

## ARTICLE 16. OIL AND GAS

### Rule 1. Definitions

#### 312 IAC 16-1-1 Definitions

Authority: IC 14-37-3

Affected: IC 14-37

Sec. 1. The definitions in this rule apply throughout this article. *(Natural Resources Commission; 312 IAC 16-1-1; filed Feb 23, 1998, 11:30 a.m.: 21 IR 2326; readopted filed Nov 17, 2004, 11:00 a.m.: 28 IR 1315; filed May 25, 2006, 3:15 p.m.: 29 IR 3348)*

#### 312 IAC 16-1-2 "Abandon" defined

Authority: IC 14-37-3

Affected: IC 14-37

Sec. 2. "Abandon" means to:

(1) terminate operations of a well for oil and gas purposes; and

(2) to reclaim and restore the site of the well in a manner that will protect the waters and lands of the state against pollution.

*(Natural Resources Commission; 312 IAC 16-1-2; filed Feb 23, 1998, 11:30 a.m.: 21 IR 2326; readopted filed Nov 17, 2004, 11:00 a.m.: 28 IR 1315)*

#### 312 IAC 16-1-2.5 "Active underground mine" defined

Authority: IC 14-37-3

Affected: IC 14-34; IC 14-37

Sec. 2.5. "Active underground mine" means an underground coal mine permitted under IC 14-34 that is currently producing coal. *(Natural Resources Commission; 312 IAC 16-1-2.5; filed May 25, 2006, 3:15 p.m.: 29 IR 3348)*

#### 312 IAC 16-1-3 "Administrator" defined

Authority: IC 14-37-3

Affected: IC 14-37

Sec. 3. "Administrator" means:

(1) the administrator of the United States Environmental Protection Agency; or

(2) an authorized representative.

*(Natural Resources Commission; 312 IAC 16-1-3; filed Feb 23, 1998, 11:30 a.m.: 21 IR 2326; readopted filed Nov 17, 2004, 11:00 a.m.: 28 IR 1315)*

#### 312 IAC 16-1-4 "Annulus" defined

Authority: IC 14-37-3

Affected: IC 14-37

Sec. 4. "Annulus" means the space between:

(1) the well bore wall and a string of casing;

(2) two (2) strings of casing; or

(3) tubing and the innermost casing.

*(Natural Resources Commission; 312 IAC 16-1-4; filed Feb 23, 1998, 11:30 a.m.: 21 IR 2326; readopted filed Nov 17, 2004, 11:00 a.m.: 28 IR 1315)*

#### 312 IAC 16-1-5 "Aquifer" defined

Authority: IC 14-37-3

Affected: IC 14-37

Sec. 5. "Aquifer" means a geological formation, group of formations, or a part of a formation that can yield a significant amount of water to a well or spring. *(Natural Resources Commission; 312 IAC 16-1-5; filed Feb 23, 1998, 11:30 a.m.: 21 IR 2326; readopted filed Nov 17, 2004, 11:00 a.m.: 28 IR 1315)*

**312 IAC 16-1-6 "Bridge" defined**

Authority: IC 14-37-3

Affected: IC 14-37

Sec. 6. "Bridge" means natural or manmade material placed above the bottom of a bore hole. *(Natural Resources Commission; 312 IAC 16-1-6; filed Feb 23, 1998, 11:30 a.m.: 21 IR 2326; readopted filed Nov 17, 2004, 11:00 a.m.: 28 IR 1315)*

**312 IAC 16-1-7 "Class II well" defined**

Authority: IC 14-37-3

Affected: IC 14-37

Sec. 7. "Class II well" means a well that injects fluids:

(1) that are brought to the surface in connection with conventional oil or gas production and can be commingled with wastewaters (other than wastewaters classified as hazardous waste at the time of injection) from gas plants that are an integral part of production operations;

(2) for the enhanced recovery of oil or gas; or

(3) for the storage of hydrocarbons that are liquid at standard temperature and pressure.

*(Natural Resources Commission; 312 IAC 16-1-7; filed Feb 23, 1998, 11:30 a.m.: 21 IR 2327; readopted filed Nov 17, 2004, 11:00 a.m.: 28 IR 1315)*

**312 IAC 16-1-8 "Commercially mineable coal resource" defined**

Authority: IC 14-37-3

Affected: IC 14-37

Sec. 8. "Commercially mineable coal resource" means a seam of coal that is:

(1) at least thirty-six (36) inches thick; and

(2) located no more than eight hundred (800) feet below the surface.

*(Natural Resources Commission; 312 IAC 16-1-8; filed Feb 23, 1998, 11:30 a.m.: 21 IR 2327; readopted filed Nov 17, 2004, 11:00 a.m.: 28 IR 1315)*

**312 IAC 16-1-9 "Commission representative" defined**

Authority: IC 14-37-3

Affected: IC 14-37; IC 14-38

Sec. 9. "Commission representative" means an employee of the division who is authorized by the commission to perform the powers and duties set forth in IC 14-37, IC 14-38, and the rules adopted under those articles. Each inspector is a commission representative. *(Natural Resources Commission; 312 IAC 16-1-9; filed Feb 23, 1998, 11:30 a.m.: 21 IR 2327; readopted filed Nov 17, 2004, 11:00 a.m.: 28 IR 1315)*

**312 IAC 16-1-9.5 "Completed zone" defined**

Authority: IC 14-37-3

Affected: IC 14-37

Sec. 9.5. "Completed zone" means a geologic formation in which production, injection, gas storage, gas storage observation, or water supply was established. *(Natural Resources Commission; 312 IAC 16-1-9.5; filed Aug 6, 2004, 12:00 p.m.: 27 IR 3881; readopted filed Nov 17, 2004, 11:00 a.m.: 28 IR 1315)*

**312 IAC 16-1-10 "Confining zone" defined**

Authority: IC 14-37-3

Affected: IC 14-37

Sec. 10. "Confining zone" means a stratum or group of strata that prevent the vertical migration of fluid above the injection zone. (*Natural Resources Commission; 312 IAC 16-1-10; filed Feb 23, 1998, 11:30 a.m.: 21 IR 2327; readopted filed Nov 17, 2004, 11:00 a.m.: 28 IR 1315*)

**312 IAC 16-1-11 "Deputy director" defined**

Authority: IC 14-37-3

Affected: IC 14-9-3-1; IC 14-37

Sec. 11. "Deputy director" refers to the deputy director for the bureau of mine reclamation established under IC 14-9-3-1. (*Natural Resources Commission; 312 IAC 16-1-11; filed Feb 23, 1998, 11:30 a.m.: 21 IR 2327; readopted filed Nov 17, 2004, 11:00 a.m.: 28 IR 1315*)

**312 IAC 16-1-12 "Directional drilling" defined**

Authority: IC 14-37-3

Affected: IC 14-37

Sec. 12. "Directional drilling" means the controlled directional drilling whereby the bottom of the well bore is directed away from the vertical position. (*Natural Resources Commission; 312 IAC 16-1-12; filed Feb 23, 1998, 11:30 a.m.: 21 IR 2327; readopted filed Nov 17, 2004, 11:00 a.m.: 28 IR 1315*)

**312 IAC 16-1-13 "Disposal well" defined**

Authority: IC 14-37-3

Affected: IC 14-37

Sec. 13. "Disposal well" means a Class II well that injects fluids that are brought to the surface in connection with conventional oil or natural gas production and may be commingled with wastewaters from gas plants that are an integral part of production operations unless those waters are classified as hazardous waste at the time of injection. (*Natural Resources Commission; 312 IAC 16-1-13; filed Feb 23, 1998, 11:30 a.m.: 21 IR 2327; readopted filed Nov 17, 2004, 11:00 a.m.: 28 IR 1315*)

**312 IAC 16-1-14 "Division" defined**

Authority: IC 14-37-3

Affected: IC 14-9-4-1; IC 14-37

Sec. 14. "Division" refers to the division of oil and gas established under IC 14-9-4-1(15). (*Natural Resources Commission; 312 IAC 16-1-14; filed Feb 23, 1998, 11:30 a.m.: 21 IR 2327; readopted filed Nov 17, 2004, 11:00 a.m.: 28 IR 1315*)

**312 IAC 16-1-15 "Division director" defined**

Authority: IC 14-37-3

Affected: IC 14-37

Sec. 15. "Division director" refers to the director of the division of oil and gas. (*Natural Resources Commission; 312 IAC 16-1-15; filed Feb 23, 1998, 11:30 a.m.: 21 IR 2327; readopted filed Nov 17, 2004, 11:00 a.m.: 28 IR 1315*)

**312 IAC 16-1-16 "Enhanced recovery well" defined**

Authority: IC 14-37-3

Affected: IC 14-37

Sec. 16. "Enhanced recovery well" means a well that is used to inject fluid under pressure into a geological formation for the enhancement of oil or gas production. (*Natural Resources Commission; 312 IAC 16-1-16; filed Feb 23, 1998, 11:30 a.m.: 21 IR 2327; readopted filed Nov 17, 2004, 11:00 a.m.: 28 IR 1315*)

**312 IAC 16-1-17 "Established Trenton limestone reservoir" defined**

Authority: IC 14-37-3

Affected: IC 14-37

Sec. 17. "Established Trenton limestone reservoir" means any reservoir of Ordovician age in an area that is within one (1) mile of a well that has produced oil or natural gas in commercial quantities from the Trenton formation. (*Natural Resources Commission; 312 IAC 16-1-17; filed Feb 23, 1998, 11:30 a.m.: 21 IR 2327; readopted filed Nov 17, 2004, 11:00 a.m.: 28 IR 1315*)

**312 IAC 16-1-18 "Exempted aquifer" defined**

Authority: IC 14-37-3

Affected: IC 14-37

Sec. 18. "Exempted aquifer" is an aquifer or a portion of an aquifer that is an underground source of drinking water, but has been exempted under 312 IAC 16-5-8. (*Natural Resources Commission; 312 IAC 16-1-18; filed Feb 23, 1998, 11:30 a.m.: 21 IR 2328; readopted filed Nov 17, 2004, 11:00 a.m.: 28 IR 1315*)

**312 IAC 16-1-19 "Existing injection well" defined**

Authority: IC 14-37-3

Affected: IC 14-37

Sec. 19. "Existing injection well" means a Class II well in operation as an injection well before January 1, 1990. (*Natural Resources Commission; 312 IAC 16-1-19; filed Feb 23, 1998, 11:30 a.m.: 21 IR 2328; readopted filed Nov 17, 2004, 11:00 a.m.: 28 IR 1315*)

**312 IAC 16-1-19.5 "Facility" defined**

Authority: IC 14-37-3

Affected: IC 14-37

Sec. 19.5. "Facility" means an oil and gas exploration or production operation contained within a single lease or group of leases communitized into a single operating unit. (*Natural Resources Commission; 312 IAC 16-1-19.5; filed Sep 11, 2000, 3:31 p.m.: 24 IR 278; readopted filed Nov 17, 2004, 11:00 a.m.: 28 IR 1315*)

**312 IAC 16-1-20 "Field" defined**

Authority: IC 14-37-3

Affected: IC 14-37

Sec. 20. "Field" means a group of pools that are related to a single geologic feature, either by structure or stratigraphy. (*Natural Resources Commission; 312 IAC 16-1-20; filed Feb 23, 1998, 11:30 a.m.: 21 IR 2328; readopted filed Nov 17, 2004, 11:00 a.m.: 28 IR 1315*)

**312 IAC 16-1-21 "Fluid" defined**

Authority: IC 14-37-3

Affected: IC 14-37

Sec. 21. "Fluid" means a material or substance that flows or moves. (*Natural Resources Commission; 312 IAC 16-1-21; filed Feb 23, 1998, 11:30 a.m.: 21 IR 2328; readopted filed Nov 17, 2004, 11:00 a.m.: 28 IR 1315*)

**312 IAC 16-1-21.5 "Fluid contaminated with oil or saltwater" defined**

Authority: IC 14-37-3

Affected: IC 14-37

Sec. 21.5. "Fluid contaminated with oil or saltwater" means a fluid that contains:

(1) oil, as defined at section 37 of this rule; or

(2) saltwater, as defined at section 43.5 of this rule.

A fluid is contaminated with saltwater if the total dissolved solids content of a representative sample of the fluid is greater than seven hundred fifty (750) milligrams per liter. (*Natural Resources Commission; 312 IAC 16-1-21.5; filed Sep 11, 2000, 3:31 p.m.: 24 IR 278; errata filed Dec 6, 2000, 10:12 a.m.: 24 IR 1032; readopted filed Nov 17, 2004, 11:00 a.m.: 28 IR 1315*)

**312 IAC 16-1-22 "Formation" defined**

Authority: IC 14-37-3

Affected: IC 14-37

Sec. 22. "Formation" means a body of consolidated or unconsolidated rock characterized by a degree of lithographic homogeneity that is mappable on the earth's surface or traceable in the subsurface. (*Natural Resources Commission; 312 IAC 16-1-22; filed Feb 23, 1998, 11:30 a.m.: 21 IR 2328; readopted filed Nov 17, 2004, 11:00 a.m.: 28 IR 1315*)

**312 IAC 16-1-23 "Fresh water" defined**

Authority: IC 14-37-3

Affected: IC 14-37

Sec. 23. "Fresh water," for purposes of identifying an underground source of drinking water, means water that contains no more than ten thousand (10,000) milligrams per liter of total dissolved solids. (*Natural Resources Commission; 312 IAC 16-1-23; filed Feb 23, 1998, 11:30 a.m.: 21 IR 2328; readopted filed Nov 17, 2004, 11:00 a.m.: 28 IR 1315*)

**312 IAC 16-1-24 "Gas" defined**

Authority: IC 14-37-3

Affected: IC 14-37

Sec. 24. "Gas" means natural gas unless otherwise specified. (*Natural Resources Commission; 312 IAC 16-1-24; filed Feb 23, 1998, 11:30 a.m.: 21 IR 2328; readopted filed Nov 17, 2004, 11:00 a.m.: 28 IR 1315*)

**312 IAC 16-1-25 "Gas storage observation well" defined**

Authority: IC 14-37-3

Affected: IC 14-37

Sec. 25. "Gas storage observation well" means a well used in conjunction with an underground gas storage reservoir to observe and measure the presence, movement, pressure, kind, and amount of formation fluids by physical, electrical, or geophysical methods. (*Natural Resources Commission; 312 IAC 16-1-25; filed Feb 23, 1998, 11:30 a.m.: 21 IR 2328; readopted filed Nov 17, 2004, 11:00 a.m.: 28 IR 1315*)

**312 IAC 16-1-26 "Gas storage well" defined**

Authority: IC 14-37-3

Affected: IC 14-37

Sec. 26. "Gas storage well" means a well used for the injection of gas into or the withdrawal of gas from an underground gas storage reservoir. (*Natural Resources Commission; 312 IAC 16-1-26; filed Feb 23, 1998, 11:30 a.m.: 21 IR 2328; readopted filed Nov 17, 2004, 11:00 a.m.: 28 IR 1315*)

**312 IAC 16-1-27 "Geological or structure test well" defined**

Authority: IC 14-37-3

Affected: IC 14-37

Sec. 27. "Geological or structure test well" means a nonproduction well drilled to investigate geologic, structural, or hydrogeologic stratigraphic intervals. (*Natural Resources Commission; 312 IAC 16-1-27; filed Feb 23, 1998, 11:30 a.m.: 21 IR 2328; readopted filed Nov 17, 2004, 11:00 a.m.: 28 IR 1315*)

**312 IAC 16-1-28 "Ground water" defined**

Authority: IC 14-37-3

Affected: IC 14-37

Sec. 28. "Ground water" means all water occurring beneath the surface of the ground regardless of location. (*Natural Resources Commission; 312 IAC 16-1-28; filed Feb 23, 1998, 11:30 a.m.: 21 IR 2328; readopted filed Nov 17, 2004, 11:00 a.m.: 28 IR 1315*)

**312 IAC 16-1-28.3 "Inactive underground mine" defined**

Authority: IC 14-37-3

Affected: IC 14-34-19; IC 14-37

Sec. 28.3. "Inactive underground mine" means an underground coal mine within the jurisdiction of IC 14-34, except an abandoned coal mine under the jurisdiction of IC 14-34-19 that is not currently producing coal. (*Natural Resources Commission; 312 IAC 16-1-28.3; filed May 25, 2006, 3:15 p.m.: 29 IR 3348*)

**312 IAC 16-1-28.5 "Indiana department of environmental management" or "IDEM" defined**

Authority: IC 14-37-3

Affected: IC 13-13-1; IC 14-37

Sec. 28.5. "Indiana department of environmental management" or "IDEM" means the agency established under IC 13-13-1. (*Natural Resources Commission; 312 IAC 16-1-28.5; filed Sep 11, 2000, 3:31 p.m.: 24 IR 278; readopted filed Nov 17, 2004, 11:00 a.m.: 28 IR 1315*)

**312 IAC 16-1-29 "Injection well" defined**

Authority: IC 14-37-3

Affected: IC 14-37

Sec. 29. "Injection well" means a well into which fluids are injected. (*Natural Resources Commission; 312 IAC 16-1-29; filed Feb 23, 1998, 11:30 a.m.: 21 IR 2328; readopted filed Nov 17, 2004, 11:00 a.m.: 28 IR 1315*)

**312 IAC 16-1-30 "Injection zone" defined**

Authority: IC 14-37-3

Affected: IC 14-37

Sec. 30. "Injection zone" means a geological formation, group of formations, or part of a formation receiving fluids through a well. (*Natural Resources Commission; 312 IAC 16-1-30; filed Feb 23, 1998, 11:30 a.m.: 21 IR 2329; readopted filed Nov 17, 2004, 11:00 a.m.: 28 IR 1315*)

**312 IAC 16-1-31 "Inspector" defined**

Authority: IC 14-37-3

Affected: IC 14-37

Sec. 31. "Inspector" refers to an oil and gas inspector of the department. (*Natural Resources Commission; 312 IAC 16-1-31;*

*filed Feb 23, 1998, 11:30 a.m.: 21 IR 2329; readopted filed Nov 17, 2004, 11:00 a.m.: 28 IR 1315)*

**312 IAC 16-1-31.2 "Intermediate string of casing" defined**

Authority: IC 14-37-3

Affected: IC 14-37

Sec. 31.2. "Intermediate string of casing" means a length of pipe set below the surface casing string, but before the production casing is run, to isolate one (1) or more zones. *(Natural Resources Commission; 312 IAC 16-1-31.2; filed May 25, 2006, 3:15 p.m.: 29 IR 3348)*

**312 IAC 16-1-31.5 "Lease" defined**

Authority: IC 14-37-3

Affected: IC 14-37

Sec. 31.5. "Lease" means the property from which an owner may produce oil or gas. *(Natural Resources Commission; 312 IAC 16-1-31.5; filed Sep 11, 2000, 3:31 p.m.: 24 IR 278; readopted filed Nov 17, 2004, 11:00 a.m.: 28 IR 1315)*

**312 IAC 16-1-32 "Log" defined**

Authority: IC 14-37-3

Affected: IC 14-37

Sec. 32. "Log" means a systematic, written record that describes the strata and formations progressively encountered while drilling a well for oil and gas purposes, including water, oil, gas formations, and other underground resources. The term includes data usually recorded during drilling. *(Natural Resources Commission; 312 IAC 16-1-32; filed Feb 23, 1998, 11:30 a.m.: 21 IR 2329; readopted filed Nov 17, 2004, 11:00 a.m.: 28 IR 1315)*

**312 IAC 16-1-32.5 "Mine floor" defined**

Authority: IC 14-37-3

Affected: IC 14-37

Sec. 32.5. "Mine floor" means the upper surface of a stratum underlying a coal seam, whether or not the coal seam has been extracted. *(Natural Resources Commission; 312 IAC 16-1-32.5; filed May 25, 2006, 3:15 p.m.: 29 IR 3348)*

**312 IAC 16-1-32.6 "Mine plan" defined**

Authority: IC 14-37-3

Affected: IC 14-37

Sec. 32.6. "Mine plan" means a map filed under 312 IAC 16-5-4(b) by a person having title or legal interest showing the land on which a commercially mineable coal resource exists. *(Natural Resources Commission; 312 IAC 16-1-32.6; filed May 25, 2006, 3:15 p.m.: 29 IR 3348)*

**312 IAC 16-1-33 "Mud-laden fluid" defined**

Authority: IC 14-37-3

Affected: IC 14-37

Sec. 33. "Mud-laden fluid" means a mixture that is predominantly water and clay, but may contain fabricated additives. *(Natural Resources Commission; 312 IAC 16-1-33; filed Feb 23, 1998, 11:30 a.m.: 21 IR 2329; readopted filed Nov 17, 2004, 11:00 a.m.: 28 IR 1315)*

**312 IAC 16-1-34 "Natural gas" defined**

Authority: IC 14-37-3

Affected: IC 14-37

Sec. 34. "Natural gas" means hydrocarbons that, when produced in a natural state from an underground reservoir, maintain a gaseous state at atmospheric conditions. *(Natural Resources Commission; 312 IAC 16-1-34; filed Feb 23, 1998, 11:30 a.m.: 21 IR 2329; readopted filed Nov 17, 2004, 11:00 a.m.: 28 IR 1315)*

**312 IAC 16-1-35 "New injection well" defined**

Authority: IC 14-37-3

Affected: IC 14-37

Sec. 35. "New injection well" means a Class II well that begins operation as an injection well after December 31, 1989. *(Natural Resources Commission; 312 IAC 16-1-35; filed Feb 23, 1998, 11:30 a.m.: 21 IR 2329; readopted filed Nov 17, 2004, 11:00 a.m.: 28 IR 1315)*

**312 IAC 16-1-36 "Noncommercial gas well" defined**

Authority: IC 14-37-3

Affected: IC 14-37

Sec. 36. "Noncommercial gas well" means a gas well permitted under IC 14-37 from which all gas produced must be consumed exclusively by the operator or owner of the property where the well is located. *(Natural Resources Commission; 312 IAC 16-1-36; filed Feb 23, 1998, 11:30 a.m.: 21 IR 2329; readopted filed Nov 17, 2004, 11:00 a.m.: 28 IR 1315)*

**312 IAC 16-1-37 "Oil" defined**

Authority: IC 14-37-3

Affected: IC 14-37

Sec. 37. "Oil" means all liquid petroleum produced at a well. *(Natural Resources Commission; 312 IAC 16-1-37; filed Feb 23, 1998, 11:30 a.m.: 21 IR 2329; readopted filed Nov 17, 2004, 11:00 a.m.: 28 IR 1315)*

**312 IAC 16-1-38 "Operator" defined**

Authority: IC 14-37-3

Affected: IC 14-8-2; IC 14-37

Sec. 38. "Operator" refers to a person:

(1) issued a permit under this article; or

(2) engaging in an activity for which a permit is required under this article.

*(Natural Resources Commission; 312 IAC 16-1-38; filed Feb 23, 1998, 11:30 a.m.: 21 IR 2329; readopted filed Nov 17, 2004, 11:00 a.m.: 28 IR 1315)*

**312 IAC 16-1-39 "Owner" defined**

Authority: IC 14-37-3

Affected: IC 14-37

Sec. 39. "Owner" means a person who has the right to drill into and produce from a pool and to appropriate the oil and gas produced from the pool for:

(1) the person or others; or

(2) the person and others.

*(Natural Resources Commission; 312 IAC 16-1-39; filed Feb 23, 1998, 11:30 a.m.: 21 IR 2329; readopted filed Nov 17, 2004, 11:00 a.m.: 28 IR 1315)*



**312 IAC 16-1-39.5 "Permanent plugback" defined**

Authority: IC 14-37-3

Affected: IC 14-37

Sec. 39.5. "Permanent plugback" means a mechanical or cement plug placed between the completed zones of an active oil or gas related well. (*Natural Resources Commission; 312 IAC 16-1-39.5; filed Aug 6, 2004, 12:00 p.m.: 27 IR 3881; readopted filed Nov 17, 2004, 11:00 a.m.: 28 IR 1315*)

**312 IAC 16-1-39.6 "Permit boundary" defined**

Authority: IC 14-37-3

Affected: IC 14-34; IC 14-37

Sec. 39.6. "Permit boundary" means that area on which mining operations will affect the ground surface or in which underground mine workings are, or will be, located as designated on the maps approved by the division of reclamation as a part of the mining permit issued under IC 14-34. (*Natural Resources Commission; 312 IAC 16-1-39.6; filed May 25, 2006, 3:15 p.m.: 29 IR 3349*)

**312 IAC 16-1-39.8 "Pillar" defined**

Authority: IC 14-37-3

Affected: IC 14-37

Sec. 39.8. "Pillar" means a column of coal or rock remaining after removal of coal for the purpose of supporting the overlying strata and materials. (*Natural Resources Commission; 312 IAC 16-1-39.8; filed May 25, 2006, 3:15 p.m.: 29 IR 3349*)

**312 IAC 16-1-40 "Plug" defined**

Authority: IC 14-37-3

Affected: IC 14-37

Sec. 40. "Plug" means to stop the flow of water, oil, or gas into or from a formation through a bore hole or well penetrating that formation. (*Natural Resources Commission; 312 IAC 16-1-40; filed Feb 23, 1998, 11:30 a.m.: 21 IR 2329; readopted filed Nov 17, 2004, 11:00 a.m.: 28 IR 1315*)

**312 IAC 16-1-41 "Pollution" defined**

Authority: IC 14-37-3

Affected: IC 14-37

Sec. 41. "Pollution" means an artificial or artificially induced alteration of the chemical, physical, biological, or radiological properties of the water. (*Natural Resources Commission; 312 IAC 16-1-41; filed Feb 23, 1998, 11:30 a.m.: 21 IR 2329; readopted filed Nov 17, 2004, 11:00 a.m.: 28 IR 1315*)

**312 IAC 16-1-42 "Pool" defined**

Authority: IC 14-37-3

Affected: IC 14-37

Sec. 42. "Pool" means an accumulation of oil or natural gas that occurs in a separate underground reservoir under a single pressure system. (*Natural Resources Commission; 312 IAC 16-1-42; filed Feb 23, 1998, 11:30 a.m.: 21 IR 2330; readopted filed Nov 17, 2004, 11:00 a.m.: 28 IR 1315*)

**312 IAC 16-1-43 "Reservoir" defined**

Authority: IC 14-37-3

Affected: IC 14-37

Sec. 43. "Reservoir" means an underground geological formation that contains oil or natural gas. (*Natural Resources Commission; 312 IAC 16-1-43; filed Feb 23, 1998, 11:30 a.m.: 21 IR 2330; readopted filed Nov 17, 2004, 11:00 a.m.: 28 IR 1315*)

**312 IAC 16-1-43.5 "Saltwater" defined**

Authority: IC 14-37-3

Affected: IC 14-37

Sec. 43.5. "Saltwater" means water that is brought to the surface in connection with conventional oil or gas production or wastewater (other than wastewaters classified as hazardous waste) from gas plants that are an integral part of production operations. The term includes fluids contaminated with saltwater. (*Natural Resources Commission; 312 IAC 16-1-43.5; filed Sep 11, 2000, 3:31 p.m.: 24 IR 278; readopted filed Nov 17, 2004, 11:00 a.m.: 28 IR 1315*)

**312 IAC 16-1-43.7 "Secondary containment structure" defined**

Authority: IC 14-37-3

Affected: IC 14-37

Sec. 43.7. "Secondary containment structure" means a structure specifically constructed to contain a spill of crude oil or saltwater for a period of no less than seventy-two (72) hours. (*Natural Resources Commission; 312 IAC 16-1-43.7; filed Sep 11, 2000, 3:31 p.m.: 24 IR 278; readopted filed Nov 17, 2004, 11:00 a.m.: 28 IR 1315*)

**312 IAC 16-1-44 "Sonic cement bond-variable density log" defined**

Authority: IC 14-37-3

Affected: IC 14-37

Sec. 44. "Sonic cement bond-variable density log" means a written record produced by an acoustic tool that contains, at a minimum, sonic transit time curve and an amplitude curve and variable density display. (*Natural Resources Commission; 312 IAC 16-1-44; filed Feb 23, 1998, 11:30 a.m.: 21 IR 2330; readopted filed Nov 17, 2004, 11:00 a.m.: 28 IR 1315*)

**312 IAC 16-1-44.5 "Spill" defined**

Authority: IC 14-37-3

Affected: IC 14-37; IC 14-38

Sec. 44.5. "Spill" means any unexpected, unintended, abnormal, or unapproved dumping, leakage, drainage, seepage, discharge, or other loss of crude oil or saltwater from any operation governed by IC 14-37 or IC 14-38. (*Natural Resources Commission; 312 IAC 16-1-44.5; filed Sep 11, 2000, 3:31 p.m.: 24 IR 279; readopted filed Nov 17, 2004, 11:00 a.m.: 28 IR 1315*)

**312 IAC 16-1-44.6 "Static well" defined**

Authority: IC 14-37-3

Affected: IC 14-37

Sec. 44.6. "Static well", for purposes of 312 IAC 16-5-19, means a well in which the liquid level in the well bore, after two (2) tests on the well performed in the presence of a division representative and conducted at least eighteen (18) hours apart using comparable acoustic measuring devices, has changed no more than the lesser of:

- (1) ten percent (10%) of the distance between the bottom of the hole and the top of the fluid column, taken from the first test; or
- (2) ninety (90) feet.

(*Natural Resources Commission; 312 IAC 16-1-44.6; filed Aug 6, 2004, 12:00 p.m.: 27 IR 3881; readopted filed Nov 17, 2004, 11:00 a.m.: 28 IR 1315*)

**312 IAC 16-1-45 "Stratum" defined**

Authority: IC 14-37-3

Affected: IC 14-37

Sec. 45. "Stratum" means a single sedimentary bed or layer, regardless of thickness, that consists of generally homogeneous rock material. *(Natural Resources Commission; 312 IAC 16-1-45; filed Feb 23, 1998, 11:30 a.m.: 21 IR 2330; readopted filed Nov 17, 2004, 11:00 a.m.: 28 IR 1315)*

**312 IAC 16-1-45.5 "Tank bottoms" defined**

Authority: IC 14-37-3

Affected: IC 14-37

Sec. 45.5. "Tank bottoms" means fluids, consisting primarily of emulsified oil, bottom sediments, and water, from stock tanks that are a part of primary field operations. *(Natural Resources Commission; 312 IAC 16-1-45.5; filed Sep 11, 2000, 3:31 p.m.: 24 IR 279; readopted filed Nov 17, 2004, 11:00 a.m.: 28 IR 1315)*

**312 IAC 16-1-46 "Total dissolved solids" defined**

Authority: IC 14-37-3

Affected: IC 14-37

Sec. 46. "Total dissolved solids" means the total dissolved (filterable) solids as determined by use of the method specified in 40 CFR 136. *(Natural Resources Commission; 312 IAC 16-1-46; filed Feb 23, 1998, 11:30 a.m.: 21 IR 2330; readopted filed Nov 17, 2004, 11:00 a.m.: 28 IR 1315)*

**312 IAC 16-1-47 "Tubing" defined**

Authority: IC 14-37-3

Affected: IC 14-37

Sec. 47. "Tubing" means a string of pipe set within a cased well through which fluid is produced or injected. *(Natural Resources Commission; 312 IAC 16-1-47; filed Feb 23, 1998, 11:30 a.m.: 21 IR 2330; readopted filed Nov 17, 2004, 11:00 a.m.: 28 IR 1315)*

**312 IAC 16-1-48 "Underground gas storage reservoir" defined**

Authority: IC 14-37-3

Affected: IC 14-37

Sec. 48. "Underground gas storage reservoir" means a subsurface formation that is geologically arranged and situated for the injection, retention, and subsequent withdrawal of gas. *(Natural Resources Commission; 312 IAC 16-1-48; filed Feb 23, 1998, 11:30 a.m.: 21 IR 2330; readopted filed Nov 17, 2004, 11:00 a.m.: 28 IR 1315)*

**312 IAC 16-1-49 "Underground source of drinking water" defined**

Authority: IC 14-37-3

Affected: IC 14-37

Sec. 49. "Underground source of drinking water" means an aquifer or a portion of an aquifer, other than an exempted aquifer, that:

- (1) presently supplies fresh water to any user; or
- (2) contains a sufficient quantity of fresh water to supply a future user.

*(Natural Resources Commission; 312 IAC 16-1-49; filed Feb 23, 1998, 11:30 a.m.: 21 IR 2330; readopted filed Nov 17, 2004, 11:00 a.m.: 28 IR 1315)*

**312 IAC 16-1-50 "Waste" defined**

Authority: IC 14-37-3

Affected: IC 14-37

Sec. 50. "Waste" includes the following:

(1) Locating, spacing, drilling, equipping, operating, or producing a well for oil and gas purposes drilled after March 13, 1947, in any manner that:

(A) reduces or tends to reduce the quantity of oil or gas ultimately to be recovered from any well in this state; or

(B) violates the spacing provisions adopted by the commission under IC 14-37 and this article.

(2) Storing oil in earthen reservoirs except in an emergency to prevent the total loss of that oil.

(3) Producing oil or gas in a manner that will cause water channeling or zoning.

(4) Injecting fluids into a stratum or part of a stratum capable of producing oil or gas, except in accordance with the terms of a permit for a Class II well issued under this article.

(5) Allowing water other than fresh water to flow from any producing horizon located in a producing pool, except in accordance with the terms of a permit issued under this article.

(6) Allowing gas from a well that produces only gas to escape into the atmosphere, except as is necessary while making or changing connections, completing the well, or reconditioning the well.

*(Natural Resources Commission; 312 IAC 16-1-50; filed Feb 23, 1998, 11:30 a.m.: 21 IR 2330; readopted filed Nov 17, 2004, 11:00 a.m.: 28 IR 1315)*

**312 IAC 16-1-50.5 "Waters of the state" defined**

Authority: IC 14-37-3

Affected: IC 14-37

Sec. 50.5. "Waters of the state" means such accumulations of water, surface and underground, natural and artificial, public and private, or parts thereof, which are wholly or partially within, flow through, or border upon this state, but the term does not include any private pond, or any off-stream pond, reservoir, or facility built for reduction or control of pollution or cooling of water prior to discharge unless the discharge therefrom causes or threatens to cause water pollution. *(Natural Resources Commission; 312 IAC 16-1-50.5; filed Sep 11, 2000, 3:31 p.m.: 24 IR 279; readopted filed Nov 17, 2004, 11:00 a.m.: 28 IR 1315)*

**312 IAC 16-1-51 "Well for oil and gas purposes" defined**

Authority: IC 14-37-3

Affected: IC 14-37

Sec. 51. "Well for oil and gas purposes" means a hole drilled, deepened, or converted for any purposes for which a permit is required under IC 14-37 and the rules adopted under that article, including the following:

(1) An oil or natural gas well.

(2) A Class II well under the underground injection control program promulgated under Part C of the Safe Drinking Water Act (Public Law 95-523, as amended by Public Law 96-502, 42 U.S.C. 300f et seq.) and under 40 CFR 124, 40 CFR 144, 40 CFR 145, and 40 CFR 146.

(3) A structure test well.

(4) A well used for the sole purpose of supplying water for the secondary recovery of petroleum resources.

(5) An underground gas storage well or underground gas storage observation well.

*(Natural Resources Commission; 312 IAC 16-1-51; filed Feb 23, 1998, 11:30 a.m.: 21 IR 2331; readopted filed Nov 17, 2004, 11:00 a.m.: 28 IR 1315)*

**312 IAC 16-1-52 "Workable limits" defined**

Authority: IC 14-37-3

Affected: IC 14-37

Sec. 52. "Workable limits" means the boundary of the coal resource that can be mined using current mining technology.

*(Natural Resources Commission; 312 IAC 16-1-52; filed May 25, 2006, 3:15 p.m.: 29 IR 3349)*

## **Rule 2. General Provisions**

### **312 IAC 16-2-1 Forms**

Authority: IC 14-37-3

Affected: IC 14-37

Sec. 1. The division shall prescribe and prepare forms required under this article and shall furnish copies to any interested person upon request. *(Natural Resources Commission; 312 IAC 16-2-1; filed Feb 23, 1998, 11:30 a.m.: 21 IR 2331; readopted filed Nov 17, 2004, 11:00 a.m.: 28 IR 1315)*

### **312 IAC 16-2-2 Severability of rules**

Authority: IC 14-37-3

Affected: IC 14-37

Sec. 2. If any word, phrase, sentence, or other portion of a rule under this article is declared invalid, that declaration shall not affect the remaining portions and parts of the rule and this article. *(Natural Resources Commission; 312 IAC 16-2-2; filed Feb 23, 1998, 11:30 a.m.: 21 IR 2331; readopted filed Nov 17, 2004, 11:00 a.m.: 28 IR 1315)*

### **312 IAC 16-2-3 Informal hearings**

Authority: IC 14-37-3-16

Affected: IC 4-21.5; IC 4-22-2; IC 14-37

Sec. 3. (a) A person may file with the commission a written request for an informal hearing to consider a matter that assists in the administration of the division. The request may seek to do any of the following:

- (1) Amend a rule in this article.
- (2) Modify a commission order.
- (3) Review a pending permit application.
- (4) Revise the location of known commercially mineable coal resources.
- (5) Secure other lawful relief as provided under IC 14-37-3-16.

The written request shall set forth the relief sought and identify in particular or by class the persons who would be affected.

(b) Where a request for an informal hearing is filed under subsection (a), the division director shall conduct appropriate proceedings and make written proposed findings and a recommended order for disposition of the matter. An informal hearing under this section shall be conducted in a manner that will facilitate public participation and is not governed by the rules of evidence or discovery.

(c) Notification of an informal hearing shall be made by the division by first class mail, publication, or both, reasonably calculated to inform affected persons of the time, place, and purpose of the hearing. Where an informal hearing is scheduled to consider a Class II well permit or permit application, notification of that hearing shall be provided to the same persons identified under 312 IAC 16-3-2(j) with respect to an application for a Class II well permit.

(d) An order resulting from an informal hearing under this section is subject to administrative review under IC 4-21.5 and 312 IAC 3-1, except an order with respect to rule adoption, which is subject to review under IC 4-22-2.

(e) Nothing in this section shall prohibit the commission from holding or authorizing an informal hearing on its own initiative. *(Natural Resources Commission; 312 IAC 16-2-3; filed Feb 23, 1998, 11:30 a.m.: 21 IR 2331; readopted filed Nov 17, 2004, 11:00 a.m.: 28 IR 1315)*

## **Rule 3. Permits**

### **312 IAC 16-3-1 Permit required**

Authority: IC 14-37-3

Affected: IC 4-21.5-3-6; IC 14-37

Sec. 1. (a) A person may not drill, deepen, operate, or convert a well for oil and gas purposes without a permit issued by the division under IC 14-37 and this rule.

(b) No person may commence drilling, construction, operation, or conversion of a Class II well except in conformance with this rule.

(c) The original or a copy of the permit must be posted by the operator at the well site before drilling, deepening, or operating a well. (*Natural Resources Commission; 312 IAC 16-3-1; filed Feb 23, 1998, 11:30 a.m.: 21 IR 2331; readopted filed Nov 17, 2004, 11:00 a.m.: 28 IR 1315*)

### **312 IAC 16-3-2 Permit applications**

Authority: IC 14-37-3

Affected: IC 4-21.5; IC 14-34; IC 14-37; IC 25-39-1.5

Sec. 2. (a) This section establishes general application requirements for a permit to:

- (1) drill;
- (2) deepen;
- (3) operate; or
- (4) convert;

a well for oil and gas purposes or conduct a geophysical survey.

(b) An application for a permit to:

- (1) drill;
- (2) deepen;
- (3) operate; or
- (4) convert;

a well for oil and gas purposes or conduct a geophysical survey shall be made on a division form.

(c) A permit application must be signed by:

- (1) the person designated as the owner or operator on the application; or
- (2) an authorized agent.

Upon a request by the division, a person who signs as an agent for an owner or operator must furnish satisfactory evidence of authority.

(d) An applicant shall remit with the application a permit fee of two hundred fifty dollars (\$250) in cash, by check, or by draft, payable to the department of natural resources. However, a person may apply for an expedited review of the application for a permit except for a Class II or noncommercial gas well by submitting a permit fee of seven hundred fifty dollars (\$750).

(e) This subsection describes the surveying requirements for a permit application as follows:

(1) Except as otherwise provided in this subsection, an application must be accompanied by a survey showing the location of the proposed well for oil and gas purposes, giving the:

- (A) quarter, quarter, quarter section, township, range, county, lot number;
- (B) block of the recorded plat if the land is platted;
- (C) three (3) nearest boundary lines of the tract;
- (D) distance in two (2) directions from a corner of the tract of land upon which the well is to be drilled and from the nearest quarter post or lot corner; and
- (E) UTM coordinates accurate to within four (4) meters of the actual location on the ground.

A registered Indiana land surveyor must certify the survey with respect to the information required under this subdivision.

(2) With respect to a Class II well, or a noncommercial gas well, in addition to the requirements set forth in subdivision (1), the survey must include the permit number, location, and state the depth of the following:

- (A) Each well for oil and gas purposes located within one-fourth ( $\frac{1}{4}$ ) mile of the proposed well (including abandoned and nonoperational wells) that intersect the injection or production zone.
- (B) Each water well recorded with the department under IC 25-39-1.5 located within one-fourth ( $\frac{1}{4}$ ) mile of the proposed Class II well location.

(3) Information of public record and information that should have been known to the applicant must be included under this subsection. This subsection does not apply to an existing injection well unless otherwise ordered by the department.

(f) In addition to the general requirements for a permit application provided in this section, an application for a permit for a

Class II well must be accompanied by the following:

- (1) A schematic diagram of the well showing the following:
  - (A) The total depth of the plugback of the well.
  - (B) The depth of the injection or disposal interval.
  - (C) The geological name of the injection or disposal zone.
  - (D) The geological name, thickness, and description of the confining zone.
  - (E) The vertical distance separating the uppermost extremity of the injection zone from the base of the lowest underground source of drinking water.
  - (F) The depths of the tops and the bottoms of the casing and the cement to be used in a well.
  - (G) The size of the casing and tubing and the depth of the packer.
  - (H) The depth to the base of the lowermost underground source of drinking water.
- (2) If the well has been drilled, a copy of the completion report and any available geophysical log of the well.
- (3) Proposed operating data as follows:
  - (A) The geological name, depth, and location of the injection fluid source.
  - (B) A standard laboratory analysis of a representative sample of water to be injected under the proposed Class II permit.
  - (C) The location and description of each underground source of drinking water through which the well would pass.
  - (D) A description of the current or proposed casing program, including the following:
    - (i) Casing size, weight, and type.
    - (ii) Cement volume and type.
    - (iii) Packer type.
    - (iv) Type of completion for the well and the proposed method for testing casing.
  - (E) The proposed maximum injection rate and pressure. The owner or operator shall limit injection pressure to either a value:
    - (i) that does not exceed a maximum injection pressure at the wellhead calculated to assure that the pressure during injection does not initiate new fractures or propagate existing fractures in the confining zone adjacent to an underground source of drinking water and will not cause the movement or injection of fluids into an underground source of drinking water; or
    - (ii) for wellhead pressure calculated by using the following formula:

$$P_{\max} = (0.8 \text{ psi/ft} - (.433 \text{ psi/ft} (S_g)))d$$

Where:

$P_{\max}$	=	Maximum injection pressure (psia).
$S_g$	=	Specific gravity of the injected fluid.
$d$	=	Depth to the top of the injection zone in feet.

- (g) A bond required in 312 IAC 16-4-1 must accompany a permit application.

(h) If a drilling unit, lease, or tract of land is communitized for exploration or development, the original or a certified copy of the communitization agreement or declaration of pooling must accompany the initial permit application made under that agreement or declaration. An application for a subsequent permit must identify the:

- (1) agreement or declaration; and
- (2) permit number of the initial permit.

(i) With respect to an application for a Class II well, or a noncommercial gas well, an applicant must serve a written notification describing the proposed well personally or by certified mail on each of the following persons, if the described property is located within one-fourth ( $\frac{1}{4}$ ) mile of the proposed well:

- (1) The owner or operator of each well for oil and gas purposes, including a well having temporary abandonment status under 312 IAC 16-5-20 or not yet in production.
- (2) The permittee of an underground mine permitted under IC 14-34.
- (3) The person who files a mine plan under 312 IAC 16-5-4(b) through 312 IAC 16-5-4(g) showing the workable limits for a proposed underground mine.
- (4) Each owner of rights to surface or subsurface property that the well penetrates.

(j) The notification required under subsection (i) shall specify that a person who wishes to object to issuance of the permit may, within fifteen (15) days of receipt of the notification, submit written comments or request an informal hearing before the commission under 312 IAC 16-2-3. The notification shall include the address to which written comments or the hearing request must be forwarded and where additional information may be obtained.

(k) In addition to the notification required under subsection (i), the division shall cause a notice of a permit application to be placed in a newspaper of general circulation in the county where the proposed well is located. The notice must include the following:

- (1) The name and address of the applicant.
- (2) The location of the proposed well.
- (3) The geological name and depth of the injection zone.
- (4) The maximum injection pressure.
- (5) The maximum rate of barrels each day.

The notice shall specify that a person who wishes to object to issuance of the permit may, within fifteen (15) days of publication of the notification, submit written comments or request an informal hearing before the department. The notification shall include the address to which the written comments or hearing requests must be forwarded, how a person may receive written notice of the proceedings, and where additional information concerning the proposed permit can be obtained.

(l) Proof of service of the notification required in subsection (i) must be delivered to the division before a permit for a Class II well can be issued.

(m) A person may file a written request for an informal hearing under 312 IAC 16-2-3 within fifteen (15) days after the notification required under subsections (i) through (k) to consider an objection to a permit.

(n) No permit shall be issued for a Class II well or a noncommercial gas well:

- (1) until eighteen (18) days after service of any notification required under subsections (i) through (k); or
- (2) if a hearing is requested under subsection (m), until the division director makes a determination with respect to the objection.

Upon issuance of the permit, IC 4-21.5 and 312 IAC 3-1 apply.

(o) Upon notification by the division that the requirements of this section are satisfied, an owner or operator may act upon a permit. (*Natural Resources Commission; 312 IAC 16-3-2; filed Feb 23, 1998, 11:30 a.m.: 21 IR 2332; filed Jan 16, 2003, 10:52 a.m.: 26 IR 1896; readopted filed Nov 17, 2004, 11:00 a.m.: 28 IR 1315; filed Jan 7, 2005, 2:00 p.m.: 28 IR 1682*)

### **312 IAC 16-3-3 Permit issuance and denial**

Authority: IC 14-37-3

Affected: IC 4-21.5-3-6; IC 14-37

Sec. 3. (a) Except as provided in subsection (b), if an applicant for a permit complies with IC 14-37 and this article, the department shall issue a permit.

(b) The division may deny a permit to any person who has:

- (1) had a permit revoked under section 9 of this rule; or
- (2) been issued a notice of violation and failed to abate the violation within sixty (60) days after the deadline for abatement, unless the person has requested an administrative adjudication of the notice of violation, and a final determination has not been rendered by the commission.

(*Natural Resources Commission; 312 IAC 16-3-3; filed Feb 23, 1998, 11:30 a.m.: 21 IR 2333; readopted filed Nov 17, 2004, 11:00 a.m.: 28 IR 1315*)

### **312 IAC 16-3-4 Permit modification; amendment**

Authority: IC 14-37-3

Affected: IC 4-21.5; IC 14-37

Sec. 4. (a) The department may, subject to IC 4-21.5, require modification of a permit for a well for oil and gas purposes for any of the following causes:

- (1) The owner or operator requests or agrees to a modification.
- (2) There are material and substantial alterations or additions to the permitted facility or activity that occurred after permit issuance justifying the application of permit conditions that are different or absent in the original permit.
- (3) The department has received information that the cumulative effects on the environment resulting from the permitted well are unacceptable.
- (4) The statutes or rules upon which the permit was based have changed by amendment or by a reported judicial decision.
- (5) The director determines good cause exists for the modification of a compliance schedule as a result of events over which



the owner or operator has little or no control and for which no other remedy is practicable.

(6) The department determines good cause exists for the revocation of a permit under section 9 of this rule, but, upon a recommendation by the division director, finds that a modification is appropriate to effectuation of the purposes of IC 14-37.

(b) An owner or operator may, before drilling is commenced, file an amended permit application, with the original permit attached, seeking to change a well location. The division may issue an amended permit if the modified well placement:

- (1) would be located on the original lease;
- (2) does not affect a person who would have been entitled to notification had the modified location been included in the original permit application, but who was not notified of the original application; and
- (3) does not significantly change how a person entitled to notification would be affected.

*(Natural Resources Commission; 312 IAC 16-3-4; filed Feb 23, 1998, 11:30 a.m.: 21 IR 2334; readopted filed Nov 17, 2004, 11:00 a.m.: 28 IR 1315)*

### **312 IAC 16-3-5 Permit duration**

Authority: IC 14-37-3

Affected: IC 4-21.5-3-5; IC 14-37

Sec. 5. (a) A permit for a well for oil and gas expires one (1) year from the date of issuance unless the drilling of the well has commenced.

(b) A permit for a Class II well is effective for the life of the well unless the permit is voided, revoked, expired, or otherwise terminated under this rule.

(c) The division shall review each Class II well at least once every five (5) years to determine whether the operation of the well meets the requirements of IC 14-37 and this article. *(Natural Resources Commission; 312 IAC 16-3-5; filed Feb 23, 1998, 11:30 a.m.: 21 IR 2334; readopted filed Nov 17, 2004, 11:00 a.m.: 28 IR 1315)*

### **312 IAC 16-3-6 Continuation of an existing injection well not subsequently issued a permit as a Class II well**

Authority: IC 14-37-3

Affected: IC 14-37

Sec. 6. (a) An existing injection well, that has not been issued a federal permit as a Class II well, but was issued a permit by the department as a well for oil and gas purposes before January 1, 1990, may continue normal operations until the division:

- (1) has conducted a file review of the well; or
- (2) has notified the owner or operator to cease injection.

(b) An owner or operator of an injection well authorized under this section must, upon request by the division, provide the following information:

- (1) Facility name and location.
- (2) Name and address of owner or operator.
- (3) Ownership of facility.
- (4) Nature and type of injection well.
- (5) Operating status of injection well.

This subsection does not require an owner or operator to resubmit well information previously supplied by the owner or operator to the division.

(c) An owner or operator must notify the division, orally or in writing, within twenty-four (24) hours concerning any condition resulting from the operation of a well authorized under this section that may endanger health or the environment. A written notification must also be provided within five (5) days of when the owner or operator becomes aware of the condition. The written notification must describe the condition and its cause. If the condition has not been corrected, the written notification must also state how long the condition is expected to continue and how the owner or operator will correct the condition.

(d) An owner or operator shall not exceed a maximum injection pressure at the wellhead, which shall be calculated to assure that the pressure during injection does not initiate new fractures or propagate existing fractures in the confining zone adjacent to an underground source of drinking water.

(e) An owner or operator shall monitor the nature of the injected fluids with a sufficient frequency to yield data representative of their characteristics. The results of monitoring shall be summarized on a quarterly report to the division and shall include any major

changes in characteristics or sources of injected fluids.

(f) For a Class II well, an owner or operator shall demonstrate mechanical integrity under 312 IAC 16-5-15 upon a written schedule provided by the division.

(g) The division may order a well authorized under this section to be repermited as a Class II well where necessary for the protection of an underground source of drinking water.

(h) Nothing in this section shall relieve an owner or operator from compliance with the requirements of the permit issued by the division. *(Natural Resources Commission; 312 IAC 16-3-6; filed Feb 23, 1998, 11:30 a.m.: 21 IR 2334; readopted filed Nov 17, 2004, 11:00 a.m.: 28 IR 1315)*

### **312 IAC 16-3-7 Continuation of federal Class II permits**

Authority: IC 14-37-3

Affected: IC 14-37

Sec. 7. (a) A person who was issued a federal permit for a Class II well before the adoption of this rule may continue to operate the Class II well after the adoption date. Continued operation of a Class II well after the adoption date subjects the person to the requirements of this rule.

(b) Where an injection well or enhanced recovery well is authorized under Subpart C of the Underground Injection Control Program (40 CFR 144.21 through 144.28), any federal terms or conditions placed on an owner or operator under Subpart C bind the owner or operator and may be enforced as if ordered by the department under this article.

(c) The terms of the federal permit issued under Subpart D of the Underground Injection Control Program (40 CFR 144.31 through 144.41) bind the owner or operator and may be enforced as if issued by the department under this article. *(Natural Resources Commission; 312 IAC 16-3-7; filed Feb 23, 1998, 11:30 a.m.: 21 IR 2335; readopted filed Nov 17, 2004, 11:00 a.m.: 28 IR 1315)*

### **312 IAC 16-3-8 Permit transfer**

Authority: IC 14-37-3-1

Affected: IC 4-21.5; IC 14-37

Sec. 8. (a) This section establishes the requirements for the transfer of a permit issued by the department for a well for oil and gas purposes.

(b) An owner or operator must provide notice, in advance, to the division of the intention to transfer a permit to another person. The notification shall be completed on a division form.

(c) A person must submit the following with an application for a permit transfer:

(1) A bond required in 312 IAC 16-4-1.

(2) A fee of fifteen dollars (\$15) payable to the department for each well. However, if an applicant submits more than fifty (50) applications simultaneously, the transfer for each application in excess of fifty (50) is ten dollars (\$10).

(d) The department shall grant approval of a permit transfer except upon a written finding that sets forth at least one (1) of the following factors with respect to the person who seeks to receive transfer of the permit (or an officer, partner, or director of the person, if other than an individual):

(1) The fee required by this section was not submitted.

(2) A bond has not been submitted by the person as required in 312 IAC 16-4-1.

(3) The person is the owner or operator of a well for oil and gas purposes at which the person has demonstrated a pattern of willful violations of IC 14-37 or this article that has resulted in substantial damage to the environment indicating an intention not to comply with IC 14-37 or this article.

(4) The person is the owner or operator of a well for oil and gas purposes against which there is a pending notice of violation under 312 IAC 16-5-21. If this finding is made, however, the person is not disqualified from receiving the transfer if the person establishes either of the following:

(A) The violation has been or is in the process of being corrected to the satisfaction of the deputy director.

(B) The person has filed and is presently pursuing, in good faith, a direct administrative review or judicial review to contest the validity of the violation. A request for review under this clause must conform with IC 4-21.5 and 312 IAC 3-1.

(e) If an application is filed to transfer a well on which there is a pending notice of violation, the owner or operator against

which the violation was issued, and its surety, continue to be liable for performing the abatement and for satisfying any resulting penalty. A person who receives transfer of a permit is also liable for abatement and for any penalty attributable to the period following transfer. However, the division director may, in writing, waive any penalty that would otherwise apply during a period of not more than ninety (90) days following the transfer if the division director determines that the new permit holder is acting in good faith to correct the violation.

(f) No transfer of a permit issued for oil and gas purposes is effective until the transfer is approved in writing by the division director. (*Natural Resources Commission; 312 IAC 16-3-8; filed Feb 23, 1998, 11:30 a.m.: 21 IR 2335; readopted filed Nov 17, 2004, 11:00 a.m.: 28 IR 1315; filed Jan 7, 2005, 2:00 p.m.: 28 IR 1684*)

### **312 IAC 16-3-9 Permit revocation**

Authority: IC 14-37-3

Affected: IC 4-21.5-3-5; IC 4-21.5-3-6; IC 14-37-12-2

Sec. 9. (a) The department may revoke a permit issued under IC 14-37 upon a finding that:

- (1) the permit was issued through fraud or misrepresentation;
- (2) the owner or operator has violated IC 14-37 or this article;
- (3) the information or conditions upon which a permit was issued have substantially changed since issuance;
- (4) the owner or operator of a well for oil and gas purposes is polluting the waters or land in Indiana;
- (5) the operation of a Class II well may result in a movement of fluids into an underground source of drinking water; or
- (6) the owner or operator has been issued a notice of violation under IC 14-37-12-2 and 312 IAC 16-5-21, and has failed:
  - (A) to abate the violation within the prescribed period;
  - (B) to secure in writing from the division an extension of time in which to abate the violation before the expiration of the period established for abatement; or
  - (C) to request a proceeding under IC 4-21.5-3-6 within thirty (30) days after service of the notification or within the period provided by the division for abatement, whichever is longer.

(b) In addition to the grounds for permit revocation set forth under subsection (a), a permit for a Class II well may be revoked, modified, or reissued under IC 4-21.5-3-5 where there is:

- (1) a substantial change of conditions in the operation of the Class II well;
- (2) a substantial change in the information upon which the permit was issued; or
- (3) reasonable cause to believe that the permitted operation may result in the movement of fluids into an underground source of drinking water other than an exempted aquifer.

(*Natural Resources Commission; 312 IAC 16-3-9; filed Feb 23, 1998, 11:30 a.m.: 21 IR 2336; readopted filed Nov 17, 2004, 11:00 a.m.: 28 IR 1315*)

### **Rule 3.5. Annual Well Fee**

#### **312 IAC 16-3.5-1 Annual well fee and reporting requirements**

Authority: IC 14-37-5

Affected: IC 4-21.5; IC 14-37-6-2; IC 14-37-6-4

Sec. 1. (a) Each oil and gas well owner or operator must pay an annual well fee based on the number of wells for oil and gas purposes for which the person has permits as of November 1 of each year. The annual well fee does not apply to a noncommercial gas well.

(b) The division shall, by December 1 of each year, mail a notice to each owner or operator indicating the number of wells that division records show were under a permit on November 1. Each owner or operator must verify the annual fee due under section 2 of this rule and must cause the fee to be actually received by the division no later than February 1 of the following year. Failure of an owner or operator to comply with this subsection is a violation of this article and is cause for revocation of any permit in violation.

(c) A well for oil and gas purposes is included in the number of wells that the division assesses for the annual well fee on November 1 until the earlier of the following:

- (1) The well is plugged and the well site is restored under 312 IAC 16-5-19.

(2) The well is transferred to a new permittee under 312 IAC 16-3-8.

(d) Each owner or operator of a well for oil and gas purposes must also report to the division by February 1 of each year, on a form prescribed by the division, any change in:

(1) mailing address; or

(2) organizational status.

*(Natural Resources Commission; 312 IAC 16-3.5-1; filed Jan 16, 2003, 10:52 a.m.: 26 IR 1898; readopted filed Nov 17, 2004, 11:00 a.m.: 28 IR 1315)*

### **312 IAC 16-3.5-2 Amount of assessment**

Authority: IC 14-37-5

Affected: IC 4-21.5; IC 14-37-6-2; IC 14-37-6-4

Sec. 2. The division shall assess the annual well fee as follows:

(1) For one (1) permit, one hundred fifty dollars (\$150).

(2) For two (2) through five (5) permits, three hundred dollars (\$300).

(3) For six (6) through twenty-five (25) permits, seven hundred fifty dollars (\$750).

(4) For twenty-six (26) through one hundred (100) permits, one thousand five hundred dollars (\$1,500).

(5) For more than one hundred (100) permits, one thousand five hundred dollars (\$1,500) plus fifteen dollars (\$15) for each permit over one hundred (100).

*(Natural Resources Commission; 312 IAC 16-3.5-2; filed Jan 16, 2003, 10:52 a.m.: 26 IR 1898; readopted filed Nov 17, 2004, 11:00 a.m.: 28 IR 1315)*

## **Rule 4. Bonding in Addition to Annual Well Fee**

### **312 IAC 16-4-1 Bond required in addition to the annual well fee**

Authority: IC 14-37-3

Affected: IC 4-21.5; IC 14-37-5; IC 14-37-6-2; IC 14-37-6-4; IC 14-37-13

Sec. 1. (a) In addition to the annual well fee required by 312 IAC 16-3.5, no person shall drill, deepen, operate, or convert a well for oil and gas purposes until the person has filed and the department has accepted a bond as provided in section 2 of this rule, if the person:

(1) is an applicant for a permit under this article who has never been granted a permit for a well for oil and gas purposes under this article;

(2) has demonstrated a pattern of violation under IC 14-37 and this article within the previous two (2) years;

(3) has failed to pay a civil penalty imposed under IC 14-37-13; or

(4) has failed to pay an annual fee required under IC 14-37-5.

(b) The purpose of a bond is to provide for compliance with IC 14-37 and this article.

(c) A bond shall be renewed until there has been compliance with the conditions imposed by IC 14-37 and by the permit for two (2) consecutive years.

(d) Requirements and procedures applicable to bonds also apply to the substitute securities described in IC 14-37-6-2 and IC 14-37-6-4.

(e) Any person in whose name the permit is issued shall execute and be named as principal on the bond. The name of the owner or operator on the permit and the principal on the bond shall be the same. *(Natural Resources Commission; 312 IAC 16-4-1; filed Feb 23, 1998, 11:30 a.m.: 21 IR 2336; filed Jan 16, 2003, 10:52 a.m.: 26 IR 1898; readopted filed Nov 17, 2004, 11:00 a.m.: 28 IR 1315)*

### **312 IAC 16-4-2 Bond types**

Authority: IC 14-37-3

Affected: IC 14-37

Sec. 2. (a) The bond required in section 1 of this rule shall consist of any one (1) of the following:

- (1) A surety bond in the amount of two thousand five hundred dollars (\$2,500) for each well drilled or produced.
- (2) A cash bond in the amount of two thousand five hundred dollars (\$2,500) for each well drilled or produced.
- (3) A certificate of deposit in the principal amount of two thousand five hundred dollars (\$2,500) for each well drilled or produced, according to terms and specifications provided by the division.
- (4) A surety bond in any amount for wells drilled, deepened, or converted; however, the maximum number of wells under the bond may not exceed that number determined by dividing the principal sum of the bond by two thousand five hundred dollars (\$2,500).
- (5) A blanket bond of forty-five thousand dollars (\$45,000) for any number of wells drilled, deepened, or converted.

(b) No surety bond shall be approved unless issued by a company holding an applicable certificate of authority from the department of insurance, state of Indiana. A surety bond shall be executed by the owner or operator as principal and by the surety or for either of them by an attorney-in-fact with certified power of attorney attached.

(c) With respect to a noncommercial gas well drilled on real estate owned by a bona fide resident of Indiana, the deputy director may waive the bond described in subsection (a), provided the person does the following:

- (1) Submits written proof of financial responsibility.
- (2) Enters on a division form an agreement to maintain and abandon the well in accordance with IC 14-37 and this article. The deputy director may require the agreement provided under this subsection to be recorded.

(d) The division shall obtain possession and custody of all collateral deposited by an applicant until released or replaced under this rule. A certificate of deposit must be assigned in writing to the state and the assignment noted upon the books of the bank issuing the certificate. (*Natural Resources Commission; 312 IAC 16-4-2; filed Feb 23, 1998, 11:30 a.m.: 21 IR 2336; filed Jan 16, 2003, 10:52 a.m.: 26 IR 1898; readopted filed Nov 17, 2004, 11:00 a.m.: 28 IR 1315*)

### **312 IAC 16-4-3 Bond cancellation**

Authority: IC 14-37-3

Affected: IC 4-21.5; IC 14-37

Sec. 3. (a) A surety may in writing notify the department and the owner or operator of its intention to terminate liability under a bond. The surety shall deliver the notification to the owner or operator by personal service or by certified mail. Proof of service of the notification shall be provided by the surety to the division.

(b) Within thirty (30) days after receipt of a notice under subsection (a), the owner or operator must file a substitute bond or must:

- (1) with respect to a well for oil and gas purposes, discontinue operations and abandon the well under IC 14-37, and this article; or
- (2) with respect to a geophysical survey operation, cease activities and satisfy outstanding obligations under IC 14-37 and 312 IAC 22-3 [*sic.*, 312 IAC 17-3].

(c) If a substitute bond is filed by the owner or operator and accepted by the department, liability on the original bond ceases.

(d) If a substitute bond is not filed and the owner or operator does not satisfy the requirements of subsection (b), the department shall revoke the permit under IC 4-21.5 and 312 IAC 3-1.

(e) If the owner or operator fails to abandon a well:

- (1) the surety must forfeit to the division director the principal sum of the bond; or
- (2) with respect to a well for oil and gas purposes, the surety may cause the well to be properly abandoned.

(*Natural Resources Commission; 312 IAC 16-4-3; filed Feb 23, 1998, 11:30 a.m.: 21 IR 2337; readopted filed Nov 17, 2004, 11:00 a.m.: 28 IR 1315*)

### **312 IAC 16-4-4 Bond forfeiture**

Authority: IC 14-37-4

Affected: IC 4-21.5; IC 14-37

Sec. 4. The director may order bond forfeiture if any permit secured by a bond is revoked or if findings of the department otherwise support a forfeiture. Bond forfeitures are governed by IC 4-21.5 and 312 IAC 3-1. (*Natural Resources Commission; 312 IAC 16-4-4; filed Feb 23, 1998, 11:30 a.m.: 21 IR 2337; readopted filed Nov 17, 2004, 11:00 a.m.: 28 IR 1315*)

**312 IAC 16-4-5 Bond release**

Authority: IC 14-37-3

Affected: IC 14-37-5; IC 14-37-6-1; IC 14-37-13

Sec. 5. (a) The division shall release a bond submitted pursuant to this rule after:

- (1) each well secured by the bond has been plugged and abandoned and the well site restored under IC 14-37, this article, the terms of the permit, and orders of the department;
- (2) each well secured by the bond has been converted under 312 IAC 16-5-19(e) to a fresh water well;
- (3) a substitute bond is filed by the owner or operator and accepted by the department;
- (4) each well secured by the bond is transferred under 312 IAC 16-3-8; or
- (5) the owner or operator is not required to post a bond under IC 14-37-6-1(a) due to not having:
  - (A) demonstrated a pattern of violation within the previous two (2) years;
  - (B) failed to pay a civil penalty imposed under IC 14-37-13; or
  - (C) failed to pay an annual fee required under IC 14-37-5.

(b) The department may execute a partial release for a bond issued to secure more than one (1) permit where an individual well is abandoned or converted to a fresh water well. A partial release under this subsection shall not relieve a surety from responsibility with respect to a well other than the individual well identified in the partial release. (*Natural Resources Commission; 312 IAC 16-4-5; filed Feb 23, 1998, 11:30 a.m.: 21 IR 2337; filed Jan 16, 2003, 10:52 a.m.: 26 IR 1899; readopted filed Nov 17, 2004, 11:00 a.m.: 28 IR 1315*)

**Rule 5. Performance Standards and Enforcement****312 IAC 16-5-1 Well spacing**

Authority: IC 14-37-3-4

Affected: IC 14-37

Sec. 1. (a) This section governs the location and spacing of wells.

(b) All wells except those described in subsections (c) through (d) shall be located not less than:

(1) three hundred thirty (330) feet from a lease line, property line, or subdivision that separates unconsolidated property interests; and

(2) six hundred sixty (660) feet from a well for oil and gas purposes that is not excepted under section 3 of this rule and is capable of production from the same reservoir.

(c) In an established Trenton limestone reservoir, a well shall be located not less than:

(1) one hundred sixty-five (165) feet from a lease line, property line, or subdivision that separates unconsolidated property interests; and

(2) three hundred thirty (330) feet from a well for oil and gas purposes that is not excepted under section 3 of this rule.

(d) All wells drilled deeper than one thousand (1,000) feet for the commercial production of natural gas shall be located on a drilling unit having not less than forty (40) acres of surface lying within a quarter quarter section of land as established by the official public land survey by the rectangular surveying system of the state. These wells shall be located not less than:

(1) three hundred thirty (330) feet from a lease line, property line, or subdivision that separates unconsolidated property interests; and

(2) one thousand three hundred twenty (1,320) feet from a well for oil and gas purposes that is not excepted under section 3 of this rule and is capable of the production of natural gas from the same reservoir.

(*Natural Resources Commission; 312 IAC 16-5-1; filed Feb 23, 1998, 11:30 a.m.: 21 IR 2337; readopted filed Nov 17, 2004, 11:00 a.m.: 28 IR 1315*)

**312 IAC 16-5-2 Drilling units**

Authority: IC 14-37-3-4

Affected: IC 14-37

Sec. 2. (a) This section establishes drilling units.

(b) For sandstone reservoirs, every quarter, quarter, quarter section containing ten (10) acres, more or less, as established by the official U.S. Public Lands Survey by the rectangular surveying system for the state.

(c) For all other reservoirs, except in established Trenton limestone reservoirs, half a quarter, quarter section containing twenty (20) acres, more or less, as established by the official U.S. Public Lands Survey by the rectangular surveying system for the state. The use of any portion of one (1) quarter, quarter section with any portion of another quarter, quarter section is prohibited unless approved following an informal hearing conducted under 312 IAC 16-2-3.

(d) For established Trenton limestone reservoirs, half of every quarter, quarter, quarter section containing five (5) acres, more or less, as established by the official U.S. Public Lands Survey by the rectangular surveying system for the state.

(e) An exception to drilling unit requirements may be authorized following an informal hearing under 312 IAC 16-2-3, if the exception is supported by unusual regional or geological characteristics and is conducive to the most efficient and economical recovery of oil and gas.

(f) A drilling unit may be established following an informal hearing under 312 IAC 16-2-3 for those areas not covered by the rectangular surveying system of the U.S. Public Lands Survey. The drilling unit shall conform as nearly as practicable to the drilling unit requirements for reservoirs of similar lithology in those areas covered by the rectangular surveying system.

(g) For irregular sections containing more or less than six hundred forty (640) acres, the department may establish drilling units other than those defined in subsections (b) through (c) of approximately twenty (20) acres or ten (10) acres. (*Natural Resources Commission; 312 IAC 16-5-2; filed Feb 23, 1998, 11:30 a.m.: 21 IR 2338; readopted filed Nov 17, 2004, 11:00 a.m.: 28 IR 1315*)

### **312 IAC 16-5-3 Exceptions to well spacing and drilling unit requirements**

Authority: IC 14-37-3-4; IC 14-37-3-11

Affected: IC 14-37

Sec. 3. (a) Exceptions to the spacing requirements established under this section shall be made only after an informal hearing conducted under 312 IAC 16-2-3.

(b) In order to avoid locating a well in a ditch, stream, or other impracticable location, the division director may modify the location of any well not more than fifty (50) feet from the location shown in the survey or the plat in the permit application.

(c) The division director may grant exceptions for wells varying not more than ten percent (10%) from the acreage or distances otherwise required under this article when the exceptions will not:

(1) create a greater well density than required under sections 1 through 2 of this rule; and

(2) leave isolated tracts not contiguous to another unit.

(d) Twin wells may be drilled on the same drilling unit to different reservoirs, allocating the acreage in the drilling unit for each producing reservoir as provided in section 2 of this rule.

(e) The following are exempt from spacing and drilling unit requirements:

(1) Class II wells.

(2) Gas storage wells.

(3) Gas storage observation wells.

(4) Noncommercial gas wells.

(5) Geological or structure test wells.

However, a noncommercial gas well must not be located to cause an existing well for oil and gas purposes to violate sections 1 through 2 of this rule. (*Natural Resources Commission; 312 IAC 16-5-3; filed Feb 23, 1998, 11:30 a.m.: 21 IR 2338; readopted filed Nov 17, 2004, 11:00 a.m.: 28 IR 1315*)

### **312 IAC 16-5-4 Protection of coal resources**

Authority: IC 14-37-3-11

Affected: IC 4-21.5; IC 14-34; IC 14-37-7

Sec. 4. (a) Except as provided in subsection (b), if a well for oil and gas purposes is proposed to be drilled on lands:

(1) underlaid by an inactive underground mine; or

(2) within the permit boundaries of an active underground mine permitted under IC 14-34;

and if the well is completed as a well for oil and gas purposes, an owner or operator shall run an intermediate string of casing from the surface to a point at least fifty (50) feet below the base of the commercially mineable coal resources or the mine floor, whether

drilled through a pillar or not.

(b) Upon written application to the director by a person that proposes to drill a well described in subsection (a), the director may grant a variance from the requirements of subsection (a) if, with respect to a proposed well on land described in:

(1) subsection (a)(1), written consent to the variance is given by:

(A) the permittee under IC 14-34; or

(B) the person that has the right to develop the coal resource; or

(2) subsection (a)(2), written consent to the variance is given by the coal mine operator under IC 14-34.

(c) If a variance is granted under subsection (b), the well must be completed as follows:

(1) In the manner required under this article.

(2) In a manner that prevents the following:

(A) Waste.

(B) Fresh water pollution.

(C) Blowouts.

(D) Cavings.

(E) Seepages.

(F) Fires.

(G) Unreasonably detrimental effects upon fish, wildlife, and botanical resources.

(d) A person engaged in the production of commercially mineable coal resources may file with the division a dated mine plan showing the workable limits of a proposed underground mine on lands for which the person has title or a legal interest, but for which an intermediate string is not required under subsection (a). The person may file amendments to its proposed underground mine.

(e) If a well is drilled and completed as a well for oil and gas purposes:

(1) through a commercially mineable coal resource; and

(2) within an area for which a mine plan is filed under subsection (d);

an owner or operator shall set a production string of casing, properly centralized and cemented, as documented by a sonic cement bond-variable density log.

(f) An owner or operator shall provide at least forty-eight (48) hours notice to the division and to the person who filed the mine plan before commencing logging operations under subsection (e). The person who filed the mine plan is entitled to:

(1) be present during logging operations; and

(2) examine the log.

(g) The division shall determine the adequacy of cement bonding, and, in the event of a bonding failure between fifty (50) feet below and one hundred (100) feet above the commercially mineable coal resource, an owner or operator must perform remedial action, as ordered by the commission, that results in adequate bonding.

(h) Within thirty (30) days of commencing logging operations, an owner or operator must provide the division and the person who filed the mine plan with a copy of the sonic cement bond-variable density log.

(i) Preparation of the log required under subsection (e) and any remedial action required under subsection (g) are at the expense of the owner or operator.

(j) If a well is drilled and completed as a well for oil and gas purposes through a commercially mineable coal resource, except a coal resource identified in subsection (a) or subsections (d) through (i), that resource shall be protected by a properly cemented, centralized production string of casing.

(k) The division shall notify a permit applicant if the application is within the permit boundaries of an underground mine:

(1) permitted under IC 14-34;

(2) for which a mine plan has been filed as provided in subsections (d) through (i); or

(3) which contains commercially mineable coal resources as set forth in section 5 of this rule.

No permit may be issued except under IC 4-21.5 and 312 IAC 3.

(l) Nothing in this section shall be construed to relieve an owner or operator from compliance with sections 19 and 20 of this rule. (*Natural Resources Commission; 312 IAC 16-5-4; filed Feb 23, 1998, 11:30 a.m.: 21 IR 2338; readopted filed Nov 17, 2004, 11:00 a.m.: 28 IR 1315; filed May 12, 2006, 10:28 a.m.: 29 IR 3343*)

### **312 IAC 16-5-5 Identification of commercially mineable coal resources**

Authority: IC 14-37-3-11

Affected: IC 4-21.5; IC 14-37



Sec. 5. (a) The location of known commercially mineable coal resources is set forth in Cementing Depths for Mineable Coals, 1984 edition, as prepared by the Indiana geological survey. Upon receipt of a permit application under IC 14-37 and this article, the division shall determine whether the application is for an area known to contain a commercially mineable coal resource.

(b) A person may seek to revise Cementing Depths of Mineable Coals by filing a written request for an informal hearing under 312 IAC 16-2-3.

(c) The location of commercially mineable coal resources referenced in Cementing Depths for Mineable Coals is presumed to be complete and accurate, but the presumption may be rebutted by an affected person under IC 4-21.5 and 312 IAC 3-1. (*Natural Resources Commission; 312 IAC 16-5-5; filed Feb 23, 1998, 11:30 a.m.: 21 IR 2339; readopted filed Nov 17, 2004, 11:00 a.m.: 28 IR 1315; filed May 12, 2006, 10:28 a.m.: 29 IR 3343*)

### **312 IAC 16-5-6 Protection of underground storage reservoirs of petroleum products**

Authority: IC 14-37-3-10

Affected: IC 14-37

Sec. 6. (a) A person engaged in the underground storage of petroleum products shall file with the division a dated and certified plat or map showing the lowest closing contour or the lease or ownership limits of any existing or proposed underground storage reservoir that the person owns or operates. The person shall update the plat or map as follows:

(1) July 1 of each year.

(2) Each time an underground storage reservoir is expanded or contracted, excluding seasonal fluctuations.

(3) Upon a change of the lease or ownership limits as filed with the division.

Where a plat or map is unchanged from the prior year, the requirements of this subsection are met upon filing with the division a notification on July 1 that the underground storage reservoir is unchanged from the prior year.

(b) The division shall notify a permit applicant if the application is within the boundaries of an underground storage reservoir for which a certified map has been filed as provided in subsection (a). The division will include with this notification a waiver that must be sent by the applicant to the underground storage operator by certified mail. The waiver may be signed and returned to the division stating there are no objections to the location of the proposed well.

(c) A person entitled to notification under subsection (b) may file a written request for an informal hearing under 312 IAC 16-2-3 to consider an objection to a permit application.

(d) Any permit application for a well to be drilled within the limits defined in subsection (a) will not be issued until one (1) the following occurs:

(1) The executed waiver is returned to the division.

(2) Ten (10) days after the service of notification required in subsection (b), providing that the proof of service is submitted to the division as part of the application.

(3) If a hearing is requested under subsection (c), a determination has been made by the division director with respect to an objection. This determination shall include protective measures required to prevent waste and as may otherwise be appropriate to accomplishing the purposes of IC 14-37.

(e) Nothing in this section shall be construed to relieve an owner or operator from compliance with sections 19 and 20 of this rule. (*Natural Resources Commission; 312 IAC 16-5-6; filed Feb 23, 1998, 11:30 a.m.: 21 IR 2339; readopted filed Nov 17, 2004, 11:00 a.m.: 28 IR 1315*)

### **312 IAC 16-5-7 Identification of underground sources of drinking water and exempted aquifers**

Authority: IC 14-37-3

Affected: IC 14-37

Sec. 7. (a) The department may identify (by narrative description, illustrations, maps, or other means) and shall protect, except where exempted under subsections (b) through (c), an aquifer or part of an aquifer that qualifies as an underground source of drinking water. An aquifer or part of an aquifer that is an underground source of drinking water is protected under this rule regardless of whether it has been identified by the department.

(b) The department may identify (by narrative description, illustrations, maps, or other means) and describe in geographic or geometric terms (such as vertical and lateral limits and gradient) that are clear and definite, an aquifer or part of an aquifer proposed for designation as an exempted aquifer under section 8 of this rule.

(c) After notice by publication in a newspaper of general circulation in the county or counties where an affected aquifer is located, and after an opportunity for an informal hearing as provided under 312 IAC 16-2-3, the department may identify an exempted aquifer in addition to a previously exempted aquifer. The exemption of an aquifer under section 8(a)(1) of this rule shall be treated as a revision to the approved program of the state for the regulation of Class II wells. The exemption of an aquifer under section 8(a)(2) of this rule becomes final if the deputy director submits the exemption in writing to the administrator and the administrator has not disapproved the designation within forty-five (45) days. (*Natural Resources Commission; 312 IAC 16-5-7; filed Feb 23, 1998, 11:30 a.m.: 21 IR 2340; readopted filed Nov 17, 2004, 11:00 a.m.: 28 IR 1315*)

### **312 IAC 16-5-8 Criteria for exempting an aquifer**

Authority: IC 14-37-3

Affected: IC 14-37

Sec. 8. (a) An aquifer or a portion of an aquifer that is an underground source of drinking water may be determined under section 7 of this rule to be an exempted aquifer where the aquifer or portion of the aquifer:

(1) does not currently serve as a source of drinking water and cannot now and will not in the future serve as a source of drinking water because it is:

(A) mineral, hydrocarbon, or geothermal energy producing, or can be demonstrated by a permit applicant to contain minerals or hydrocarbons, that, considering their quantity and location, are expected to be commercially producible;

(B) situated at a depth or location that makes recovery of water for drinking water purposes economically or technologically impracticable; or

(C) so contaminated that to render that water fit for human consumption would be economically or technologically impracticable; or

(2) contains fresh water with more than three thousand (3,000) milligrams per liter of total dissolved solids and is not reasonably expected to supply a future user of fresh water.

(b) For a Class II well, a demonstration of commercial producibility shall be made as follows:

(1) For an enhanced recovery well to be used in a field from which hydrocarbons were previously produced, commercial producibility shall be presumed by the department upon a demonstration by the applicant of historical production in the field.

(2) For a Class II well not located in a field containing an aquifer from which hydrocarbons were previously produced, to the extent available, the department shall consider logs, core data, formation description, formation depth, formation thickness, and formation parameters, such as permeability and porosity.

(*Natural Resources Commission; 312 IAC 16-5-8; filed Feb 23, 1998, 11:30 a.m.: 21 IR 2340; readopted filed Nov 17, 2004, 11:00 a.m.: 28 IR 1315*)

### **312 IAC 16-5-9 Well construction**

Authority: IC 14-37-3

Affected: IC 14-37

Sec. 9. (a) This subsection governs the following placement of casing, tubing, and drill pipe in a well for oil and gas purposes:

(1) Casing, tubing, and drill pipe shall be run and set in conformance with the standards set forth by the American Petroleum Institute in "API Specifications" 5A, 5AC, and 5AX (May 31, 1985, editions).

(2) Casing centralizers may be required by the division director to effectuate the minimum clearances needed to ensure the proper cementing of casing.

(3) The slurry used in a casing string must contain a mixture of cement and water and may contain API-approved additives. The use of aggregate or sand in cement mixture is prohibited. The slurry must be placed using the pump and plug or displacement method and with a volume of cement sufficient to cause its return to the surface or to the bottom of a cemented intermediate or surface string of casing.

(b) In addition to the requirements set forth in subsection (a), surface casing must be set as follows:

(1) Surface casing shall be run below the lowest underground source of drinking water. Surface casing shall be set in or through an impervious formation and shall be cemented with cement sufficient to circulate to the top of the hole. The owner or operator shall use more than one (1) string of casing where necessary to protect any underground source of drinking water.

(2) Instead of the surface casing requirements set forth in subdivision (1), an owner or operator may cement an intermediate

or long string of casing with cement sufficient to circulate to the top of the hole.

(3) In addition to the requirements set forth in subsection (a), if intermediate casing is used, the intermediate casing must be set in an impervious stratum.

(c) In addition to the requirements set forth in subsection (a), production casing must be set as follows:

(1) Except as provided under section 20 of this rule, a well that an owner or operator does not abandon after completion of the drilling operations must be immediately equipped with production casing set at the bottom of the hole or at the top of the last stratum drilled.

(2) If a well is plugged to a point higher than the last stratum drilled, production casing shall be set at the plug to prevent the migration of oil, gas, or water from one (1) stratum to another.

(d) The division director may authorize an alternate well construction method if the owner or operator demonstrates the alternate well construction method:

(1) will not cause the pollution of, endanger, or threaten any underground source of drinking water;

(2) will not damage a source of oil or gas; and

(3) is designed to confine injected fluids to the approved interval or intervals.

*(Natural Resources Commission; 312 IAC 16-5-9; filed Feb 23, 1998, 11:30 a.m.: 21 IR 2341; filed Oct 1, 1999, 1:12 p.m.: 23 IR 294; readopted filed Nov 17, 2004, 11:00 a.m.: 28 IR 1315)*

### **312 IAC 16-5-10 Lease identification**

Authority: IC 14-37-3-3

Affected: IC 14-37

Sec. 10. (a) To identify producing leases, the owner or operator shall place a permanent sign where the principal lease road enters the lease, or at another location approved by the commission representative, to show the following:

(1) The name of the lease.

(2) The owner or operator.

(3) The manager.

(4) An emergency telephone number.

(5) The section, township, and range.

(b) The permanent sign described in subsection (a) shall be a size and shape that is easily read from a distance of twenty (20) feet.

(c) In addition to the permanent sign described in subsection (a), a legible sign shall also be placed near the well to identify the permit number, well number, and well name. *(Natural Resources Commission; 312 IAC 16-5-10; filed Feb 23, 1998, 11:30 a.m.: 21 IR 2341; readopted filed Nov 17, 2004, 11:00 a.m.: 28 IR 1315)*

### **312 IAC 16-5-11 Fire prevention**

Authority: IC 14-37-3-6

Affected: IC 14-37

Sec. 11. (a) To prevent fire hazards, all waste oil, cut oil, bottom sediments, and tank bottoms shall be collected in burn off pits located a safe distance from any oil well, oil storage tank, building, or other structure and shall be burned as necessary to prevent overflowing. Before any burn off pit is constructed, the owner or operator shall file an application with the division on a division form. Waste oil in tank bottoms shall be conveyed from storage tanks to pits in such a manner as to not create a fire hazard. Pits shall be constructed to prevent the escape of oil and of sufficient height to prevent surface water from entering the pit. No pits shall be constructed where the soil is porous and closely underlaid by either gravel or sand strata. These pits shall not be used to collect production brine. The burn off pits and their walls shall be kept free of vegetation.

(b) All lease and storage tanks shall be surrounded by an impermeable dike that has a capacity of one and one-half (1½) times that of the tank or tanks it surrounds. The dike and the area within the dike shall be maintained free from vegetation, fluids, and inflammable materials. The dike shall not be breached.

(c) All well, tank, oil heating or treating installation, and booster pump locations shall be kept free from vegetation and inflammable material.

(d) All gas produced in the operation of oil wells that is not utilized shall not be burned closer than what is a reasonable safe

distance from a well, storage tank, or building. (*Natural Resources Commission; 312 IAC 16-5-11; filed Feb 23, 1998, 11:30 a.m.: 21 IR 2341; readopted filed Nov 17, 2004, 11:00 a.m.: 28 IR 1315*)

### **312 IAC 16-5-12 Mud pits**

Authority: IC 14-37-3

Affected: IC 14-37

Sec. 12. (a) An owner or operator shall construct and maintain necessary mud circulation and reserve pits.

(b) Upon completion of a well, pits shall be filled and leveled. The surface shall be restored as nearly as practicable to conditions existing before drilling commenced. (*Natural Resources Commission; 312 IAC 16-5-12; filed Feb 23, 1998, 11:30 a.m.: 21 IR 2342; readopted filed Nov 17, 2004, 11:00 a.m.: 28 IR 1315*)

### **312 IAC 16-5-13 Disposal of salt water and other waste liquids**

Authority: IC 14-37-3

Affected: IC 14-28-1; IC 14-28-3; IC 14-37

Sec. 13. (a) To prevent surface or underground pollution, a person must not dispose of a fluid that results from the development or production of a well for oil and gas purposes except as approved by the division.

(b) Evaporation pits are prohibited.

(c) A pit may be authorized under a permit for oil and gas purposes for backwash water, for emergency use, or in connection with a Class II well, if the pit:

(1) is surrounded by walls that prevent the entry of surface drainage from adjacent areas;

(2) is located at least one hundred (100) feet from any:

(A) stream;

(B) river;

(C) lake; or

(D) drainage way;

(3) conforms to IC 14-28-1, IC 14-28-3, and 312 IAC 10 and is constructed to prevent flooding during a regulatory flood;

(4) is:

(A) constructed according to plans approved by the division, including the placement of an impermeable liner; and

(B) found by a commission representative to conform to the plans before utilization;

(5) is maintained so that the level of contained fluids in the pit is kept at least two (2) feet below the top of the pit wall having the lowest elevation; and

(6) conforms to all other requirements of law, including those pertaining to Class II wells.

(d) Fluids shall be removed from an emergency pit as soon as the emergency can be abated. Construction or maintenance of a pit other than as provided in subsection (c) and this subsection may result in revocation of any permit for oil and gas purposes associated with the pit.

(e) Any pipe that conveys water or a fluid from or to a well for oil and gas purposes shall be kept in good repair and free from leaks. No discharge of water or a fluid shall occur between the place of origin and the authorized place of disposal. (*Natural Resources Commission; 312 IAC 16-5-13; filed Feb 23, 1998, 11:30 a.m.: 21 IR 2342; readopted filed Nov 17, 2004, 11:00 a.m.: 28 IR 1315; filed Mar 4, 2008, 12:31 p.m.: 20080402-IR-312070486FRA*)

### **312 IAC 16-5-14 Operating requirements for a Class II well**

Authority: IC 14-37-3

Affected: IC 14-37

Sec. 14. Operating requirements for a Class II well are as follows:

(1) A Class II well must be completed, equipped, operated, and maintained so the Class II well will do the following:

(A) Not cause the pollution of, endanger, or threaten any underground source of drinking water.

(B) Not damage a source of oil or gas.

(C) Confine injected fluids to the approved interval or intervals.

- (2) The injection of a permitted fluid must be through tubing separated from the innermost casing with a corrosion inhibiting annular fluid. The tubing shall be installed with a packer. The packer must be set inside cemented casing within two hundred (200) feet above the permitted injection zone.
- (3) Before operating an injection well, mechanical integrity must be demonstrated for the well under section 15 of this rule, and the owner or operator must obtain a written authorization to inject from the division.
- (4) The division must be notified in advance of a permit change that may require the alteration of an approved condition. The owner or operator must not implement a permit change until the change is approved by the division.
- (5) Injection piping, valves, and facilities must be used that meet or exceed design standards for the maximum allowable injection pressure and that safely maintain equipment without leakage.
- (6) The division director may require additional testing or special equipment if appropriate to the protection of an underground source of drinking water.

*(Natural Resources Commission; 312 IAC 16-5-14; filed Feb 23, 1998, 11:30 a.m.: 21 IR 2342; filed Oct 1, 1999, 1:12 p.m.: 23 IR 294; filed Sep 16, 2004, 9:15 a.m.: 28 IR 556; readopted filed Nov 17, 2004, 11:00 a.m.: 28 IR 1315)*

### **312 IAC 16-5-15 Mechanical integrity**

Authority: IC 14-37-3

Affected: IC 14-37

Sec. 15. (a) A Class II well has mechanical integrity if there is the following:

- (1) No significant leak in the casing, tubing, or packer.
- (2) No significant fluid movement into an underground source of drinking water through vertical channels adjacent to the injection well bore.

(b) One (1) of the following methods must be used to evaluate mechanical integrity under subsection (a)(1):

- (1) After an initial pressure test, monthly monitoring of annulus pressure (at a positive value) by the owner or operator to be reported to the division no less frequently than quarterly.

(2) Pressure testing with liquid.

(c) Where pressure testing is performed under subsection (b)(2), the casing-tubing annulus above the packer must be filled with fluid and tested, with no more than a three percent (3%) pressure differential over a thirty (30) minute period, not less than once every five (5) years under the supervision of a division representative at a pressure of no less than three hundred (300) pounds per square inch.

(d) One (1) of the following methods must be used to evaluate mechanical integrity under subsection (a)(2):

- (1) The results of a temperature or noise log.
- (2) Records demonstrating the presence of cement adequate to prevent the migration of fluids in the well bore.
- (3) A radioactive tracer survey.

(e) The division director may authorize a test to demonstrate mechanical integrity other than those listed in subsections (b) and (d). The division director may authorize an alternative test only where the test reliably demonstrates the mechanical integrity of a well.

(f) In conducting and evaluating a test authorized by this section, the owner or operator and the director shall apply methods and standards generally accepted in the petroleum industry. When reporting the results of a mechanical integrity test to the director, an owner or operator shall include a description of any test and method used. When evaluating a mechanical integrity test, the division director shall review monitoring and other test data submitted since the previous evaluation. *(Natural Resources Commission; 312 IAC 16-5-15; filed Feb 23, 1998, 11:30 a.m.: 21 IR 2342; filed Aug 6, 2004, 12:00 p.m.: 27 IR 3881; readopted filed Nov 17, 2004, 11:00 a.m.: 28 IR 1315)*

### **312 IAC 16-5-16 Corrective action to wells affected by a Class II well**

Authority: IC 14-37-3

Affected: IC 14-37

Sec. 16. (a) This section applies if the survey required under 312 IAC 16-3-2(f) locates a well that penetrates:

- (1) the injection zone to be utilized by the new injection well; or
- (2) a formation that will be affected by the increase in pressure resulting from operation of the new injection well, where the

well located by the survey is improperly sealed, constructed, or abandoned.

(b) If this section applies, an applicant shall submit a plan consisting of steps or modifications needed to prevent the movement of fluid into an underground source of drinking water. The plan shall be developed by the owner or operator, and evaluated by the director, based upon the following:

- (1) The nature and volume of injected fluid.
- (2) The nature of native fluids or byproducts of injection.
- (3) Potentially affected persons.
- (4) Geology.
- (5) Hydrology.
- (6) History of the injection operation.
- (7) Completion and plugging records.
- (8) Abandonment procedures in effect when the well was abandoned.
- (9) Hydraulic connections with an underground source of drinking water.

(c) The division director will evaluate the corrective action plan based on its adequacy to assure that wells within a one-fourth (¼) mile radius will not serve as a conduit for the migration of fluids into an underground source of drinking water.

(d) Upon approval by the division director of a plan submitted under subsection (b), the plan is incorporated as a condition of the permit for the new injection well. (*Natural Resources Commission; 312 IAC 16-5-16; filed Feb 23, 1998, 11:30 a.m.: 21 IR 2343; readopted filed Nov 17, 2004, 11:00 a.m.: 28 IR 1315*)

### **312 IAC 16-5-17 Well logs; completion and recompletion reports**

Authority: IC 14-37-3-5; IC 14-37-3-12; IC 14-37-7

Affected: IC 14-37

Sec. 17. (a) Immediately upon completion or recompletion of a well for oil and gas purposes, an owner or operator must file the following with the division:

- (1) Three (3) copies of any geophysical logs that are run.
- (2) A completion or recompletion report.
- (3) A log or record of all strata encountered during drilling or deepening.
- (4) Any other surface or subsurface measurements recorded by the owner or operator.
- (b) The record of strata shall be from the surface to the total depth of the well.
- (c) The driver's log and well completion or recompletion report shall be completed on a division form.

(d) Upon written request by the owner or operator, the department shall keep the following information confidential for one (1) year from the date of completion, except information that must be disclosed in order for the department to obtain and maintain primary enforcement authority for Class II wells under the Underground Injection Control Program:

- (1) The driver's log and completion report of the well.
- (2) The geophysical or instrumental log.
- (3) Drill cuttings or cores.
- (4) Other information required to be supplied to the commission under this rule.

These records and materials become public records at the end of this period.

(e) Upon request by the division, the owner or operator shall do the following:

- (1) Provide cuttings and core samples if cores are taken.
- (2) Provide at least forty-eight (48) hours' notice to the Indiana geological survey before commencing the coring of any well drilled for oil and gas purposes.
- (3) Furnish these cuttings and core samples at a place designated by the division.

(f) If a directional hole is drilled, a directional survey shall be made and a copy filed with the division. (*Natural Resources Commission; 312 IAC 16-5-17; filed Feb 23, 1998, 11:30 a.m.: 21 IR 2343; readopted filed Nov 17, 2004, 11:00 a.m.: 28 IR 1315*)

### **312 IAC 16-5-18 Monitoring and reporting requirements for Class II wells**

Authority: IC 14-37-3

Affected: IC 14-37

Sec. 18. The monitoring and reporting requirements for a Class II well are as follows:

- (1) The owner or operator shall file with the division a quarterly report on a division form not later than thirty (30) days following the quarter reported.
- (2) The owner or operator shall monitor maximum and average injection pressure and the injection rate for a Class II well on at least a monthly basis, with the results reported and summarized quarterly on a division form. The owner or operator shall use the same form to indicate casing annulus pressure monitoring used instead of any other casing annulus pressure test performed. No person may operate a Class II well unless the division form identified in this subdivision is completed and filed as required in subdivision (1).
- (3) The owner or operator of a Class II well shall notify the division in writing within thirty (30) days of the date upon which injection or disposal is commenced.
- (4) Within thirty (30) days of the permanent termination of injection or disposal, an owner or operator shall in writing notify the division of the termination date and the reason for termination.
- (5) The division director may order an owner or operator to plug a Class II well where injection fluid is not being directed into the permitted injection zone. If fresh water may be endangered, the owner or operator must orally notify a commission representative within twenty-four (24) hours of when the owner or operator knows or should have known of the failure or irregularity and a written notice of the failure or irregularity must be submitted to the division direction within five (5) days of the occurrence, together with a plan for testing and repairing the well.
- (6) The owner or operator must demonstrate mechanical integrity of the well after testing and repairs under subdivision (5) and prior to resuming the injection of fluids.

*(Natural Resources Commission; 312 IAC 16-5-18; filed Feb 23, 1998, 11:30 a.m.: 21 IR 2344; readopted filed Nov 17, 2004, 11:00 a.m.: 28 IR 1315)*

### **312 IAC 16-5-19 Plugging and abandoning wells**

Authority: IC 14-37-3-6

Affected: IC 14-37-8

Sec. 19. (a) Wells for oil and gas purposes shall be plugged in accordance with IC 14-37-8.

(b) With respect to a well for oil and gas purposes, an owner or operator must place bottom plugs using one (1) of the following procedures:

- (1) A cement plug from total depth to three (3) feet below ground elevation.
- (2) A cement plug from the shallower of total depth of fifty (50) feet below to not less than one hundred (100) feet above each completed zone unless the placement of the plug would require the removal of a permanent plugback and one (1) of the following:
  - (A) A mechanical plug set inside cemented casing within two hundred (200) feet above the uppermost completed zone with a ten (10) gallon cement plug placed on top of the mechanical plug.
  - (B) A cement plug from the top of to not less than two hundred fifty (250) feet above the uppermost completed zone.
- (3) A mechanical plug between each completed zone unless the placement of the plug would require the removal of a permanent plugback and one (1) of the following:
  - (A) A mechanical plug set inside cemented casing within two hundred (200) feet above the uppermost completed zone with a ten (10) gallon cement plug placed on top of the mechanical plug.
  - (B) A cement plug from the top of to not less than two hundred fifty (250) feet above the uppermost completed zone.
- (4) A dry hole that does not enter a commercially mineable coal resource may be filled with mud-laden fluid, well cuttings, pea gravel, or crushed rock from the bottom of the hole to fifty (50) feet below the deepest underground source of drinking water. The owner or operator shall place a cement plug from fifty (50) feet below the deepest underground source of drinking water to three (3) feet below the surface.
- (5) If a well is flowing at the surface, however, the operator must place plugs under one (1) of the following:
  - (A) Subdivision (1).
  - (B) Subdivision (2) and (2)(A).
  - (C) Subdivision (3) and (3)(A).
- (c) An owner or operator must place any top plug as a cement plug from fifty (50) feet below:
  - (1) the deeper of the lowest commercially mineable coal seam or underground source of drinking water to three (3) feet below

ground elevation; or

(2) to not less than one hundred (100) feet above each commercially mineable coal seam, and a cement plug from fifty (50) feet below the deepest underground source of drinking water to three (3) feet below ground elevation.

Notwithstanding subdivisions (1) and (2), fallback of a top plug may be topped off by surface placement of cement slurry.

(d) Uncemented casing from fifty (50) feet below the deeper of the lowest commercially mineable coal seam or underground source of drinking water to three (3) feet below ground elevation must be:

(1) removed;

(2) ripped; or

(3) cemented in place using a method approved by the division.

(e) Uncemented intervals must be filled with:

(1) pea gravel;

(2) crushed rock;

(3) drilling mud;

(4) gel; or

(5) water.

(f) An owner or operator must obtain prior approval from the division for the use of cement. Cement must meet American Petroleum Institute (API) specification 10(A) or American Society for Testing and Materials (ASTM) Specification C150 Standards for Portland cement. If a pozzolan cement mixture is used, the pozzolanic content by volume must not exceed fifty percent (50%).

(g) An owner or operator must obtain prior approval from the division for the use of a mechanical plug. The mechanical plug must meet API specification 11D1.

(h) An owner or operator must place any cement plug using one (1) of the following methods:

(1) Dump bailing on top of a mechanical plug.

(2) Pump and plug or displacement through:

(A) tubing;

(B) coiled tubing; or

(C) drill pipe.

(3) For any well with two (2) or fewer completed zones and circulated casing, surface pumping or bullhead plugging from the uppermost completed zone to three (3) feet below ground elevation.

(i) To ensure the proper plugging of wells, the division may require one (1) or more of the following:

(1) Use of mechanical plugs in nonstatic wells (as defined in 312 IAC 16-1-44.6).

(2) Submission of cement and service company tickets.

(3) Removal of any unauthorized material placed in a hole before plugging.

(4) Sampling and testing of cement plugs.

(j) The division director may authorize the use of alternative plugging materials and methods to achieve any of the following:

(1) To protect human health or safety.

(2) To protect the environment.

(3) To prevent unreasonably detrimental effects upon fish, wildlife, or botanical resources.

(4) To avoid unreasonable efforts to remove obstructions below the deepest underground source of drinking water.

An owner or operator must obtain prior approval from the division director before using an alternative material or method.

(k) Except as provided in subsection (l) or (m), an owner or operator must not plug a well unless a division representative is present to witness the plugging. If a well is plugged without a division representative present to witness the plugging, the owner or operator may be required by the division director to drill out and plug the well in the presence of a division representative.

(l) If an owner or operator and a division representative have scheduled the plugging of a well, but a division representative is not present at the scheduled time or place, the owner or operator may plug the well in the absence of a division representative only after making a reasonable attempt to have another division representative present to witness the plugging. If a division representative did not witness the plugging, the owner or operator may seek approval for the plugging from the division director under a Special Plugging Affidavit. To qualify for approval of a Special Plugging Affidavit, the owner or operator must do the following:

(1) Provide a confirmation number to establish that the plugging was scheduled with the division.

(2) Demonstrate that a reasonable attempt was made to have another division representative present to witness the plugging.

(3) Submit a cement ticket that identifies the well and shows the amount of cement delivered.

(4) Submit the completed Special Plugging Affidavit.



(m) If a well was plugged by a former owner or operator before the effective date of this section and a division representative was not present to witness the plugging, the owner or operator shall request the approval of a Special Plugging Affidavit from the division director. To qualify for a Special Plugging Affidavit under this subsection, the owner or operator must submit the following:

- (1) A cement ticket that identifies the well and shows the amount of cement delivered.
- (2) The completed Special Plugging Affidavit.
- (n) The owner or operator must submit a report of each permanent plugback on a form approved by the division.
- (o) A plugging and abandonment report must be signed by the following persons:

- (1) The owner or operator or an authorized agent for the owner or operator.
- (2) The person who supplied or prepared the cement.
- (3) The division representative who witnessed the plugging.
- (4) The division employee who reviewed the information contained in the report.

(p) Within six (6) months after plugging a well, the owner or operator must perform the following acts:

- (1) Cut off and remove all casing from three (3) feet below ground elevation to the surface.
- (2) Remove substructures.
- (3) Clear the well site of refuse and equipment.
- (4) Remove and properly dispose of waste fluids from the well site.
- (5) Fill all excavations at the well site.
- (6) Restore the well site as nearly as practicable to its condition before drilling.
- (7) If necessary, initiate a cleanup at the well site under sections 24 through 29 of this rule.

(q) In addition to the requirements of subsection (p), the owner or operator must, within six (6) months after the plugging of the last well on the lease, perform the following acts:

- (1) Remove and properly dispose of waste fluids.
- (2) Remove the tank battery from the lease.
- (3) Clear the lease of refuse and equipment.
- (4) Fill all excavations.
- (5) Restore the tank battery and excavation site as nearly as practicable to its condition before operation.
- (6) If necessary, initiate a cleanup of the tank battery and excavation site under sections 24 through 29 of this rule.

(r) The owner of surface rights may, with the consent of the owner or operator, accept responsibility for either or both of the following, by so indicating on the division's well completion form:

- (1) Equipment, fixtures, or excavations placed with respect to a well drilled for oil and gas purposes.
- (2) A well plugged up to a zone containing fresh water.

If the owner of surface rights accepts responsibility under this subsection, the owner or operator and its agents are released from responsibility for those items for which the owner of surface rights accepts responsibility. (*Natural Resources Commission; 312 IAC 16-5-19; filed Feb 23, 1998, 11:30 a.m.: 21 IR 2344; filed Aug 6, 2004, 12:00 p.m.: 27 IR 3882; readopted filed Nov 17, 2004, 11:00 a.m.: 28 IR 1315; filed Sep 12, 2005, 9:45 a.m.: 29 IR 458*)

### **312 IAC 16-5-20 Temporary abandonment of wells**

Authority: IC 14-37-3-6; IC 14-37-8-8

Affected: IC 14-37-8-1; IC 14-37-10

Sec. 20. (a) An owner or operator may defer plugging and abandonment under IC 14-37-8-1 for a well that has been drilled, completed, and cased for production if either of the following is satisfied:

- (1) Abandonment is deferred under subsection (b).
- (2) The requirements of subsection (c) are completed for temporary abandonment status.

(b) An owner or operator may defer plugging and abandonment of a well for one (1) year, or for any lesser time prescribed by the division, if both of the following are satisfied:

(1) The owner or operator notifies the division, in writing, on a form provided by the division, that plugging and abandonment are being deferred. The notification must be filed with the division within sixty (60) days of the following:

- (A) Well completion for a well not placed in operation.
- (B) The termination of operations for a well placed in operation.

(2) The owner or operator complies with each of the following technical requirements:

- (A) The well is provided with an intact, leak-free wellhead or is capped with a valve and configured to monitor casing or casing-tubing annulus pressure.
- (B) The well site is kept free of unnecessary equipment, vegetation, and debris.
- (C) The excavations associated with drilling are filled and leveled.
- (D) Signs are posted and maintained under section 10 of this rule.
- (E) A properly executed completion or recompletion report is submitted to the division under section 17 of this rule.
- (F) The well is cased and cemented under this rule.
- (G) Bond is maintained on the well as required under this rule.
- (H) A demonstration is made under subsection (d) that the well does not threaten an underground source of drinking water.

(c) An owner or operator of a well may seek temporary abandonment status for a well that conforms to the requirements of IC 14-37 and this rule. The owner or operator seeking temporary abandonment status must file a completed application on a division form within sixty (60) days of the following:

- (1) For a well not placed in operation, the date on which drilling of the well is completed.
- (2) For a well placed in operation, the date on which operation of the well is terminated.
- (3) If the department has approved a deferral of plugging and abandonment under subsection (b), the date of expiration of the deferral.

(d) The following governs the demonstration required under subsection (b)(2)(H) that a well does not threaten an underground source of drinking water:

- (1) The owner or operator must notify an inspector at least forty-eight (48) hours before a demonstration is to be performed.
- (2) The owner or operator must use one (1) of the following methods in performing the demonstration:

(A) Monitor the fluid level using acoustical or wire line measuring methods on an annual basis and report the results of monitoring on a form prescribed by the division. If the fluid level is closer than one hundred (100) feet to the base of the lowest underground source of drinking water, the owner or operator shall notify an inspector within twenty-four (24) hours and shall do one (1) of the following:

- (i) Plug and abandon the well under section 19 of this rule.
- (ii) Set a mechanical bridge, cement, or calseal plug within two hundred (200) feet above the perforated or open hole interval in the cemented portion of the casing, but no less than one hundred (100) feet below the base of the lowest underground source of drinking water. Remove any fluid to a level at least one hundred (100) feet below the base of the lowest underground source of drinking water.
- (iii) Set a mechanical bridge, cement, or calseal plug within two hundred (200) feet above the perforated or open hole interval in the cemented portion of the casing, but no less than one hundred (100) feet below the base of the lowest underground source of drinking water. Pressure test the casing at least once every five (5) years during any period of temporary abandonment by filling the casing above the mechanical bridge, cement, or calseal plug with water and placing a pressure of at least three hundred (300) pounds per square inch gauge (which may vary no more than three percent (3%)) for a period of thirty (30) minutes. During the thirty (30) minute period of the test, additional pressure may not be applied to the casing.
- (iv) Install tubing and packer within two hundred (200) feet above the perforated or open hole interval in cemented portion of the casing, but no less than one hundred (100) feet below the base of the lowest underground source of drinking water. Pressure test the casing tubing annulus at least once every five (5) years during any period of temporary abandonment by filling the annulus above the packer with water and placing a pressure of at least three hundred (300) pounds per square inch gauge (which may vary no more than three percent (3%)) for a period of thirty (30) minutes. During the thirty (30) minute period of the test, additional pressure may not be applied to the annulus.
- (v) If a bridge, cement, or calseal plug was lawfully set before the effective date of this section, which is one hundred (100) feet below the base of the lowest underground source of drinking water, but no less than one hundred (100) feet below the calculated top of the cement, fluid level monitoring as described in item (iii) or a pressure test as described in item (iv) may be used to demonstrate the well does not threaten an underground source of drinking water.

(B) Perform a mechanical integrity test as described in clause (A)(ii), (A)(iii), or (A)(iv).

(C) For a gas well, with a minimum wellhead pressure of one hundred (100) pounds per square inch, each of the

following standards apply:

- (i) At least ten percent (10%) of the initial shut-in pressure shall be bled off, and the well shall be shut back in under the supervision of an inspector.
- (ii) Once the well returns to the maximum shut-in pressure, the pressure must be maintained at a constant level for thirty (30) minutes in the presence of an inspector.
- (iii) A pressure measuring device displaying a readout of the shut-in pressure shall be attached to the wellhead and shall be accessible at all times for inspection by the inspector.

(e) Temporary abandonment status may be granted for a period not to exceed five (5) consecutive years.

(f) Upon the expiration of temporary abandonment status or its renewal, the owner or operator must do one (1) of the following:

(1) Operate the well for its permitted purpose.

(2) Plug and abandon the well under section 19 of this rule.

(3) Submit a request for temporary abandonment renewal, on a form prescribed by the division, which demonstrates that the engineering, geologic, or economic reasons for retaining a well on temporary abandonment status outweigh the potential benefit from operating, plugging, or abandoning the well. Demonstrate the well does not threaten an underground source of drinking water by using a method, as selected by the division, under subsection (d)(2)(A)(ii), (d)(2)(A)(iii), or (d)(2)(A)(iv).

(g) If an owner or operator fails to file an annual report, as required under subsection (d)(2)(A), the division may require the owner or operator to do any of the following:

(1) Demonstrate the well has mechanical integrity using a method selected by the division under subsection (d)(2)(A)(ii), (d)(2)(A)(iii), or (d)(2)(A)(iv).

(2) Operate the well for the permitted purpose.

(3) Plug and abandon the well under section 19 of this rule.

(h) An owner or operator must notify the division in writing within thirty (30) days of any change in the operational status of a well that has been granted temporary abandonment status under this section.

(i) Operation of a well that is subject to this section removes the well from temporary abandonment status. (*Natural Resources Commission; 312 IAC 16-5-20; filed Feb 23, 1998, 11:30 a.m.: 21 IR 2345; filed Oct 1, 1999, 1:12 p.m.: 23 IR 295; readopted filed Nov 17, 2004, 11:00 a.m.: 28 IR 1315*)

### **312 IAC 16-5-21 Notice of violation; penalty**

Authority: IC 14-37-3-1

Affected: IC 4-21.5-3-6; IC 14-37-13-3

Sec. 21. (a) A notice of violation may be issued by an inspector, the division director, or the deputy director against any person who violates IC 14-37 or this article.

(b) A notice of violation is subject to IC 4-21.5-3-6. The notice must be in writing and include the following:

(1) A designation that the document is a "Notice of Violation".

(2) The name of the person or persons against whom the notice is directed.

(3) The nature of the violation.

(4) What action is appropriate to abate the violation.

(5) The date by which the violation must be abated.

(6) A statement that a person who is aggrieved by the notice of violation may request administrative review within thirty (30) days of issuance from the following address:

Division of Hearings  
Natural Resources Commission  
Indiana Government Center-South  
402 West Washington Street, Room W272  
Indianapolis, Indiana 46204

(c) The notice of violation may also set forth a civil penalty under IC 14-37-13-3. An owner or operator is liable for a civil penalty under this subsection in the following situations:

(1) Abatement of the violation is not performed by the date provided under subsection (b)(5) if no request for administrative review is filed.

(2) If a request for administrative review is filed:

(A) where a stay is issued under subsection (d) and the stay is later terminated, abatement is not performed by the date set forth in the order to terminate the stay; or

(B) where a final agency action modifies the abatement required by the notice of violation, abatement is not performed as set forth in the final agency action.

(d) A petition for review of a notice of violation does not automatically delay the effectiveness of the terms of the notice of violation, but the review petition may include a petition for stay of effectiveness of all or a portion of the notice of violation. If a petition for stay is filed, an administrative law judge shall, as soon as practicable, conduct a preliminary hearing to determine whether the notice of violation should be stayed in whole or in part. The burden of proof in the preliminary hearing is upon the person seeking the stay. (*Natural Resources Commission; 312 IAC 16-5-21; filed Feb 23, 1998, 11:30 a.m.: 21 IR 2346; readopted filed Nov 17, 2004, 11:00 a.m.: 28 IR 1315*)

### 312 IAC 16-5-22 Spill containment

Authority: IC 14-37-3

Affected: IC 14-37

Sec. 22. (a) An owner or operator shall contain all spills of oil or saltwater as required by this section.

(b) Spills that are not confined within a secondary containment structure shall be contained by the placement of absorbent materials, emergency excavations, or by other collection means designed to prevent the migration of the spill.

(c) Used absorbent materials shall be disposed of:

(1) in a municipal solid waste landfill permitted under 329 IAC 10; or

(2) in another manner approved by the division.

(*Natural Resources Commission; 312 IAC 16-5-22; filed Sep 11, 2000, 3:31 p.m.: 24 IR 279; errata filed Dec 6, 2000, 10:12 a.m.: 24 IR 1032; readopted filed Nov 17, 2004, 11:00 a.m.: 28 IR 1315*)

### 312 IAC 16-5-23 Spill reporting

Authority: IC 14-37-3

Affected: IC 14-37

Sec. 23. (a) An owner or operator shall report all spills of oil or saltwater as required by Table 1 as follows:

Table 1. Spill Reporting Requirements

Size and Location of the Spill	Report the Spill to the:	
	Indiana Department of Natural Resources	Indiana Department of Environmental Management
More than 2,000 gallons of oil or saltwater that is contained in a secondary containment structure approved by the Department of Natural Resources.	Not more than 48 hours after discovery of the spill.	
More than 1,000 gallons of oil or saltwater that is not contained in a secondary containment structure approved by the Department of Natural Resources.		Not more than 2 hours after discovery of the spill.
Less than 1,000 gallons but more than 42 gallons of oil or saltwater that is not contained in a secondary containment structure approved by the Department of Natural Resources but is contained within the boundary of the facility.	Not more than 48 hours after discovery of the spill.	
More than 55 gallons of oil that is not contained within the boundary of a facility.		Not more than 2 hours after discovery of the spill.
Less than 55 gallons of oil or saltwater that is not contained within the boundary of a facility.	Not more than 48 hours after discovery of the spill.	
Any spill of oil or saltwater that enters waters of the state.		Not more than 2 hours after discovery of the spill.

## OIL AND GAS

Any spill of oil or saltwater:  (1) that has not been cleaned up in accordance with section 24 of this rule; or (2) for which cleanup has not been started in accordance with section 24 of this rule.		Not more than 2 hours after discovery of the spill.
Any spill of less than 42 gallons of oil or saltwater that does not enter waters of the state.	No report required.	

(b) Spills required by Table 1 to be reported to the Indiana department of natural resources must be reported to the Evansville field office by telephone at (812) 477-8773, or by facsimile at (812) 477-8952.

(c) Spills required by Table 1 to be reported to the Indiana department of environmental management must be reported to the office of environmental response at (317) 233-7745 or (888) 233-7745 (toll-free in Indiana).

(d) Each report of a spill must include all of the following information:

- (1) The name, address, and telephone number of the person making the report.
- (2) The name, address, and telephone number of a contact person, if different than the person making the report.
- (3) The location of the spill, including lease name, township, range, and section.
- (4) The time of the spill.
- (5) The identification of the substance spilled.
- (6) The approximate quantity of the substance that has been spilled or may be spilled.
- (7) The duration of the spill.
- (8) The source of the spill.
- (9) The name and location of waters damaged.
- (10) The identity of any response organization responding to the spill.
- (11) What measures have been or will be undertaken to perform a spill response.
- (12) Any other information that may be significant to the response action.

*(Natural Resources Commission; 312 IAC 16-5-23; filed Sep 11, 2000, 3:31 p.m.: 24 IR 279; errata filed Dec 6, 2000, 10:12 a.m.: 24 IR 1032; readopted filed Nov 17, 2004, 11:00 a.m.: 28 IR 1315)*

### **312 IAC 16-5-24 Spill cleanup**

Authority: IC 14-37-3

Affected: IC 14-37

Sec. 24. (a) An owner or operator shall clean up spills of oil, fluids contaminated with oil, or saltwater as required by this section.

(b) Oil or fluid contaminated with oil that is confined within a secondary containment structure or collected as required by section 22 of this rule must be:

- (1) removed within seventy-two (72) hours;
- (2) placed in a nonleaking storage tank; and
- (3) managed or disposed of in accordance with section 27(a) of this rule.

(c) Saltwater that is confined within a secondary containment structure or collected as required by section 22 of this rule must be:

- (1) removed within seventy-two (72) hours;
- (2) placed in a nonleaking storage tank; and
- (3) disposed of in accordance with section 27(b) of this rule.

(d) Fluid placed in a nonleaking storage tank under subsection (b) or (c) must be disposed of in accordance with section 27 of this rule within thirty (30) days after discovery of the spill unless additional time is approved by the division.

(e) Soils contaminated with more than one (1) gallon of oil must be cleaned up as follows:

- (1) Soils that meet the conditions for remediation in section 25(c) of this rule may be:
  - (A) remediated at the facility as required by section 25 of this rule;
  - (B) applied to lease roads in accordance with section 27(a)(1) of this rule; or

(C) excavated and disposed of as required by section 27(d) of this rule.

(2) Soils that do not meet the conditions for remediation in section 25(c) of this rule must be excavated and disposed of as required by section 27(e) of this rule.

(f) Soils contaminated with saltwater must be cleaned up as required by section 26 of this rule.

(g) Soils contaminated with oil that will be remediated under section 25 of this rule must be managed to prevent discharge of oil to unaffected soil or waters of the state. (*Natural Resources Commission; 312 IAC 16-5-24; filed Sep 11, 2000, 3:31 p.m.: 24 IR 280; errata filed Dec 6, 2000, 10:12 a.m.: 24 IR 1032; readopted filed Nov 17, 2004, 11:00 a.m.: 28 IR 1315*)

### **312 IAC 16-5-25 Remediation of soils contaminated with oil**

Authority: IC 14-37-3

Affected: IC 14-37

Sec. 25. (a) The owner or operator may clean up soils contaminated with oil using remediation at the facility only as required by this section.

(b) The owner or operator may use a remediation method for soils contaminated with crude oil that is documented with a standard or procedure published by one (1) of the following:

(1) A department or agency of the federal government.

(2) A state environmental or natural resources agency.

(3) American Society for Testing and Materials.

(4) National Fire Protection Association.

(5) American Petroleum Institute.

(c) Remediation may be used at a facility only if all of the following conditions are met:

(1) Remediation is not prohibited by Table 2 in subsection (e).

(2) The slope of the remediation site is less than six percent (6%).

(3) The remediation site is not:

(A) subject to frequent, common, or occasional flooding as described in the soil survey prepared for the county by the natural resources conservation service;

(B) located in a flood plain or a floodway as defined at 310 IAC 6-1-3; or

(C) a wetland.

(4) The surface soil at the remediation site is not classified as a hydric soil in the soil survey prepared for the county by the Natural Resources Conservation Service. Soil surveys are available from the Natural Resources Conservation Service, P.O. Box 2890, Washington, D.C. 20013; from the State Conservationist, 6013 Lakeside Boulevard, Indianapolis, Indiana 46278, (317) 290-3200 extension 301; or from the cooperative extension service office in the county.

(5) The entire remediation site is within the boundary of the facility.

(6) No part of the remediation site is within one hundred (100) feet of any surface water or field tile.

(7) No part of the remediation site is within one thousand five hundred (1,500) feet of any public water supply well.

(8) No part of the remediation site is within five hundred (500) feet of any domestic water well.

(9) No part of the remediation site is within a wellhead protection area that is delineated and approved in accordance with rules of the water pollution control board at 327 IAC 8-4.1.

(d) Contaminated soil that is not permitted to be remediated by Table 2 in subsection (e) must be excavated and disposed of as required by section 27 of this rule.

(e) The remediation method to be used must be determined by the soil characteristics that exist at the remediation site as described in Table 2 as follows:

Table 2. Requirements for Remediation Based  
on Permeability of Surface Soil and Depth  
of Ground Water at the Remediation Site

Permeability <sup>1</sup> and Depth of Ground Water <sup>1</sup>	Remediation Requirements
More than 2.0 inches/hour permeability and	Remediation is not permitted.

Less than 6 feet depth to ground water	
More than 2.0 inches/hour permeability and More than 6 feet depth to ground water	Use a liner that meets the requirements of subsection (f).
Less than 2.0 inches/hour permeability and Less than 6 feet depth to ground water	Use a liner that meets the requirements of subsection (f).
Less than 2.0 inches/hour permeability and More than 6 feet depth to ground water	No restrictions.

<sup>1</sup>Permeability of surface soil and depth of ground water during the remediation as described in the soil survey prepared for the county by the Natural Resources Conservation Service or by on-site inspection and analysis by a qualified soil scientist or licensed professional geologist. Soil surveys are available from the Natural Resources Conservation Service, P.O. Box 2890, Washington, D.C. 20013; from the State Conservationist, 6013 Lakeside Boulevard, Indianapolis, Indiana 46278, (317) 290-3200 extension 301; or from the cooperative extension service office in your county.

(f) If a liner is required by Table 2 in subsection (e), remediation may be conducted on any site where one (1) of the following has been constructed:

- (1) A synthetic liner that meets all of the following requirements:
  - (A) Constructed of a minimum of twenty (20) mil polyethylene or its equivalent.
  - (B) Hydraulic conductivity of  $1 \times 10^{-6}$  centimeters per second or less.
  - (C) Installed in accordance with the manufacturer's directions.
  - (D) Equipped with a leachate collection system that collects all leachate from the remediation site for monitoring and proper disposal.
  - (E) Installed at least two (2) feet above the depth of ground water.
- (2) A compacted soil liner that meets all of the following requirements:
  - (A) Constructed of soil compacted to a depth of two (2) feet.
  - (B) Hydraulic conductivity of  $1 \times 10^{-6}$  centimeters per second or less.
  - (C) Installed at least two (2) feet above the depth of ground water.
- (g) The owner or operator shall:
  - (1) begin remediation as soon as practicable but not more than one hundred twenty (120) days after discovery of the spill;
  - (2) notify the division within seven (7) days after beginning remediation;
  - (3) follow the remediation method or procedure selected as closely as possible;
  - (4) monitor the remediation site as required by section 28 of this rule during remediation; and
  - (5) complete remediation as described in subsection (h) within:
    - (A) three hundred sixty-five (365) days after beginning remediation; or
    - (B) another time period approved by the division.

(h) Remediation of soils contaminated with oil is complete when the concentration of polynuclear aromatic hydrocarbons in the soil is reduced to the values shown in Table 3:

Table 3. Criteria for Completion of Remediation of Soils  
Contaminated with Oil

Contaminant	Maximum Concentration <sup>1</sup>
Acenaphthene	130 ppm
Anthracene	51 ppm
Benzo(a)anthracene <sup>2</sup>	5.0 ppm
Benzo(b)fluoranthene <sup>2</sup>	5.0 ppm
Benzo(k)fluoranthene <sup>2</sup>	39 ppm
Benzo(a)pyrene <sup>2</sup>	0.50 ppm
Chrysene <sup>2</sup>	26 ppm
Dibenz(a,h)anthracene <sup>2</sup>	0.5 ppm
Fluoranthene	880 ppm
Fluorene	170 ppm
Indeno(1,2,3-cd)pyrene <sup>2</sup>	3.0 ppm
Naphthalene	0.70 ppm
Pyrene	570 ppm

<sup>1</sup>The maximum concentration of polynuclear aromatic hydrocarbons in soil contaminated with oil is determined by testing a representative sample of that soil using U.S. EPA Method 8310, "Polynuclear Aromatic Hydrocarbons". Method 8310 is found in the U.S. Environmental Protection Agency Publication SW-846, Third Edition (November 1986), "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", as amended by Updates I (July 1992), II (September 1994), IIA (August 1993), IIB (January 1995), and III (December 1996). U.S. Environmental Protection Agency Publication SW-846 is available from the Superintendent of Documents, Government Printing Office, Washington, D.C. 20402, (202) 512-1800.

<sup>2</sup>This substance is a carcinogen identified in the RISC Technical Resources Guidance Document, Draft February 18, 1999.

(i) If the contaminated soil does not meet the completion criteria in subsection (h) within:

(1) three hundred sixty-five (365) days after beginning remediation; or

(2) another time period approved by the division;

the owner or operator shall excavate all soil that does not meet the completion criteria in subsection (h) and dispose of that soil as required by section 27 of this rule. (*Natural Resources Commission; 312 IAC 16-5-25; filed Sep 11, 2000, 3:31 p.m.: 24 IR 281; errata filed Dec 6, 2000, 10:12 a.m.: 24 IR 1032; readopted filed Nov 17, 2004, 11:00 a.m.: 28 IR 1315*)

### **312 IAC 16-5-26 Remediation of soils contaminated with saltwater**

Authority: IC 14-37-3

Affected: IC 14-37

Sec. 26. (a) The owner or operator shall clean up soils contaminated with saltwater using remediation at the facility only as required by this section.

(b) The owner or operator may use a remediation method for soils contaminated with saltwater that is documented with a standard or procedure published by one (1) of the following:

(1) A department or agency of the federal government.



(2) A state environmental or natural resources agency.

(3) American Society of Testing and Materials.

(4) American Petroleum Institute.

(c) Instead of using a method described in subsection (b), the owner or operator may submit to the division a written remediation plan that is designed to:

(1) prevent additional soil damage;

(2) prevent soil erosion;

(3) where feasible, remediate the soil to a condition where it can support vegetation;

(4) establish vegetative cover; and

(5) where feasible, use a vegetative cover with palatability and seasons of use characteristics similar to the vegetation already present on adjoining uncontaminated sites.

(d) If the division approves a remediation plan submitted under subsection (c), the owner or operator may use that approved remediation plan to clean up soils contaminated with saltwater at the facility. (*Natural Resources Commission; 312 IAC 16-5-26; filed Sep 11, 2000, 3:31 p.m.: 24 IR 282; readopted filed Nov 17, 2004, 11:00 a.m.: 28 IR 1315*)

### **312 IAC 16-5-27 Disposal**

Authority: IC 14-37-3

Affected: IC 14-37

Sec. 27. (a) Oil or fluid contaminated with oil must be managed using one (1) of the following methods:

(1) Oil or fluid contaminated with oil may be applied to lease roads for the purpose of dust suppression in a manner designed to ensure that the materials do not leave the roadbed. Oil or fluid contaminated with oil must be:

(A) stored in a leak-free tank; and

(B) applied to lease roads within seventy-two (72) hours of removal from the secondary containment unless a longer period of time is authorized by the division.

(2) Oil or fluid contaminated with oil may be:

(A) placed in a leak-free tank; and

(B) returned to crude oil production in accordance with this article.

(3) Oil or fluid contaminated with oil may be disposed of in a solid waste land disposal facility if such disposal is approved by the Indiana department of environmental management.

(b) Saltwater or fluid contaminated with saltwater must be:

(1) injected into a Class II well authorized under 312 IAC 16-3; or

(2) discharged under a NPDES permit issued by the Indiana department of environmental management.

(c) Soil contaminated with oil or saltwater may be disposed of as alternate daily cover in a municipal solid waste landfill permitted under 329 IAC 10 in accordance with:

(1) 329 IAC 10-20-14.1; and

(2) the permit issued to the landfill under 329 IAC 10.

(d) After three hundred sixty-five (365) days of remediation, or another time period approved by the division, all soil contaminated with oil that has a remaining concentration of polynuclear aromatic hydrocarbons greater than the values listed in Table 3 in section 25(h) of this rule must be:

(1) excavated;

(2) removed from the facility;

(3) disposed of in accordance with 329 IAC 10-8.1-13 in a municipal solid waste landfill permitted by the Indiana department of environmental management under 329 IAC 10; and

(4) replaced with comparable uncontaminated soil.

(e) All soil contaminated with oil that is not permitted to be remediated under section 25 of this rule must be:

(1) excavated;

(2) removed from the facility;

(3) disposed of in accordance with 329 IAC 10-8.1-13 in a municipal solid waste landfill permitted by the Indiana department of environmental management under 329 IAC 10; and

(4) replaced with comparable uncontaminated soil.

(Natural Resources Commission; 312 IAC 16-5-27; filed Sep 11, 2000, 3:31 p.m.: 24 IR 283; errata filed Dec 6, 2000, 10:12 a.m.: 24 IR 1032; readopted filed Nov 17, 2004, 11:00 a.m.: 28 IR 1315)

### 312 IAC 16-5-28 Monitoring

Authority: IC 14-37-3

Affected: IC 14-37

Sec. 28. (a) The owner or operator shall monitor a remediation site for releases or discharges of oil or fluid contaminated with oil to surface waters as required by Table 4 as follows:

Table 4. Requirements for Monitoring a Remediation Site for Discharges to Surface Waters

Remediation Site Location	Type of Monitoring
More than 1,500 feet from surface water or field tile.	No requirement.
500 to 1,500 feet from surface water or field tile.	Once every 30 days, conduct a visual inspection during daylight hours of all surface water or field tile within 500 to 1,500 feet of remediation site for visible film, sheen, or discoloration of the surface of the water or sludge or emulsion beneath the surface or upon adjoining shorelines.
100 to 500 feet from surface water or field tile.	(1) Once every 7 days, conduct a visual inspection during daylight hours of all surface water within 100 to 500 feet of remediation site for visible film, sheen, or discoloration of the surface of the water or sludge or emulsion beneath the surface or upon adjoining shorelines. (2) If a visible film, sheen, or discoloration of the surface of the water or sludge or emulsion beneath the surface or upon adjoining shorelines is noted, sample any surface water within 100 to 500 feet from the remediation site and analyze the samples for violation of applicable water standards in 327 IAC 2, using a method described in 327 IAC 2.
Less than 100 feet from surface water or field tile.	Remediation is not permitted less than 100 feet from surface water or field tile.

(b) The owner or operator shall:

(1) record the date, time, and results of each monitoring event required by Table 4 in subsection (a); and

(2) make the records available to the division upon request.

*(Natural Resources Commission; 312 IAC 16-5-28; filed Sep 11, 2000, 3:31 p.m.: 24 IR 283; errata filed Dec 6, 2000, 10:12 a.m.: 24 IR 1032; readopted filed Nov 17, 2004, 11:00 a.m.: 28 IR 1315)*

**312 IAC 16-5-29 Reporting**

Authority: IC 14-37-3

Affected: IC 14-37

Sec. 29. (a) The owner or operator shall report any discharge of oil from the remediation site that is required to be reported by 329 IAC 2-6.1 to the Indiana department of environmental management at (317) 233-7745 or (888) 233-7745 (toll free in Indiana).

(b) When remediation under section 25 of this rule is determined to be complete, the owner or operator shall send a written report to the division within seven (7) days of completion that includes the following information:

- (1) The name and address of the person responsible for the remediation.
- (2) The identity of the facility where the remediation was done.
- (3) The type and approximate amount of the waste remediated at the facility.
- (4) The method used to remediate the waste.
- (5) The concentrations of polynuclear aromatic hydrocarbons listed in Table 3 in section 25(h) of this rule remaining in the soil at the remediation site.
- (6) How the concentration of polynuclear aromatic hydrocarbons reported under subdivision (5) was determined.
- (7) A copy of the laboratory report showing the concentrations of polynuclear aromatic hydrocarbons reported under subdivision (5).

*(Natural Resources Commission; 312 IAC 16-5-29; filed Sep 11, 2000, 3:31 p.m.: 24 IR 284; errata filed Dec 6, 2000, 10:12 a.m.: 24 IR 1032; readopted filed Nov 17, 2004, 11:00 a.m.: 28 IR 1315)*

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