

Chapter 1501:9-1 Oil Well Drilling

1501:9-1-01 General provisions.

(A) Definitions. As used in Chapters 1501:9-1 to 1501:9-12 of the Administrative Code:

(1) “Access road” means any road used as primary ingress and egress to the wellhead, tank battery, and associated equipment used in the production of a well.

(2) “Active underground mine” means an underground excavation of coal or industrial minerals in any phase of the mining operation which is required to be permitted by the division of mineral resources management, regularly and routinely examined by state-certified forepersons, and inspected quarterly by mine safety inspectors of the division of mineral resources management for compliance with mine safety laws, including the active workings of a mine, any and all sealed or unsealed boreholes, shafts, drifts, slopes or any other openings to the surface, and any and all in-seam contiguous, abandoned areas physically connected to but separated by permanently constructed seals from the current active workings where miners are able to work or travel.

(3) “API” means the American petroleum institute.

(4) “Applicant” or “person” means a natural person, corporation, association, partnership, receiver, trustee, executor, administrator, guardian, fiduciary, or other representative of any kind, and includes any government or a political subdivision or agency thereof. The masculine gender, in referring to a person, includes the feminine and the neuter genders.

(5) “Annulus” means the space between a wellbore and tubulars or between tubulars where fluid can flow.

(6) “ASTM” means ASTM international, formerly known as the American society for testing and materials.

(7) “Authorized representative of the owner” means any contractor, sub-contactor or person directed by an owner or owner holding a permit, to complete any aspect of well site construction, drilling, production, and restoration.

(8) “Best Management Practices (BMPs) For Oil and Gas Well Site Construction Manual” means practices, procedures and structures used to minimize accelerated erosion from oil and gas well site construction and well site restoration outlined in the manual, dated April 30, 2005, which can be located at http://www.dnr.state.oh.us/Portals/11/oil/pdf/BMP_OIL_GAS_WELL_SITE_CONST.pdf or by contacting the division of oil and gas resources management.

(9) "Best Management Practices (BMPs) For Pre-drilling Water Sampling Manual" means methods for ground water sampling from private or public supplies using practices, processes and procedures outlined in the manual, dated April 30, 2005, which can be located at http://www.ohiodnr.com/Portals/11/oil/pdf/BMP_PRE-DRILLING_WATER_SAMPLING.pdf or by contacting the division of oil and gas resources management.

(10) "Cage" means a wire, wood, metal or similar material surrounding a wellhead.

(11) "Casing shoe test" means a pressure test conducted after drilling into the confining strata below a cemented casing string seat to evaluate pressure containment integrity and to determine the maximum fluid density that the strata can contain without breaking down.

(12) "Chief" means the chief of the division of oil and gas resources management.

(13) "Condensate" means liquid hydrocarbons that were originally in the gaseous phase in the reservoir.

(14) "Conductor casing" means one or more strings of casing set and cemented to provide a base for an air body for diversion of shallow naturally occurring natural gas including coalbed methane and to accomplish one or more of the following well construction objectives:

(a) Stabilize unconsolidated sediments;

(b) Isolate shallow aquifers that provide or are capable of providing groundwater for water wells and springs in the vicinity of the well; or

(c) Isolate groundwater before penetrating the workings of an active underground mine.

(15) "Contractor" means any third party engaged by an owner to conduct drilling, producing, and other operations.

(16) "Direct notification" means, person to person or phone contact between a well owner, owner holding a permit or their authorized representative and a division inspector and/or division field office staff. Voice mail messages are not considered direct notification.

(17) "Division" means the division of oil and gas resources management, department of natural resources.

(18) "Drilling unit" means the minimum acreage on which one or more wells may be drilled, but does not apply to a well for injecting gas into or removing gas from a gas storage reservoir.

(19) "Drive pipe" means a casing string that is driven through unconsolidated sediment to stabilize the wellbore and isolate associated groundwater.

(20) “Exempt domestic well” has the same meaning as in section 1509.01 of the Revised Code.

(21) “Field” means the general area underlaid by one or more pools.

(22) “Gas” means all natural gas and all other fluid hydrocarbons not defined below as oil, including condensate.

(23) “GPS” means global positioning system, which is a global satellite-based system for determining precise location on Earth.

(24) "Horizontal well" has the same meaning as in section 1509.01 of the Revised Code.

(25) “Inhabited structure” means any inhabited private dwelling house and any public building which may be used as a place of resort, assembly, education, entertainment, lodging, trade, manufacture, repair, storage, traffic, or occupancy by the public.

(26) “Inspector” means the person who has been designated by the chief under section 1509.03 of the Revised Code, to administer and enforce provisions of Chapter 1509. of the Revised Code or rules thereunder.

(27) “Intermediate casing” means one or more strings of casing set after surface casing has been cemented through the base of the deepest underground source of drinking water, but before drilling into the permitted hydrocarbon reservoir(s) to isolate hydrocarbon or brine bearing flow zones, stabilize the wellbore, to isolate protected groundwater if encountered after drilling below surface casing, isolate lost circulation zones or other potential geologic hazards, or serve as a base for well control equipment.

(28) “Lead cement” means the first, typically less-dense slurry pumped during primary cementing operations to seal intervals above those sealed by the tail cement and to reduce the hydrostatic pressure of the cement slurry column at the casing seat while the slurry sets.

(29) “Liner” means a string of casing set and cemented which does not extend to surface. Liners are anchored or suspended inside the previous casing string and may serve the purpose of intermediate or production casing strings.

(30) “Manager” means the operator, whether the owner or not, of a well or wells.

(31) “Map” means a graphic representation of the location and size of the existing or proposed objects it is made to represent, accurately drawn to a scale no smaller than four hundred feet to the inch.

(32) “Mine string” means a string of casing set and cemented to isolate a mine void, rubble zone, or a mined seam.

(33) “Minimum internal yield pressure” means the minimum internal pressure at which permanent casing deformation could take place assuming no external pressure.

(34) “Oil” means crude petroleum oil and all other hydrocarbons, regardless of gravity, that are produced in liquid form by ordinary production methods, but does not include liquid hydrocarbons that were originally in a gaseous phase in the reservoir.

(35) “Oil and gas” means oil or gas or both. The use of the plural includes the singular, and the use of the singular includes the plural.

(36) “Owner” means the person who has the right to drill on a tract or drilling unit and to drill into and produce from a pool and to appropriate the oil or gas that he produces therefrom either for himself or for others.

(37) “Pool” means an underground reservoir containing a common accumulation of oil or gas, or both, but does not include a gas storage reservoir. Each zone of a geological structure and each zone of a geological feature that is completely separated from any other zone in the same structure or feature may contain a separate pool.

(38) “Potable water supply” means water that is satisfactory for drinking, culinary, and domestic purposes as defined by the Ohio department of health for private water systems in paragraph (LLL) of rule 3701-28-01 of the Administrative Code.

(39) “Potential flow zone” means any zone in a well where hydrocarbons or other fluids can flow when wellbore pressure is less than pore pressure and isolation of such zones is necessary to:

- (a) Isolate hydrocarbons that may be present in testable or commercial quantities;
- (b) Prevent over-pressurization of the surface casing annulus; or
- (c) Maintain well control when drilling on fluid below the zone.

(40) “Producer” means the owner of a well capable of or producing oil or gas or both.

(41) “Production casing” means a string of casing set to isolate the permitted hydrocarbon bearing reservoir(s), and other pressurized flow or corrosive, hydrogen sulfide-bearing zones not effectively isolated by previous casing(s).

(42) “Protection of correlative rights” means administration and enforcement of these rules and regulations by the chief in such a manner as to afford reasonable opportunity to every person entitled thereto to recover and receive the oil and gas in and under his tract or tracts, or the equivalent thereof, without having to drill unnecessary wells or to incur other unnecessary expense.

(43) “Rathole” or “mousehole” means the temporary storage space that is used to store the kelly or drill pipe while adding a new section of pipe to the drill string at some rotary drilling rigs.

(44) “Rules adopted or promulgated by the chief,” “rules adopted thereunder,” “rules herein,” “applicable rules,” “these rules and regulations,” or “these rules” means all rules contained in Chapters 1501:9-1 to 1501:9-12 of the Administrative Code.

(45) “Spudding” means to begin drilling, to start the hole.

(46) “Storage protective boundary” means the line denoting the outermost protected area surrounding a storage reservoir certified by the federal energy regulatory commission (FERC), or, absent a FERC certificate, the boundary as defined by divisions (D)(2) and (E) of section 1571.01 of the Revised Code.

(47) “Surface casing” means a string of casing set and cemented to isolate and protect the deepest underground source of drinking water and to serve as a base for well control equipment.

(48) “Sustained annular pressure” means pressure in an annulus between casing strings that is measurable at the wellhead and rebuilds to at least the same shut-in pressure after pressure has been released.

(49) “Tail cement” means the last, typically higher density slurry pumped during primary cementing operations to seal the casing seat and isolate specific intervals providing faster thickening times and higher early compressive strength.

(50) "Take Point" means any point along a horizontal well where oil, gas, or oil and gas may be produced from a reservoir.

(51) “Tank battery” means any combination of oil collection tanks, brine collection tanks, and associated equipment within a containment dike.

(52) “Tract” has the same meaning as in section 1509.01 of the Revised Code.

(53) “Urbanized area” means an area where a well or production facilities of a well are located within a municipal corporation or within a township that has an unincorporated population of more than five thousand in the most recent federal decennial census prior to the issuance of the permit for the well or production facilities.

(54) “Underground source of drinking water” and “USDW” mean an aquifer or portion of an aquifer that supplies any public water system or that contains a sufficient quantity of groundwater to supply a public water system, and currently supplies drinking water for

human consumption, or that contains fewer than ten thousand milligrams per liter total dissolved solids and is not an exempted aquifer.

(55) “Vault” means a structure normally made of concrete surrounding the wellhead, recessed into the ground, all or portion that is placed below ground surfaces.

(56) “Waste” means and includes:

- (a) Physical waste, such as the term is understood generally in the oil and gas industry;
- (b) Inefficient, excessive, or improper use, or the unnecessary dissipation of reservoir energy;
- (c) Inefficient storing of oil or gas;
- (d) Locating, drilling, equipping, operating, or producing an oil or gas well in a manner that reduces or tends to reduce the quantity of oil or gas ultimately recoverable under prudent and proper operation from the pool into which it is drilled, or that causes or tends to cause unnecessary or excessive surface loss or destruction of oil or gas; and
- (e) Other underground or surface waste in the production, transportation, or storage of oil, gas, or condensate, however caused.

(57) “Well” has the same meaning as in section 1509.01 of the Revised Code.

(58) “Well integrity” means the quality or condition of a well being structurally sound with competent pressure seals by the application of technical and operational solutions that prevent uncontrolled fluid release or migration of annular fluids into protected groundwater throughout the well life cycle.

(59) “Well site construction” means any activity by an owner holding a permit, well owner or the owners authorized representative to build the access roads, prepare the drill site location for the drilling rig or tank battery and associated equipment and restoration of the well site.