107 (i)): Christmas tree fittings or wellhead connections, flow lines and treating facilities, shall have a working pressure in keeping with anticipated working pressures generated by the well as determined from drillstem tests or other pressure testing procedures acceptable to the director. 

Wellhead Equipment and Operations

- (Arkansas) Wellhead equipment shall be installed and maintained so that static bottom hole pressures may be obtained at any time by the State. “Valves shall be installed so that pressures can be readily obtained on both casing and tubing.”
- Pressure gauges for surface, intermediate, production casings and for tubing for continual monitoring of mechanical integrity.

Wellhead Equipment and Operations

- (Pennsylvania) The wellhead must be equipped with a check valve to prevent backflow from the pipeline(s) into the well.
- (Pennsylvania) On completion of drilling operations, the operator shall install and use equipment (i.e. shut off valve) as may be necessary to enable the well to be effectively shut-in while logging and servicing the well after completion of well construction.

Wellhead Identification Sign

- Posted in a conspicuous location, either on or near the wellhead.
- Durable weatherproof, rustproof metal or other material approved by the Director (15A NCAC 02C.0107).
- Must remain legible at all times (Ohio).
- Must be posted within 72 hours after completion of well construction activities (15A NCAC 02C .0107).
- Equivalent sign to be posted during well construction.

Wellhead Identification Sign Characteristics

- Two-inch or larger letters
- One sign for each wellhead
- Information Needed:
 - Name of well operator(s)
 - Name of county and nearest town
 - State permit number, lease name, and well number
 - Local emergency phone number and company emergency phone number

PETROLEUM CRUDE OIL

SAFETY HAZARD

- 1 - Highly Flammable
- 2 - Flammable
- 3 - Combustible
- 4 - Non-Flammable
- 5 - Not Classifiable

FIRE HAZARD

- 1 - High Pressure
- 2 - Moderate Pressure
- 3 - Slightly Press.
- 4 - Normal Press.
- 5 - Not Classifiable

REACTIVITY

- 1 - Stable
- 2 - Stable
- 3 - Stable
- 4 - Stable
- 5 - Stable

BOCOR Producing

WELL FERGUSON #1

COUNTY STARK

TOWNSHIP CANTON

SEC. 24

PERMIT # 1676

**IN CASE OF
EMERGENCY (330) 494-1221**

Fencing Requirements

- Shall be placed no closer than ten feet to the wellhead or any portion of the tank battery.
- “Danger, Keep Out” (or similarly worded) and “No Smoking” signs shall be securely attached to each side of the outside of fencing.
- Well operator identification sign, securely attached to each side of the outside of the fencing
 - Operator name
 - Operator emergency telephone number
 - Site location street address, or nearest address to access road entrance
- The well operator shall install the fence around the wellhead, tank battery, and associated production equipment, within 30 days after well construction
- Identification sign also needed at any entrance to an access gate or at access road entrances to property.

Fence Details


- Chain link
- Minimum eight feet in height
- Nine gauge
- Topped with 3 strands of barbed wire
- Securely anchored in the ground





Fencing Requirements

- Fence Gate access required
- Any gate must be at least four feet in width
- Any gate must be lockable
- Fence must have at least one gate
- Two gates at opposite ends of the fencing for two or more tanks in battery
- Keys or combinations to fence gate locks and access road gates shall be provided to DEMLR, on request

Other Safety and Security

- (Ohio) All gates, electrical boxes and pickup-lines shall be locked unless in use, under repair, or company staff or representatives are on-site. Keys or combinations to the locks shall be provided to DEMLR and local emergency response staff on request. (Tank standards?)
- (15A NCAC 05D .0107) “Any rubbish or debris shall be disposed of so as not to constitute a fire hazard.” 

Wellhead Area

- (Ohio) “Equipment and vegetation shall be maintained consistent with reasonably prudent operations, including being free of refuse, in order to assure protection of public health or safety or to prevent damage to natural resources. “ 
- (Ohio) “Equipment not used in the production of the well shall not be stored at the well site. Replacement equipment or replaced equipment shall not be stored on-site for more than thirty (30) days.” 
- (Ohio) “...any producing equipment at the well-head and related storage tanks be protected by an earthen dike or earthen pit which shall have a capacity sufficient to contain any substances resulting, obtained, or produced in connection with the operation of the related oil or gas well.” (Addressed in tank and pit standards?)

Wellhead Area Setbacks (Ohio)

- Oil Production Tanks
 - 50 ft from public road
 - 100 ft from inhabited structures
 - 50 ft from any well
 - 3 ft between tanks
- Mechanical Separators
 - 50 ft from any well
 - 10 ft from production tanks
 - 100 ft from inhabited structures
- Refer to Environmental Standards Committee?