

**CHAPTER 78. OIL AND GAS WELLS**

Subch.	Sec.
<b>A. GENERAL PROVISIONS</b> .....	<b>78.1</b>
<b>B. PERMITS, TRANSFERS AND OBJECTIONS</b> .....	<b>78.11</b>
<b>C. ENVIRONMENTAL PROTECTION PERFORMANCE STANDARDS</b> .....	<b>78.51</b>
<b>D. WELL DRILLING, OPERATION AND PLUGGING</b> .....	<b>78.71</b>
<b>E. WELL REPORTING</b> .....	<b>78.121</b>
<b>F. [Reserved]</b> .....	<b>78.141</b>
<b>G. BONDING REQUIREMENTS</b> .....	<b>78.301</b>
<b>H. UNDERGROUND GAS STORAGE</b> .....	<b>78.401</b>
<b>X. STATEMENTS OF POLICY</b> .....	<b>78.901</b>

**Authority**

The provisions of this Chapter 78 issued under the Oil and Gas Act (58 P.S. §§ 601.101—601.605); the Coal and Gas Resource Coordination Act (58 P.S. §§ 501—518); the Oil and Gas Conservation Act (58 P.S. §§ 401—419); Article XIX-A of The Administrative Code of 1929 (71 P.S. §§ 510-1—510-108); The Clean Streams Law (35 P.S. §§ 691.1—691.1001); and the Solid Waste Management Act (35 P.S. §§ 6018.101—6018.1003); amended under section 604 of the Oil and Gas Act (58 P.S. § 601.604); sections 5(b)(1), 304 and 402(a) of The Clean Streams Law (35 P.S. §§ 691.5(b)(1), 691.304(a) and 691.402(a)); section 105(a) of the Solid Waste Management Act (35 P.S. § 6018.105(a)); and sections 1901-A, 1917-A, 1920-A, 30 and 31 of The Administrative Code of 1929 (71 P.S. §§ 510-1, 510-17, 510-20, 510-103 and 510-104), unless otherwise noted.

**Source**

The provisions of this Chapter 78 adopted July 31, 1987, effective August 1, 1987, 17 Pa.B. 3235, unless otherwise noted.

**Cross References**

This chapter cited in 25 Pa. Code § 287.2 (relating to scope).

**Subchapter A. GENERAL PROVISIONS**

Sec.	
78.1.	Definitions.
78.2.	Scope.
78.3.	[Reserved].
78.4.	[Reserved].
78.5.	[Reserved].
78.6.	[Reserved].

**§ 78.1. Definitions.**

(a) The words and terms defined in section 103 of the act (58 P.S. § 601.103), section 2 of the Coal and Gas Resource Coordination Act (58 P.S. § 502), section 2 of the Oil and Gas Conservation Law (58 P.S. § 402), section 103 of the Solid Waste Management Act (35 P.S. § 6018.103) and section 1 of

The Clean Stream Law (35 P. S. § 691.1), have the meanings set forth in those statutes when the terms are used in this chapter.

(b) The following words and terms, when used in this chapter, have the following meanings, unless the context clearly indicates otherwise:

*Act*—The Oil and Gas Act (58 P. S. §§ 601.101—601.605).

*Attainable bottom*—The depth, approved by the Department, which can be achieved after a reasonable effort is expended to clean out to the total depth.

*Casing seat*—The depth to which the surface casing or coal protection casing is run. In wells without surface casing, the casing seat shall be equal to the depth of casing which is normal for wells in the area.

*Cement*—A mixture of materials for bonding or sealing that attains a 7-day maximum permeability of 0.01 millidarcies and a 24-hour compressive strength of at least 500 psi in accordance with applicable API standards and specifications.

*Certified laboratory*—A laboratory accredited by the Department under Chapter 252 (relating to laboratory accreditation).

*Coal area*—An area that is underlain by a workable coal seam.

*Coal protective casing*—A string of pipe which is installed in the well for the purpose of coal segregation and protection. In some instances the coal protective casing and the surface casing may be the same.

*Deepest fresh groundwater*—The deepest fresh groundwater bearing formation penetrated by the wellbore as determined from drillers logs from the well or from other wells in the area surrounding the well or from historical records of the normal surface casing seat depths in the area surrounding the well, whichever is deeper.

*Drill cuttings*—Rock cuttings and related mineral residues generated during the drilling of an oil or gas well.

*Fresh groundwater*—Water in that portion of the generally recognized hydrologic cycle which occupies the pore spaces and fractures of saturated subsurface materials.

*Gas storage field*—A gas storage reservoir and all of the gas storage wells connected to the gas storage reservoir.

*Gas storage reservoir*—The portion of a subsurface geologic formation or rock strata used for or being tested for storage of natural gas that:

- (i) Has sufficient porosity and permeability to allow gas to be injected or withdrawn, or both.
- (ii) Is bounded by strata of insufficient porosity or permeability, or both, to allow gas movement out of the reservoir.
- (iii) Contains or will contain injected gas geologically or by pressure control.

*Gas storage well*—A well located and used in a gas storage reservoir for injection or withdrawal purposes, or an observation well.

*Gel*—A slurry of clay or other equivalent material and water at a ratio of not more than 7 barrels of water to each 100 pounds of clay or other equivalent matter.

*Noncementing material*—A mixture of very fine to coarse grained nonbonding materials, including unwashed crushed rock, drill cuttings, earthen mud or other equivalent material approved by the Department.

*Noncoal area*—An area that is not underlain by a workable coal seam.

*Nonporous material*—Nontoxic earthen mud, drill cuttings, fire clay, gel, cement or equivalent materials approved by the Department that will equally retard the movement of fluids.

*Observation well*—A well used to monitor the operational integrity and conditions in a gas storage reservoir, the reservoir protective area or strata above or below the gas storage horizon.

*Owner*—A person who owns, manages, leases, controls or possesses a well or coal property. For purposes of sections 203(a)(4) and (5) and 210 of the act (58 P. S. §§ 601.203(a)(4) and (5) and 601.210), the term does not include those owners or possessors of surface real property on which the abandoned well is located who did not participate or incur costs in the drilling or extraction operation of the abandoned well and had no right of control over the drilling or extraction operation of the abandoned well. The term does not apply to orphan wells except where the Department determines a prior owner or operator benefited from the well as provided in section 210(a) of the act.

*Perimeter area*—An area that begins at the outside coal boundaries of an operating coal mine and extends within 1000 feet beyond those boundaries or an area within 1000 feet beyond the mine permit boundaries of a coal mine already projected and permitted but not yet being operated.

*Permanently cemented*—Surface casing or coal protective casing that is cemented until cement is circulated to the surface or is cemented with a calculated volume of cement necessary to fill the theoretical annular space plus 20% excess.

*Private water supply*—A water supply that is not a public water supply.

*Production casing*—A string of pipe other than surface casing and coal protective casing which is run for the purpose of confining or conducting hydrocarbons and associated fluids from one or more producing horizons to the surface.

*Public water supply*—A water system that is subject to the Pennsylvania Safe Drinking Water Act (35 P. S. §§ 721.1—721.17).

*Reportable release of brine*—Spilling, leaking, emitting, discharging, escaping or disposing of one of the following:

- (i) More than 5 gallons of brine within a 24-hour period on or into the ground at the well site where the total dissolved solids concentration of the brine is equal or greater than 10,000 mg/l.

(ii) More than 15 gallons of brine within a 24-hour period on or into the ground at the well site where the total dissolved solids concentration of the brine is less than 10,000 mg/l.

*Retrievable*—When used in conjunction with surface casing, coal protective casing or production casing, the casing that can be removed after exerting a prudent effort to pull the casing while applying a pulling force at least equal to the casing weight plus 5000 pounds or 120% of the casing weight, whichever is greater.

*Seasonal high groundwater table*—The saturated condition in the soil profile during certain periods of the year. The condition can be caused by a slowly permeable layer within the soil profile and is commonly indicated by the presence of soil mottling.

*Sheen*—An iridescent appearance on the surface of the water.

*Soil mottling*—Irregular marked spots in the soil profile that vary in color, size and number.

*Surface casing*—A string of pipe which extends from the surface and that segregates and protects fresh groundwater and stabilizes the hole.

*Tophole water*—Water that is brought to the surface while drilling through the strata containing fresh groundwater and water that is fresh groundwater or water that is from a body of surface water. Tophole water may contain drill cuttings typical of the formation being penetrated but may not be polluted or contaminated by additives, brine, oil or man induced conditions.

*Total depth*—The depth to which the well was originally drilled, subsequently drilled or the depth to which it was plugged back in a manner approved by the Department.

*Tour*—A workshift in drilling of a well.

*Water protection depth*—The depth to a point 50 feet below the surface casing seat.

*Water purveyor*—The owner or operator of a public water supply.

*Water supply*—A supply of water for human consumption or use, or for agricultural, commercial, industrial or other legitimate beneficial uses.

*Well operator or operator*—The person designated as the well operator or operator on the permit application or well registration. If a permit or registration was not issued, the term means a person who locates, drills, operates, alters or plugs a well or reconditions a well with the purpose of production therefrom. In cases where a well is used in connection with the underground storage of gas, the term also means a storage operator.

*Well site*—The area occupied by the equipment or facilities necessary for or incidental to the drilling, production or plugging of a well.

*Workable coal seam*—One of the following:

(i) A coal seam in fact being mined in the area in question under the act and this chapter by underground methods.

(ii) A coal seam which, in the judgment of the Department, reasonably can be expected to be mined by underground methods.

**Authority**

The provisions of this § 78.1 amended under 27 Pa.C.S. §§ 4103(a), 4104 and 4105; and section 1920-A of The Administrative Code of 1929 (71 P. S. § 510-20).

**Source**

The provisions of this § 78.1 adopted July 31, 1987, effective August 1, 1987, 17 Pa.B. 3235; amended July 28, 1989, effective July 29, 1989, 19 Pa.B. 3229; amended December 16, 1994, effective December 17, 1994, 24 Pa.B. 6284; amended March 30, 2001, effective March 31, 2001, 31 Pa.B. 1736; amended January 27, 2006, effective January 28, 2006, 36 Pa.B. 465. Immediately preceding text appears at serial pages (276293) to (276297).

**Cross References**

This section cited in 25 Pa. Code § 78.66 (relating to reporting releases).

**§ 78.2. Scope.**

This chapter specifies procedures and rules for the drilling, alteration, operation and plugging of oil and gas wells, and for the operation of a coal mine in the vicinity of an oil or gas well.

**Source**

The provisions of this § 78.2 adopted July 31, 1987, effective August 1, 1987, 17 Pa.B. 3235; amended July 28, 1989, effective July 29, 1989, 19 Pa.B. 3229. Immediately preceding text appears at serial pages (128367) to (128368).

**§ 78.3. [Reserved].**

**Source**

The provisions of this § 78.3 adopted July 31, 1987, effective August 1, 1987, 17 Pa.B. 3235; reserved July 28, 1989, effective July 29, 1989, 19 Pa.B. 3229. Immediately preceding text appears at serial pages (128368) and (121567).

**§ 78.4. [Reserved].**

**Source**

The provisions of this § 78.4 adopted July 31, 1987, effective August 1, 1987, 17 Pa.B. 3235; reserved July 28, 1989, effective July 29, 1989, 19 Pa.B. 3229. Immediately preceding text appears at serial page (121567).

**§ 78.5. [Reserved].**

**Source**

The provisions of this § 78.5 adopted July 31, 1987, effective August 1, 1987, 17 Pa.B. 3235; reserved July 28, 1989, effective July 29, 1989, 19 Pa.B. 3229. Immediately preceding text appears at serial page (121567).

**§ 78.6. [Reserved].****Source**

The provisions of this § 78.6 adopted July 31, 1987, effective August 1, 1987, 17 Pa.B. 3235; reserved July 28, 1989, effective July 29, 1989, 19 Pa.B. 3229. Immediately preceding text appears at serial page (121567).

**Subchapter B. PERMITS, TRANSFERS AND OBJECTIONS****PERMITS AND TRANSFERS**

## Sec.

- 78.11. Permit requirements.
- 78.12. Compliance with permit.
- 78.13. Permit transfers.
- 78.14. Transfer of well ownership or change of address.
- 78.15. Application requirements.
- 78.16. Accelerated permit review.
- 78.17. Permit renewal.
- 78.18. Disposal and enhanced recovery well permits.
- 78.19. Permit application fee schedule.

**OBJECTIONS**

- 78.21. Opportunity for objections and conferences; surface landowners.
- 78.22. Objections by owner or operator of coal mine.
- 78.23. Time for filing objections by owner or operator of coal mine.
- 78.24. Information to be provided with objections by owner or operator of coal mine.
- 78.25. Conferences—general.
- 78.26. Agreement at conference.
- 78.27. Continuation of conference.
- 78.28. Final action if objections do not proceed to panel.
- 78.29. Composition of panel.
- 78.30. Jurisdiction of panel.
- 78.31. Scheduling of meeting by the panel.
- 78.32. Recommendation by the panel.
- 78.33. Effect of panel on time for permit issuance.

**PERMITS AND TRANSFERS****§ 78.11. Permit requirements.**

- (a) No person may drill or alter a well unless that person has first obtained a permit from the Department.
- (b) No person may operate a well unless one of the following conditions has been met:
  - (1) The person has obtained a permit under the act.

- (2) The person has registered the well under the act.
- (3) The well was in operation on April 18, 1985, under a permit that was obtained under the Gas Operations Well-Drilling Petroleum and Coal Mining Act (52 P. S. §§ 2104, 2208, 2601 and 2602) (Repealed).

**Source**

The provisions of this § 78.11 adopted July 28, 1989, effective July 29, 1989, 19 Pa.B. 3229.

**Cross References**

This section cited in 25 Pa. Code § 78.18 (relating to disposal and enhanced recovery well permits).

**§ 78.12. Compliance with permit.**

A person may not drill, alter or operate an oil or gas well except in accordance with a permit or registration issued under the act and in compliance with the terms and conditions of the permit, this chapter and the statutes under which it was promulgated. A copy of the permit shall be kept at the well site during drilling or alteration of a well.

**Source**

The provisions of this § 78.12 adopted July 28, 1989, effective July 29, 1989, 19 Pa.B. 3229; amended December 16, 1994, effective December 17, 1994, 24 Pa.B. 6284. Immediately preceding text appears at serial page (138804).

**§ 78.13. Permit transfers.**

(a) No transfer, assignment or sale of rights granted under a permit or registration may be made without prior written approval of the Department. Permit transfers may be denied for the reasons set forth in section 201(e)(4) and (5) of the act (58 P. S. § 601.201(e)(4) and (5)).

(b) The Department may require the transferee to fulfill the drilling, plugging, well site restoration, water supply replacement and other requirements of the act, regardless of whether the transferor commenced the activity and regardless of whether the transferor failed to properly perform the transferor's obligations under the act.

**Source**

The provisions of this § 78.13 adopted July 28, 1989, effective July 29, 1989, 19 Pa.B. 3229.

**§ 78.14. Transfer of well ownership or change of address.**

(a) Within 30 days after the sale, assignment, transfer, conveyance or exchange of a well, the new owner or operator shall notify the Department, in writing, of the transfer of ownership.

(b) The notice shall include the following information:

- (1) The names, addresses and telephone numbers of the former and new owner, and the agent if applicable.

- (2) The well permit or registration number.
- (3) The effective date of the transfer of ownership.
- (4) An application for a well permit transfer if there is a change in the well operator.
- (c) The permittee shall notify the Department of a change in address or name within 30 days of the change.

**Source**

The provisions of this § 78.14 adopted July 28, 1989, effective July 29, 1989, 19 Pa.B. 3229; amended March 6, 1998, effective March 7, 1998, 28 Pa.B. 1234. Immediately preceding text appears at serial pages (193955) to (193956).

**§ 78.15. Application requirements.**

(a) An application for a well permit shall be submitted on forms furnished by the Department and contain the information required by the Department to evaluate the application.

(b) The permit application will not be considered complete until the applicant submits a complete and accurate plat, an approvable bond or other means of complying with section 215 of the act (58 P. S. § 601.215), the fee in compliance with § 78.19 (relating to permit application fee schedule), proof of notification, necessary requests for variance or waivers or other documents required to be furnished by law or the Department. The person named in the permit shall be the same person named in the bond or other security.

**Source**

The provisions of this § 78.15 adopted July 28, 1989, effective July 29, 1989, 19 Pa.B. 3229; amended April 17, 2009, effective April 18, 2009, 39 Pa.B. 1982. Immediately preceding text appears at serial page (276300).

**§ 78.16. Accelerated permit review.**

In cases of hardship, an operator may request an accelerated review of a well permit application. For the purposes of this section, hardship includes cases where immediate action is necessary to protect public health or safety, to control pollution or to effect other environmental or safety measures, and extraordinary circumstances beyond the control of the operator. Permits issued shall be consistent with the requirements of the act.

**Source**

The provisions of this § 78.16 adopted July 28, 1989, effective July 29, 1989, 19 Pa.B. 3229.

**§ 78.17. Permit renewal.**

An operator may request a 1-year renewal of a well permit. The request shall be accompanied by a permit fee, the surcharge required in section 601 of the act (58 P. S. § 601.601), and an affidavit affirming that the information on the origi-

nal application is still accurate and complete, that the well location restrictions are still met and that the surface owners, coal owners and operators, gas storage operators, where the permit renewal is for a proposed well location within an underground gas storage reservoir or the reservoir protective area, and water supply owners within 1,000 feet have been notified of this request for renewal. The request shall be received by the Department at least 15 calendar days prior to the expiration of the original permit.

**Source**

The provisions of this § 78.17 adopted July 28, 1989, effective July 29, 1989, 19 Pa.B. 3229; amended March 30, 2001, effective March 31, 2001, 31 Pa.B. 1736. Immediately preceding text appears at serial page (263008).

**§ 78.18. Disposal and enhanced recovery well permits.**

(a) A person may not drill a disposal or enhanced recovery well or alter an existing well to be a disposal or enhanced recovery well unless the person:

(1) Obtains a well permit under § 78.11 (relating to permit requirements).

(2) Submits with the well permit application a copy of the well permit, approved permit application and required related documentation submitted for the disposal or enhanced recovery well to the EPA under 40 CFR Part 146 (relating to underground injection control program).

(3) Submits a copy of a control and disposal plan for the disposal or enhanced recovery well and related facilities that meets the requirements of § 91.34 (relating to activities utilizing pollutants).

(4) Submits a copy of an erosion and sedimentation plan for the disposal or enhanced recovery well site that meets the requirements of Chapter 102 and § 78.53 (relating to erosion and sediment control; and erosion and sedimentation control).

(b) By December 18, 1995, an operator of disposal or enhanced recovery wells which were operating before December 18, 1995, shall submit to the Department a list of the operator's disposal or enhanced recovery wells including:

(1) The Department's permit or registration number for each well on this list.

(2) The corresponding permit number issued to each well on this list by the EPA.

(c) A person who operates multiple well projects may submit one copy of the documents required under subsection (a) if the documents are applicable to the entire project.

**Source**

The provisions of this § 78.18 adopted December 16, 1994, effective December 17, 1994, 24 Pa.B. 6284.

**§ 78.19. Permit application fee schedule.**

(a) Except as provided in subsection (b), an applicant shall pay a permit application fee of \$100.

(b) An applicant proposing to drill a well to produce gas from the Marcellus Shale formation shall pay a permit application fee according to the following schedule:

<i>New Marcellus Shale Wells</i>	
Total Well Bore Length in Feet	Total Fee
0 To 1,500	\$900
1,501 To 2,000	\$1,000
2,001 To 2,500	\$1,100
2,501 To 3,000	\$1,200
3,001 To 3,500	\$1,300
3,501 To 4,000	\$1,400
4,001 To 4,500	\$1,500
4,501 To 5,000	\$1,600
5,001 To 5,500	\$1,700
5,501 To 6,000	\$1,800
6,001 To 6,500	\$1,900
6,501 To 7,000	\$2,000
7,001 To 7,500	\$2,100
7,501 To 8,000	\$2,200
8,001 To 8,500	\$2,300
8,501 To 9,000	\$2,400
9,001 To 9,500	\$2,500
9,501 To 10,000	\$2,600
10,001 To 10,500	\$2,700
10,501 To 11,000	\$2,800
11,001 To 11,500	\$2,900
11,501 To 12,000	\$3,000

(c) An applicant for a Marcellus Shale well exceeding 12,000 feet in total well bore length shall pay a permit application fee of \$3,000 + \$100 for every 500 feet the well bore extends over 12,000 feet. Fees shall be rounded to the foot interval.

(d) If, when drilled, the total well bore length of a Marcellus Shale well exceeds the length specified in the permit application, the operator shall pay the difference between the amount paid as part of the permit application and the amount required by subsection (b) plus 10% of the total amount required by subsection (b).

(e) Fees are nonrefundable.

(f) At least every 3 years, the Department will provide the EQB with an evaluation of the fees in this chapter and recommend regulatory changes to the EQB to address any disparity between the program income generated by the fees and the Department's cost of administering the program with the objective of ensuring fees meet all program costs and programs are self-sustaining.

#### Authority

The provisions of this § 78.19 adopted under sections 201(d) and 604 of the Oil and Gas Act (58 P. S. §§ 601.201(d) and 601.604); and section 1920-A of The Administrative Code of 1929 (71 P. S. § 510-20).

#### Source

The provisions of this § 78.19 adopted April 17, 2009, effective April 18, 2009, 39 Pa.B. 1982.

#### Cross References

This section cited in 25 Pa. Code § 78.15 (relating to application requirements).

### OBJECTIONS

#### § 78.21. Opportunity for objections and conferences; surface landowners.

(a) The surface landowner of the tract on which the proposed well is located may object to the well location based on the assertion that the well location violates section 205 of the act (58 P. S. § 601.205) or on the basis that the information in the application is untrue in a material respect, and request a conference under section 501 of the act (58 P. S. § 601.501).

(b) The objection and request for a conference shall be filed in writing with the Department within 15 calendar days of receipt of the plat by the surface landowner. The objection shall contain the following:

- (1) The name, address and telephone number of the person submitting the objection.
- (2) The name of the well operator, and the name and number of the proposed well.
- (3) A statement of the objection and a request for a conference if a conference is being requested.

78-10.1

**Source**

The provisions of this § 78.21 adopted July 28, 1989, effective July 29, 1989, 19 Pa.B. 3229.

**§ 78.22. Objections by owner or operator of coal mine.**

The owner or operator of an operating coal mine or a coal mine already projected and platted, but not yet being operated, may file written objections to a proposed well location with the Department if the following apply:

- (1) The well, when drilled, would penetrate within the outside coal boundaries of such a mine or within 1,000 feet beyond the boundaries.
- (2) In the opinion of the owner or operator, the well will unduly interfere with or endanger the mine or persons working in the mine.

**Source**

The provisions of this § 78.22 adopted July 28, 1989, effective July 29, 1989, 19 Pa.B. 3229.

**Cross References**

This section cited in 25 Pa. Code § 78.25 (relating to conferences—general).

**§ 78.23. Time for filing objections by owner or operator of coal mine.**

(a) A coal mine owner or operator who objects to a proposed gas well for financial considerations, and wishes to go before a panel with an objection over which the panel has jurisdiction, shall file objections to a proposed gas well within 10-calendar days of the receipt of the plat.

(b) A coal mine owner or operator who does not wish to go before a panel with an objection over which the panel has jurisdiction, or who is not raising financial objections to the proposed gas well, shall file objections to a proposed oil or gas well within 15 calendar days of the receipt of the plat.

**Source**

The provisions of this § 78.23 adopted July 28, 1989, effective July 29, 1989, 19 Pa.B. 3229.

**Cross References**

This section cited in 25 Pa. Code § 78.25 (relating to conferences—general).

**§ 78.24. Information to be provided with objections by owner or operator of coal mine.**

(a) The objections shall be filed in writing and shall contain the following information, if applicable:

- (1) The name, address and telephone number of the person filing the objection, and the date on which a copy of the plat was received.
- (2) The name and address of the applicant for the well permit and the name and number of the well.
- (3) The type of well—for example, oil, gas, injection and the like—that is the subject of the objections.
- (4) The location of the well in relation to the coal owned or operated by the objecting party.
- (5) The area through which the well will be drilled, specifically:

- (i) Whether the well will be drilled through a mining area that is projected, platted or permitted, but not yet being operated.
  - (ii) Whether the well will be drilled through a perimeter area.
  - (iii) Whether the well will penetrate a workable coal seam.
  - (iv) Whether the well will be located above an active mine.
  - (v) Whether the well will penetrate an operating mine.
- (6) A copy of the plans, maps or projections of the mining area underlying the proposed gas well showing the location of the proposed well.
- (7) Whether the owner or operator believes that the well will pose undue interference or endangerment to the mine, and the nature of the threat.
- (8) The financial impact posed by the well, to which objections may be heard by a panel under § 78.30 (relating to jurisdiction of panel).
- (9) Whether the well will violate the act, the Coal and Gas Resource Coordination Act (58 P. S. §§ 501—518) or another applicable law administered by the Department.
- (b) The objections shall include an alternate location, if possible, on the tract of the well operator that would overcome the objections or at which the interference would be minimized. The Department is not bound to consider alternate locations that are proposed after the close of the first conference.

#### Source

The provisions of this § 78.24 adopted July 28, 1989, effective July 29, 1989, 19 Pa.B. 3229.

#### Cross References

This section cited in 25 Pa. Code § 78.25 (relating to conferences—general).

### § 78.25. Conferences—general.

- (a) If a timely objection to the location is filed by the coal owner or operator under §§ 78.22—78.24 (relating to objections by owner or operator of coal mine; time for filing objections by owner or operator of coal mine; and information to be provided with objections by owner or operator of coal mine), or if objections are made by the Department, the Department will fix a time and place for a conference within 10 calendar days from the date of service of the objections upon the well operator, unless all parties agree to an extension of time for the conference.
- (b) The Department may decide not to hold a conference if it determines that the objections are not valid or if the objection is resolved.
- (c) The Department will attempt to schedule the conference as late as possible in the 10-day period if the well is subject to the Coal and Gas Resource Coordination Act (58 P. S. §§ 501—518). The Department will not schedule a conference under section 202 of the act (58 P. S. § 601.202) if it receives written notice that the gas well operator or the coal mine owner or operator has made a

written request to convene a panel to resolve objections to the location of a gas well over which a panel has jurisdiction in accordance with §§ 78.29—78.33.

(d) The conference shall be governed by §§ 78.26—78.28 (relating to agreement at conference; continuation of conference; and final action if objections do not proceed to panel).

(e) The Department or a person having a direct interest in the subject matter of the act may request a conference any time to attempt to resolve by mutual agreement a matter arising under the act.

#### Source

The provisions of this § 78.25 adopted July 28, 1989, effective July 29, 1989, 19 Pa.B. 3229.

#### Cross References

This section cited in 25 Pa. Code § 78.30 (relating to jurisdiction of panel).

### § 78.26. Agreement at conference.

(a) If the parties reach an agreement at the conference, and if the Department approves the location, the Department will cause the agreement to be reduced to writing.

(b) If the Department does not reject the agreement within 10 calendar days after the agreement is reduced to writing, the agreement becomes effective.

(c) An agreement reached at the conference shall be consistent with the requirements of the act and applicable statutes. An agreement that is not in accordance with the act, the Coal and Gas Resource Coordination Act (58 P. S. §§ 501—518) and applicable law shall be deemed to be null and void.

#### Source

The provisions of this § 78.26 adopted July 28, 1989, effective July 29, 1989, 19 Pa.B. 3229.

#### Cross References

This section cited in 25 Pa. Code § 78.25 (relating to conferences—general).

### § 78.27. Continuation of conference.

The Department may continue the conference for good cause. Good cause includes one or more of the following:

(1) The need for supplemental data, maps or surveys.

(2) The need to verify that the agreement or a proposed well location is consistent with the requirements of the act, the Coal and Gas Resource Coordination Act (58 P.S. §§ 501—518) and other applicable requirements.

(3) The need for the presence of essential witnesses whose unavailability is due to good cause.

(4) The need for further investigation into the allegations that are the basis for the objections.

(5) Agreement by all parties that a continuance is beneficial to the resolution of the objections.

**Source**

The provisions of this § 78.27 adopted July 28, 1989, effective July 29, 1989, 19 Pa.B. 3229.

**Cross References**

This section cited in 25 Pa. Code § 78.25 (relating to conferences—general).

**§ 78.28. Final action if objections do not proceed to panel.**

If the panel does not have jurisdiction of the objections, under § 78.30 (relating to jurisdiction of panel), or if the panel has jurisdiction but the parties choose not to proceed to a panel, the Department may proceed to issue or deny the permit, under sections 201 and 202 of the act (58 P. S. §§ 601.201 and 601.202). No permit will be issued for a well at a location that in the opinion of the Department would endanger the safety of persons working in a coal mine.

**Source**

The provisions of this § 78.28 adopted July 28, 1989, effective July 29, 1989, 19 Pa.B. 3229.

**Cross References**

This section cited in 25 Pa. Code § 78.25 (relating to conferences—general).

**§ 78.29. Composition of panel.**

(a) If the gas well operator and the objecting coal owner or operator are unable to agree upon a drilling location, and the gas well is subject to the jurisdiction of a panel under § 78.30 (relating to jurisdiction of panel), the well operator or a coal owner or operator may convene a panel.

(b) The panel shall consist of one person selected by the objecting coal owners or operators, a second person selected by the permit applicant and a third selected by these two.

(c) The parties shall submit their positions to the panel within such time as the panel prescribes, in accordance with section 12 of the Coal and Gas Resource Coordination Act (58 P. S. § 512).

**Source**

The provisions of this § 78.29 adopted July 28, 1989, effective July 29, 1989, 19 Pa.B. 3229.

**Cross References**

This section cited in 25 Pa. Code § 78.25 (relating to conferences—general).

**§ 78.30. Jurisdiction of panel.**

(a) A panel shall hear objections by the owner or operator of the coal mining area only if the proposed gas well is not subject to the Oil and Gas Conservation Law (58 P. S. §§ 401—419) and one of the following applies:

- (1) The well will be drilled through an area that is projected and permitted, but not yet being operated.
  - (2) The well will be drilled through a perimeter area.
  - (3) The well will penetrate a workable coal seam, and will be located above an active mine, but will not penetrate an operating mine.
- (b) The panel shall hear only objections that were filed by the owner or operator of the mining areas set forth in subsection (a).
- (c) If after a conference in accordance with § 78.25 (relating to conferences—general), the Department has unresolved objections, the panel does not have jurisdiction to convene or to hear objections.

**Source**

The provisions of this § 78.30 adopted July 28, 1989, effective July 29, 1989, 19 Pa.B. 3229.

**Cross References**

This section cited in 25 Pa. Code § 78.24 (relating to information to be provided with objections by owner or operator of coal mine); 25 Pa. Code § 78.25 (relating to conferences—general); 25 Pa. Code § 78.28 (relating to final action if objections do not proceed to panel); and 25 Pa. Code § 78.29 (relating to composition of panel).

**§ 78.31. Scheduling of meeting by the panel.**

The panel shall convene a meeting within 10-calendar days of the panel chairperson's receipt of a written request to do so by the permit applicant or by the objecting coal owner or operator.

**Source**

The provisions of this § 78.31 adopted July 28, 1989, effective July 29, 1989, 19 Pa.B. 3229.

**Cross References**

This section cited in 25 Pa. Code § 78.25 (relating to conferences—general); and 25 Pa. Code § 78.32 (relating to recommendation by the panel).

**§ 78.32. Recommendation by the panel.**

- (a) The panel shall make its recommendation of where the proposed well should be located, based upon the financial considerations of the parties.
- (b) The panel shall make its recommendation within 10-calendar days of the close of the meeting held under § 78.31 (relating to scheduling of meeting by the panel).
- (c) If the Department determines that the first recommended location endangers a mine or the public, it will reject the location and notify the panel to make another recommendation. The panel shall submit another recommended location to the Department within 10 calendar days of the Department's notification.
- (d) If the Department determines that the second recommended location endangers a mine or the public, the Department may designate a location where it has determined that the well will not unduly interfere with or endanger the

mine or the public and issue a permit for the well at that designated location. However, if the Department has not designated such a location, and if the Department determines that a well drilled at any proposed or panel-recommended alternate location will unduly interfere with or endanger the mine or the public, it will deny the permit.

(e) No permit will be issued for a well at a location that would, in the opinion of the Department, endanger the safety of persons working in a coal mine.

**Source**

The provisions of this § 78.32 adopted July 28, 1989, effective July 29, 1989, 19 Pa.B. 3229.

**Cross References**

This section cited in 25 Pa. Code § 78.25 (relating to conferences—general).

**§ 78.33. Effect of panel on time for permit issuance.**

The period of time during which the objections are being considered by a full panel is not included in the 45-day period for the issuance or denial of a permit under section 201(e) of the act (58 P. S. § 601.201(e)).

**Source**

The provisions of this § 78.33 adopted July 28, 1989, effective July 29, 1989, 19 Pa.B. 3229.

**Cross References**

This section cited in 25 Pa. Code § 78.25 (relating to conferences—general).

**Subchapter C. ENVIRONMENTAL PROTECTION**

**PERFORMANCE STANDARDS**

Sec.	
78.51.	Protection of water supplies.
78.52.	Predrilling or prealteration survey.
78.53.	Erosion and sediment control.
78.54.	General requirements.
78.55.	Control and disposal plan.
78.56.	Pits and tanks for temporary containment.
78.57.	Control, storage and disposal of production fluids.
78.58.	Existing pits used for the control, storage and disposal of production fluids.
78.59.	[Reserved].
78.60.	Discharge requirements.
78.61.	Disposal of drill cuttings.
78.62.	Disposal of residual waste—pits.
78.63.	Disposal of residual waste—land application.
78.64.	Containment around oil tanks.
78.65.	Site restoration.
78.66.	Reporting releases.

**§ 78.51. Protection of water supplies.**

(a) A well operator who affects a public or private water supply by pollution or diminution shall restore or replace the affected supply with an alternate source of water adequate in quantity and quality for the purposes served by the supply.

(b) A landowner, water purveyor or affected person suffering pollution or diminution of a water supply as a result of drilling, altering or operating an oil or gas well may so notify the Department and request that an investigation be conducted. The notice and request shall include the following:

- (1) The name, address and telephone number of the person requesting the investigation.
- (2) The type, location and use of the water supply.
- (3) Available background quality and quantity data regarding the water supply, if known.
- (4) Well depth, pump setting and water level, if known.
- (5) A description of the pollution or diminution.

(c) Within 10 days of the receipt of the investigation request, the Department will investigate the claim and will, within 45 days of receipt of the request, make a determination. If the Department finds that pollution or diminution was caused by the drilling, alteration or operation activities or if it presumes the well operator responsible for polluting the water supply of the landowner or water purveyor under section 208(c) of the act (58 P. S. § 601.208(c)), the Department will issue orders to the well operator necessary to assure compliance with this section.

(d) The operator shall affirmatively demonstrate to the Department's satisfaction that the quality of the restored or replaced water supply to be used for human consumption is at least equal to the quality of the water supply before it was affected by the operator. If the quality of the water supply before it was affected by the operator cannot be affirmatively established, the operator shall demonstrate that the concentrations of substances in the restored or replaced water supply do not exceed the primary and secondary maximum contaminant levels established under § 109.202 (relating to State MCLs, MRDLs and treatment technique requirements).

(e) If the water supply is for uses other than human consumption, the operator shall demonstrate to the Department's satisfaction that the restored or replaced water supply is adequate for the purposes served by the supply.

(f) The oil or gas well operator's duty to replace or restore a water supply includes providing plumbing, conveyance, pumping or auxiliary equipment and facilities necessary for the surface landowner or water purveyor to utilize the water supply.

(g) Tank trucks or bottled water are acceptable only as temporary water replacement for a period approved by the Department and do not relieve the operator of the obligation to provide a restored or replaced water supply.

(h) If the well operator and the landowner, water purveyor or affected person are unable to reach agreement on the means for restoring or replacing the water supply, the Department or either party may request a conference under section 501 of the act (58 P. S. § 601.501).

**Source**

The provisions of this § 78.51 adopted July 28, 1989, effective July 29, 1989, 19 Pa.B. 3229.

**§ 78.52. Predrilling or prealteration survey.**

(a) A well operator who wishes to preserve its defense under section 208(d)(1) of the act (58 P. S. § 601.208(d)(1)) that the pollution of a water supply existed prior to the drilling or alteration of the well shall cause a predrilling or prealteration survey to be conducted in accordance with this section.

(b) A person who wishes to document the quality of a water supply to support a future claim that the drilling or alteration of the well affected the water supply by pollution may conduct a predrilling or prealteration survey in accordance with this section.

(c) The survey shall be conducted by an independent certified laboratory. A person independent of the well owner or well operator, other than an employee of the certified laboratory, may collect the sample and document the condition of the water supply, if the certified laboratory affirms that the sampling and documentation is performed in accordance with the laboratory's approved sample collection, preservation and handling procedure and chain of custody.

(d) An operator electing to preserve its defenses under section 208(d)(1) of the act shall provide a copy of the results of the survey to the Department and the landowner or water purveyor within 10-calendar days of being notified by the Department to submit a copy of the results.

(e) The report describing the results of the survey must contain the following information:

- (1) The location of the water supply and the name of the surface landowner or water purveyor.
- (2) The date of the survey, and the name of the certified laboratory and the person who conducted the survey.
- (3) A description of where and how the sample was collected.
- (4) A description of the type and age, if known, of the water supply, and treatment, if any.
- (5) The name of the well operator, name and number of well to be drilled and permit number if known.
- (6) The results of the laboratory analysis.

(f) A well operator who wishes to preserve the defense under section 208(d)(2) of the act that the landowner or water purveyor refused the operator access to conduct a survey shall confirm the desire to conduct this survey and that access was refused by issuing notice to the person by certified mail, or otherwise document that access was refused. The notice must include the following:

- (1) The operator's intention to drill or alter a well.
- (2) The desire to conduct a predrilling or prealteration survey.

(3) The name of the person who requested and was refused access to conduct the survey and the date of the request and refusal.

(4) The name and address of the well operator and the address of the Department, to which the water purveyor or landowner may respond.

#### Source

The provisions of this § 78.52 adopted July 28, 1989, effective July 29, 1989, 19 Pa.B. 3229; amended March 6, 1998, effective March 7, 1998, 28 Pa.B. 1234; amended January 27, 2006, effective January 28, 2006, 36 Pa.B. 465. Immediately preceding text appears at serial pages (276305) to (276306).

#### Cross References

This section cited in 25 Pa. Code § 78.141 (relating to scope).

### § 78.53. Erosion and sediment control.

During and after earthmoving or soil disturbing activities, including the activities related to siting, drilling, completing, producing, servicing and plugging the well, constructing, utilizing and restoring the access road and restoring the site, the operator shall design, implement and maintain best management practices in accordance with Chapter 102 (relating to erosion and sediment control) and an erosion and sediment control plan prepared under that chapter. Best management practices for oil and gas well operations are listed in the *Oil And Gas Operators Manual*, Commonwealth of Pennsylvania, Department of Environmental Protection, Guidance No. 550-0300-001 (April 1997), as amended and updated.

#### Source

The provisions of this § 78.53 adopted July 28, 1989, effective July 29, 1989, 19 Pa.B. 3229; amended March 30, 2001, effective March 31, 2001, 31 Pa.B. 1736. Immediately preceding text appears at serial page (266200).

#### Cross References

This section cited in 25 Pa. Code § 78.18 (relating to disposal and enhanced recovery well permits); 25 Pa. Code § 78.57 (relating to control, storage and disposal of production fluids); 25 Pa. Code § 78.60 (relating to discharge requirements); 25 Pa. Code § 78.61 (relating to disposal of drill cuttings); 25 Pa. Code § 78.62 (relating to disposal of residual waste—pits); and 25 Pa. Code § 78.63 (relating to disposal of residual waste—land application).

### § 78.54. General requirements.

The well operator shall control and dispose of fluids, residual waste and drill cuttings, including tophole water, brines, drilling fluids, drilling muds, stimulation fluids, well servicing fluids, oil, production fluids and drill cuttings in a manner that prevents pollution of the waters of this Commonwealth and in accordance with §§ 78.55—78.58 and 78.60—78.63 and with the statutes under which this chapter is promulgated.

#### Source

The provisions of this § 78.54 adopted July 28, 1989, effective July 29, 1989, 19 Pa.B. 3229.

**Cross References**

This section cited in 25 Pa. Code § 78.55 (relating to control and disposal plan).

**§ 78.55. Control and disposal plan.**

(a) Prior to generation of waste, the well operator shall prepare and implement a plan under § 91.34 (relating to activities utilizing pollutants) for the control and disposal of fluids, residual waste and drill cuttings, including tophole water, brines, drilling fluids, additives, drilling muds, stimulation fluids, well servicing fluids, oil, production fluids and drill cuttings from the drilling, alteration, production, plugging or other activity associated with oil and gas wells.

(b) The plan shall identify the control and disposal methods and practices utilized by the well operator and be consistent with the act, The Clean Streams Law (35 P. S. §§ 691.1—691.1001), the Solid Waste Management Act (35 P. S. §§ 6018.101—6018.1003) and §§ 78.54, 78.56—78.58 and 78.60—78.63.

(c) The operator shall revise the plan prior to implementing a change to the practices identified in the plan.

(d) A copy of the plan shall be provided to the Department upon request.

**Source**

The provisions of this § 78.55 adopted July 28, 1989, effective July 29, 1989, 19 Pa.B. 3229.

**Cross References**

This section cited in 25 Pa. Code § 78.54 (relating to general requirements).

**§ 78.56. Pits and tanks for temporary containment.**

(a) Except as provided in §§ 78.60(b) and 78.61(b) (relating to discharge requirements; and disposal of drill cuttings), the operator shall contain polluttional substances and wastes from the drilling, altering, completing, recompleting, servicing and plugging the well, including brines, drill cuttings, drilling muds, oils, stimulation fluids, well treatment and servicing fluids, plugging and drilling fluids other than gases in a pit, tank or series of pits and tanks. The operator shall install or construct and maintain the pit, tank or series of pits and tanks in accordance with the following requirements:

(1) The pit, tank or series of pits and tanks shall be constructed and maintained with sufficient capacity to contain all polluttional substances and wastes which are used or produced during drilling, altering, completing and plugging the well.

(2) A pit shall be designed, constructed and maintained so that at least 2 feet of freeboard remain at all times. If open tanks are used, the tanks shall be maintained so that at least 2 feet of freeboard remain at all times unless the tank is provided with an overflow system to a standby tank or pit with sufficient volume to contain all excess fluid or waste. If an open standby tank is used, it shall be maintained with 2 feet of freeboard. If this subsection is violated, the

operator immediately shall take the necessary measures to ensure the structural stability of the pit or tank, prevent spills and restore the 2 feet of freeboard.

(3) Pits and tanks shall be designed, constructed and maintained to be structurally sound and reasonably protected from unauthorized acts of third parties.

(4) A pit or tank that contains drill cuttings from below the casing seat, pollutional substances, wastes or fluids other than tophole water, fresh water and uncontaminated drill cuttings shall be impermeable and comply with the following:

(i) The pits shall be constructed with a synthetic flexible liner with a coefficient of permeability of no greater than  $1 \times 10^{-7}$  cm/sec and with sufficient strength and thickness to maintain the integrity of the liner. The liner shall be designed, constructed and maintained so that the physical and chemical characteristics of the liner are not adversely affected by the waste and the liner is resistant to physical, chemical and other failure during transportation, handling, installation and use. Adjoining sections of liners shall be sealed together to prevent leakage in accordance with the manufacturer's directions. If the operator seeks to use a liner material other than a synthetic flexible liner, the operator shall submit a plan identifying the type and thickness of the material and the installation procedures to be used, and shall obtain approval of the plan by the Department before proceeding.

(ii) The pit shall be constructed so that the liner subbase is smooth, uniform and free from debris, rock and other material that may puncture, tear, cut or otherwise cause the liner to fail. The liner subbase and subgrade shall be capable of bearing the weight of the material above the liner without settling that may affect the integrity of the liner. If the pit bottom or sides consist of rock, shale or other materials that may cause the liner to fail, a subbase of at least 6 inches of soil, sand or smooth gravel, or sufficient amount of an equivalent material, shall be installed over the area as the subbase for the liner.

(iii) The bottom of the pit shall be at least 20 inches above the seasonal high groundwater table, unless the operator obtains approval under subsection (b) for a pit that exists only during dry times of the year and is located above groundwater.

(iv) If a liner becomes torn or otherwise loses its integrity, the pit shall be managed to prevent the pit contents from leaking from the pit. If repair of the liner or construction of another temporary pit is not practical or possible, the pit contents shall be removed and disposed at an approved waste disposal facility or disposed on the well site in accordance with § 78.61, § 78.62 or § 78.63 (relating to disposal of residual waste—pits; and disposal of residual waste—land application).

(v) If the liner drops below the 2 feet of freeboard, the pit shall be managed to prevent the pit contents from leaking from the pit and the 2 feet of lined freeboard shall be restored.

(b) The operator may request to use practices other than those specified in subsection (a) which provide equivalent or superior protection by submitting a request to the Department for approval. The request shall be made on forms provided by the Department.

(c) Disposal of uncontaminated drill cuttings in a pit or by land application shall comply with § 78.61. A pit used for the disposal of residual waste, including contaminated drill cuttings, shall comply with § 78.62. Disposal of residual waste, including contaminated drill cuttings, by land application shall comply with § 78.63.

(d) Unless a permit under The Clean Streams Law (35 P. S. §§ 691.1—691.1001) or approval under § 78.57 or § 78.58 (relating to control, storage and disposal of production fluids; and existing pits used for the control, storage and disposal of production fluids) has been obtained for the pit, the owner or operator shall remove or fill the pit within 9 months after completion of drilling, or in accordance with the extension granted by the Department under section 206(g) of the act (58 P. S. § 601.206(g)). Pits used during servicing, plugging and recompleting the well shall be removed or filled within 90 days of construction.

#### Source

The provisions of this § 78.56 adopted July 28, 1989, effective July 29, 1989, 19 Pa.B. 3229; amended December 16, 1994, effective December 17, 1994, 24 Pa.B. 6284; amended March 30, 2001, effective March 31, 2001, 31 Pa.B. 1736. Immediately preceding text appears at serial pages (263009) to (263010) and (241901).

#### Cross References

This section cited in 25 Pa. Code § 78.54 (relating to general requirements); 25 Pa. Code § 78.55 (relating to control and disposal plan); 25 Pa. Code § 78.57 (relating to control, storage and disposal of production fluids); and 25 Pa. Code § 78.61 (relating to disposal of drill cuttings).

### § 78.57. Control, storage and disposal of production fluids.

(a) Unless a permit has been obtained under § 78.60(a) (relating to discharge requirements), the operator shall collect the brine and other fluids produced during operation, service and plugging of the well in a tank, pit or a series of pits or tanks, or other device approved by the Department for subsequent disposal or reuse. Except as allowed in this subchapter or otherwise approved by the Department, the operator may not discharge the brine and other fluids on or into the ground or into the waters of this Commonwealth.

(b) Except as provided in § 78.56 (relating to pits and tanks for temporary containment), the operator may not use a pit for the control, handling or storage of brine and other fluids produced during operation, service or plugging of a well unless the pit is authorized by a permit under The Clean Streams Law (35 P. S.

§§ 691.1—691.1001) or approval to operate the pit as an impoundment under The Clean Streams Law is obtained from the Department under subsection (c).

(c) The operator may apply for approval from the Department to operate a pit as an impoundment under The Clean Streams Law, as indicated by the Department's issuance of a pit approval number in accordance with this section. No pit will be eligible for approval under this subsection unless the capacity of any one pit or of any two or more interconnected pits is less than 250,000 gallons, or the total capacity contained in pits on one tract or related tracts of land is less than 500,000 gallons. Compliance with this subsection does not relieve the operator from the obligation to comply with section 308 of The Clean Streams Law (35 P. S. § 691.308) and the requirements for obtaining a permit for the erection, construction and operation of treatment works promulgated under that section.

(1) A request for approval under this subsection shall be made on forms furnished by the Department and, at a minimum, shall include the following:

(i) A description of the operator's plan that demonstrates compliance with this subsection for the construction or reconstruction of the pit.

(ii) A description of the operator's program for operation and maintenance of the pit.

(iii) A description of the method for subsequent disposal or reuse of the brine or other fluids produced during operation of the well.

(iv) A description of the operator's program for the closure of the pit and restoration of the site.

(2) The operator shall design, construct, operate and maintain the pit in accordance with the approval and the following:

(i) The pit approval number is posted at the pit in a legible and visible manner.

(ii) The pit is not located within 100 feet of a stream, wetland or body of water unless a waiver is granted by the Department.

(iii) The bottom of the pit is a minimum of 20 inches above the seasonal high groundwater table.

(iv) At least 2 feet of freeboard remain at all times.

(v) The pit is structurally sound and the inside slopes of the pit are not steeper than a ratio of 2 horizontal to 1 vertical.

(vi) The pit is impermeable and is lined with a synthetic flexible liner or alternate material that has a coefficient of permeability of no greater than  $1 \times 10^{-7}$  cm/sec. The liner shall be of sufficient strength and thickness to maintain the integrity of the liner. The thickness of a synthetic liner shall be at least 30 mils. Adjoining sections of liners shall be sealed together in accordance with the manufacturer's directions to prevent leakage.

(vii) The physical and chemical characteristics of the liner shall be compatible with the waste and the liner is resistant to physical, chemical and other failure during transportation, handling, installation and use. Liner com-

patibility shall satisfy EPA Method 9090, *Compatibility Test for Wastes and Membrane Liners*, or other documented data approved by the Department.

(viii) The pit shall be constructed so that the liner subbase is smooth, uniform and free of debris, rock and other material that may puncture, tear, cut, rip or otherwise cause the liner to fail. The liner subbase and subgrade shall be capable of bearing the weight of the material above the liner without settling in an amount that will affect the integrity of the liner. If the pit bottom or sides consist of rock, shale or other material that may cause the liner to leak, a subbase of at least 6 inches of soil, sand or smooth gravel, or a sufficient amount of an equivalent material shall be installed over the area as the subbase for the liner.

(ix) Prior to placing brine or other fluids in the pit, the operator shall inspect the liner and correct all damage or imperfections that may cause the liner to leak.

(x) Surface water which may drain into the pit shall be diverted away from the pit.

(xi) The pit is reasonably protected from unauthorized acts of third parties.

(3) Upon abandonment of the well or revocation of the approval by the Department, the operator shall restore the pit in accordance with the following:

(i) The free liquid fraction of the pit contents shall be removed and disposed under § 78.60(a) and the remaining pit contents and liner shall be removed and disposed under §§ 78.62 and 78.63 (relating to disposal of residual waste—pits; and disposal of residual waste—land application), or the Solid Waste Management Act.

(ii) The pit shall be backfilled to the ground surface and graded to promote runoff with no depression that would accumulate or pond water on the surface. The stability of the backfilled pit shall be compatible with the adjacent land.

(iii) The surface of the backfilled pit area shall be revegetated to stabilize the soil surface and comply with § 78.53 (relating to erosion and sedimentation control). The revegetation shall establish a diverse, effective, permanent, vegetative cover which is capable of self-regeneration and plant succession. Where vegetation would interfere with the intended use of the surface by the landowner, the surface shall be stabilized against accelerated erosion.

#### Source

The provisions of this § 78.57 adopted July 28, 1989, effective July 29, 1989, 19 Pa.B. 3229.

**Cross References**

This section cited in 25 Pa. Code § 78.54 (relating to general requirements); 25 Pa. Code § 78.55 (relating to control and disposal plans); 25 Pa. Code § 78.56 (relating to pits and tanks for temporary containment); and 25 Pa. Code § 78.58 (relating to existing pits used for the control, storage and disposal of production fluids).

**§ 78.58. Existing pits used for the control, storage and disposal of production fluids.**

For pits in existence on July 29, 1989, the operator may request approval for an alternate method of satisfying the requirements of § 78.57(c)(2)(iii) (relating to control, storage and disposal of production fluids), the angle of slope requirements of § 78.57(c)(2)(v) and the liner requirement of § 78.57(c)(2)(vi)—(viii) by affirmatively demonstrating to the Department's satisfaction, by the use of monitoring wells or other methods approved by the Department, that the pit is impermeable and that the method will provide protection equivalent or superior to that provided by § 78.57. The operator shall request approval under § 78.57(c)(1).

**Source**

The provisions of this § 78.58 adopted July 28, 1989, effective July 29, 1989, 19 Pa.B. 3229.

**Cross References**

This section cited in 25 Pa. Code § 78.54 (relating to general requirements); 25 Pa. Code § 78.55 (relating to control and disposal plans); and 25 Pa. Code § 78.56 (relating to pits and tanks for temporary containment).

**§ 78.59. [Reserved].****Source**

The provisions of this § 78.59 adopted July 28, 1989, effective July 29, 1989, 19 Pa.B. 3229; reserved March 30, 2001, effective March 31, 2001, 31 Pa.B. 1736. Immediately preceding text appears at serial page (271914).

**§ 78.60. Discharge requirements.**

(a) The owner and operator may not cause or allow a discharge of a substance to the waters of this Commonwealth unless the discharge complies with this subchapter and Chapters 91—93, 95 and 102, The Clean Streams Law (35 P. S. §§ 691.1—691.1001) and the act.

(b) The owner and operator may not discharge top-hole water or water in a pit as a result of precipitation by land application unless the discharge is in accordance with the following requirements:

(1) No additives, drilling muds, polluttional materials or drilling fluids other than gases or fresh water have been added to or are contained in the water, unless otherwise approved by the Department.

- (2) The pH is not less than 6 nor greater than 9 standard units, or is characteristic of the natural background quality of the groundwater.
- (3) The specific conductance of the discharge is less than 1,000  $\mu\text{mhos/cm}$ .
- (4) There is no sheen from oil and grease.
- (5) The discharge water shall be spread over an undisturbed, vegetated area capable of absorbing the tophole water and filtering solids in the discharge, and spread in a manner that prevents a direct discharge to surface waters and complies with § 78.53 (relating to erosion and sedimentation control).
- (6) Upon completion, the area complies with § 78.53.
- (7) The area of land application is not within 200 feet of a water supply or within 100 feet of a stream, body of water or a wetland unless approved as part of a waiver granted by the Department under section 205(b) of the act (58 P. S. § 601.205(b)).
- (8) If the water does not meet the requirements of paragraph (2) or (4), the Department may approve treatment prior to discharge to the land surface.

#### Source

The provisions of this § 78.60 adopted July 28, 1989, effective July 29, 1989, 19 Pa.B. 3229; amended December 16, 1994, effective December 17, 1994, 24 Pa.B. 6284; amended March 6, 1998, effective March 7, 1998, 28 Pa.B. 1234; reserved March 30, 2001, effective March 31, 2001, 31 Pa.B. 1736. Immediately preceding text appears at serial pages (271914) to (241905).

#### Cross References

This section cited in 25 Pa. Code § 78.54 (relating to general requirements); 25 Pa. Code § 78.55 (relating to control and disposal plan); 25 Pa. Code § 78.56 (relating to pits and tanks for temporary containment); 25 Pa. Code § 78.57 (relating to control, storage and disposal of production fluids); 25 Pa. Code § 78.61 (relating to disposal of drill cuttings); 25 Pa. Code § 78.62 (relating to disposal of residual waste—pits); and 25 Pa. Code § 78.63 (relating to disposal of residual waste—land application).

### § 78.61. Disposal of drill cuttings.

(a) *Drill cuttings from above the casing seat—pits.* The owner or operator may dispose of drill cuttings from above the casing seat determined in accordance with § 78.83(b) (relating to surface and coal protective casing and cementing procedures) in a pit at the well site if the owner or operator satisfies the following requirements:

- (1) The drill cuttings are generated from the well at the well site.
- (2) The drill cuttings are not contaminated with pollutional material, including brines, drilling muds, stimulation fluids, well servicing fluids, oil, production fluids or drilling fluids other than tophole water, fresh water or gases.
- (3) The disposal area is not within 100 feet of a stream, body of water or wetland unless approved as part of a waiver granted by the Department under section 205(b) of the act (58 P. S. § 601.205(b)).

- (4) The disposal area is not within 200 feet of a water supply.
  - (5) The pit is designed, constructed and maintained to be structurally sound.
  - (6) The free liquid fraction of the waste shall be removed and disposed under § 78.60 (relating to discharge requirements).
  - (7) The pit shall be backfilled to the ground surface and graded to promote runoff with no depression that would accumulate or pond water on the surface. The stability of the backfilled pit shall be compatible with the adjacent land.
  - (8) The surface of the backfilled pit area shall be revegetated to stabilize the soil surface and comply with § 78.53 (relating to erosion and sedimentation control). The revegetation shall establish a diverse, effective, permanent, vegetative cover which is capable of self-regeneration and plant succession. Where vegetation would interfere with the intended use of the surface of the landowner, the surface shall be stabilized against erosion.
- (b) *Drill cuttings from above the casing seat—land application.* The owner or operator may dispose of drill cuttings from above the casing seat determined in accordance with § 78.83(b) by land application at the well site if the owner or operator satisfies the following requirements:
- (1) The drill cuttings are generated from the well at the well site.
  - (2) The drill cuttings are not contaminated with pollutorial material, including brines, drilling muds, stimulation fluids, well servicing fluids, oil, production fluids or drilling fluids other than tophole water, fresh water or gases.
  - (3) The disposal area is not within 100 feet of a stream, body of water or wetland unless approved as part of a waiver granted by the Department under section 205(b) of the act (58 P. S. § 601.205(b)).
  - (4) The disposal area is not within 200 feet of a water supply.
  - (5) The soils have a minimum depth from surface to bedrock of 20 inches.
  - (6) The drill cuttings are not spread when saturated, snow covered or frozen ground interferes with incorporation of the drill cuttings into the soil.
  - (7) The drill cuttings are not applied in quantities which will result in runoff or in surface water or groundwater pollution.
  - (8) The free liquid fraction is disposed in accordance with § 78.60.
  - (9) The drill cuttings are spread and incorporated into the soil.
  - (10) The land application area shall be revegetated to stabilize the soil surface and comply with § 78.53. The revegetation shall establish a diverse, effective permanent vegetative cover which is capable of self-regeneration and plant succession. Where vegetation would interfere with the intended use of the surface by the landowner, the surface shall be stabilized against erosion.
- (c) *Drill cuttings from below the casing seat.* After removal of the free liquid fraction and disposal in accordance with § 78.60, drill cuttings from below the casing seat determined in accordance with § 78.83(b) may be disposed of as follows:

- (1) In a pit that meets the requirements of § 78.62(a)(5)—(18) and (b) (relating to disposal of residual waste—pits).
- (2) By land application in accordance with § 78.63(a)(5)—(20) and (b) (relating to disposal of residual waste—land application).
- (d) The owner or operator may request to use solidifiers, dusting, unlined pits, attenuation or other alternative practices for the disposal of uncontaminated drill cuttings by submitting a request to the Department for approval. The request shall be made on forms provided by the Department and shall demonstrate that the practice provides equivalent or superior protection to the requirements of this section.
- (e) A pit used for the disposal of residual waste, including contaminated drill cuttings, shall comply with § 78.62. Land application of residual waste, including contaminated drill cuttings, shall comply with § 78.63.

#### Source

The provisions of this § 78.61 adopted July 28, 1989, effective July 29, 1989, 19 Pa.B. 3229; amended December 16, 1994, effective December 17, 1994, 24 Pa.B. 6284; amended March 30, 2001, effective March 31, 2001, 31 Pa.B. 1736. Immediately preceding text appears at serial pages (241905) to (241907).

#### Cross References

This section cited in 25 Pa. Code § 78.54 (relating to general requirements); 25 Pa. Code § 78.55 (relating to control and disposal plan); and 25 Pa. Code § 78.56 (relating to pits and tanks for temporary containment).

### § 78.62. Disposal of residual waste—pits.

- (a) After the removal and disposal of the free liquid fraction of the waste under § 78.60(a) (relating to discharge requirements), the owner or operator may dispose of residual waste, including contaminated drill cuttings, in a pit at the well site if the owner or operator satisfies the following requirements:
  - (1) The waste is generated by the drilling or production of an oil or gas well that is located on the well site where the waste is disposed.
  - (2) The well is permitted under section 201 of the act (58 P. S. § 601.201) or registered under section 203 of the act (58 P. S. § 601.203).
  - (3) The requirements of section 215 of the act (58 P. S. § 601.215) are satisfied by filing a surety or collateral bond for wells drilled on or after April 18, 1985.
  - (4) Compliance is maintained with the act and this title.
  - (5) The disposal area is not within 200 feet measured horizontally from an existing building, unless the current owner thereof has provided a written waiver consenting to the disposal closer than 200 feet. The waiver shall be knowingly made and separate from a lease or deed unless the lease or deed contains an explicit waiver from the current owner.

(6) The disposal area is not within 100 feet of a stream, body of water or wetland.

(7) The disposal area is not within 200 feet of a water supply.

(8) The bottom of the pit is a minimum of 20 inches above the seasonal high groundwater table.

(9) The pit is designed, constructed and maintained to be structurally sound and impermeable.

(10) The pit is lined with a synthetic flexible liner that is compatible with the waste and has a coefficient of permeability of no greater than  $1 \times 10^{-7}$  cm/sec. The liner shall be of sufficient strength and thickness to maintain the integrity of the liner. The liner thickness shall be at least 30 mils. Adjoining sections of liners shall be sealed together in accordance with the manufacturer's directions to prevent leakage. The operator may use an alternate liner or natural materials, if the material and the installation procedure to be used are approved by the Department. Notice of the approved liners and installation procedures will be published by the Department in the *Pennsylvania Bulletin*.

(11) The liner shall be designed, constructed and maintained so that the physical and chemical characteristics of the liner are not adversely affected by the waste and the liner is resistant to physical, chemical and other failure during transportation, handling, installation and use. Liner compatibility shall satisfy EPA Method 9090, *Compatibility Test for Wastes and Membrane Liners*, or other documented data approved by the Department.

(12) The pit shall be constructed so that the liner subbase is smooth, uniform and free of debris, rock and other material that may puncture, tear, cut, rip or otherwise cause the liner to fail. The liner subbase and subgrade shall be capable of bearing the weight of the material above the liner without settling. If the pit bottom or sides consist of rock, shale or other material that may cause the liner to fail and leak, a subbase of at least 6 inches of soil, sand or smooth gravel, or sufficient amount of an equivalent material shall be installed over the area as the subbase for the liner.

(13) Prior to placing material in the pit, the liner shall be inspected for lack of uniformity, damage and other imperfections that may cause the liner to leak. The owner or operator shall correct damages or imperfections before placing waste in the pit, and shall maintain the pit until closure of the pit.

(14) Prior to encapsulating the waste within the liner, the free liquid fraction of the waste shall be removed and disposed under § 78.60(a).

(15) The liner shall be folded over, or an additional liner shall be added, to completely cover the waste and the waste is shaped so that water does not infiltrate the liner and is not confined above the liner.

(16) Puncturing or perforating the liner is prohibited.

(17) The pit shall be backfilled to at least 18 inches over the top of the liner and graded to promote runoff with no depressions that would accumulate or pond water on the surface. The stability of the backfilled pit shall be compatible with the adjacent land.

(18) The surface area of the backfilled pit area shall be revegetated to stabilize the soil surface and comply with § 78.53 (relating to erosion and sedimentation control). The revegetation shall establish a diverse, effective permanent vegetative cover which is capable of self-regeneration and plant succession. Where vegetation would interfere with the intended use of the surface by the landowner, the surface shall be stabilized against erosion.

(b) A person may not dispose of residual waste, including contaminated drill cuttings, at the well site unless the waste meets the following requirements:

(1) The concentration of contaminants in the leachate from the waste does not exceed 50% of the maximum concentration in § 261.24 Table I (relating to characteristic of toxicity).

(2) The concentration of contaminants in the leachate from the waste does not exceed 50 times the primary maximum contaminant level in effect under § 109.202 (relating to State MCLs, MRDLs and treatment technique requirements).

(3) For other health related contaminants, the concentration of contaminants in the leachate from the waste does not exceed 50 times the safe drinking water level established by the Department.

(4) Leachate characteristics are determined in accordance with methods approved by the Department.

(c) The owner or operator may request to use solidifiers or other alternate practices for the disposal of residual waste, including contaminated drill cuttings, by submitting a request to the Department for approval. The request shall be made on forms provided by the Department and shall demonstrate that the practice provides equivalent or superior protection to the requirements of this section.

#### Source

The provisions of this § 78.62 adopted July 28, 1989, effective July 29, 1989, 19 Pa.B. 3229; amended December 16, 1994, effective December 17, 1994, 24 Pa.B. 6284; amended March 30, 2001, effective March 31, 2001, 31 Pa.B. 1736. Immediately preceding text appears at serial pages (241907) to (241909).

#### Cross References

This section cited in 25 Pa. Code § 78.54 (relating to general requirements); 25 Pa. Code § 78.55 (relating to control and disposal plan); 25 Pa. Code § 78.56 (relating to pits and tanks for temporary containment); 25 Pa. Code § 78.57 (relating to control, storage and disposal of production fluids); and 25 Pa. Code § 78.61 (relating to disposal of drill cuttings).

**§ 78.63. Disposal of residual waste—land application.**

(a) The owner or operator may dispose of residual waste, including contaminated drill cuttings, at the well site by land application of the waste if the owner or operator satisfies the following requirements:

- (1) The waste is generated by the drilling or production of an oil or gas well that is located on the well side.
- (2) The well is permitted under section 201 of the act (58 P. S. § 601.201) or registered under section 203 of the act (58 P. S. § 601.215).
- (3) The requirements of section 215 of the act (58 P. S. § 601.215) are satisfied by filing a surety or collateral bond for wells drilled on or after April 18, 1985.
- (4) Compliance with the act and this title is maintained.
- (5) The owner or operator shall notify the Department at least 3 working days before the land application activity is to occur.
- (6) The waste application area is not within 200 feet measured horizontally from an existing building, unless the current owner thereof has provided a written waiver consenting to the application closer than 200 feet. The waiver shall be knowingly made and separate from a lease or deed, unless the lease or deed contains an explicit waiver from the current owner.
- (7) The waste application area is not within 100 feet of a stream, body of water or wetland.
- (8) The waste application area is not within 200 feet of a water supply and is not within 1,000 feet upgradient from an uncased well or spring being used as a water supply.
- (9) At a minimum, the seasonal high groundwater table is 20 inches from the surface.
- (10) The soils located within and immediately adjacent to the application area shall fall within the United States Department of Agriculture textural classes of sandy loam, loam, sandy clay loam, silty clay loam or silt loam.
- (11) The soils have a minimum depth from surface to bedrock of 20 inches.
- (12) Ground slopes to be utilized for waste applications do not exceed 25%.
- (13) The waste is not spread when the ground is saturated, or when snow or frozen ground would interfere with incorporation of the waste into the soil.
- (14) Prior to land application of the waste, the free liquid fraction of the waste is removed and disposed under § 78.60(a) (relating to discharge requirements).
- (15) The waste is not applied in quantities which will result in surface or groundwater pollution.
- (16) The waste is not applied in quantities that will adversely affect the intended use of the vegetation.
- (17) The waste is spread and incorporated into the top layer of the soil to a depth of at least 6 inches.

(18) The loading and application rate of waste is consistent with the Departmental guidelines for the proposed operation and may not exceed a maximum waste to soil ratio of 1:1.

(19) To determine compliance with this section, the Department may require the owner or operator to conduct soil surveys, monitoring or chemical analysis.

(20) The land application area shall be revegetated to stabilize the soil surface and comply with § 78.53 (relating to erosion and sedimentation control). The revegetation shall establish a diverse, effective permanent vegetative cover which is capable of self-regeneration and plant succession. Where vegetation would interfere with the intended use of the surface by the landowner, the surface shall be stabilized against erosion.

(21) If a chemical analysis fails to show compliance with paragraph (18), the owner or operator shall remediate the land application area until compliance is demonstrated.

(b) A person may not dispose of residual waste, including contaminated drill cuttings, at the well site unless the concentration of contaminants in the leachate from the waste does not exceed the maximum concentration stated in § 261.24 Table I (relating to characteristic of toxicity).

(c) The owner or operator may request to dispose of residual waste, including contaminated drill cuttings, in an alternate manner from that required in subsection (a) by submitting a request to the Department for approval. The request shall be made on forms provided by the Department and shall demonstrate that the practice provides equivalent or superior protection to the requirements of this section.

#### Source

The provisions of this § 78.63 adopted July 28, 1989, effective July 29, 1989, 19 Pa.B. 3229; amended December 16, 1994, effective December 17, 1994, 24 Pa.B. 6284; amended March 30, 2001, effective March 31, 2001, 31 Pa.B. 1736. Immediately preceding text appears at serial pages (241909) to (241911).

#### Cross References

This section cited in 25 Pa. Code § 78.54 (relating to general requirements); 25 Pa. Code § 78.55 (relating to control and disposal plan); 25 Pa. Code § 78.56 (relating to pits and tanks for temporary containment); 25 Pa. Code § 78.57 (relating to control, storage and disposal of production fluids); and 25 Pa. Code § 78.61 (relating to disposal of drill cuttings).

### § 78.64. Containment around oil tanks.

(a) If an owner or operator uses a tank with a capacity of at least 660 gallons or tanks with a combined capacity of at least 1,320 gallons to contain oil produced from a well, the owner or operator shall construct and maintain a dike or other method of secondary containment which satisfies the requirements under 40 CFR 112 (relating to oil pollution prevention) around the tank or tanks which will prevent the tank contents from entering waters of this Commonwealth.

(b) The containment area provided by the dikes or other method of secondary containment shall have containment capacity sufficient to hold the volume of the largest single tank, plus a reasonable allowance for precipitation based on local weather conditions and facility operation.

(c) Prior to drainage of accumulated precipitation from containment structures, the containment area shall be inspected and accumulations of oil picked up and returned to the tank or disposed of in accordance with approved methods.

(d) After complying with subsection (c), drainage of containment facilities is acceptable if:

(1) The accumulation in the containment facility consists of only precipitation directly to the containment facility and drainage will not cause a harmful discharge or result in a sheen.

(2) The containment drain valve is opened and resealed, or other drainage procedure, as applicable, is conducted under responsible supervision.

#### Source

The provisions of this § 78.64 adopted December 16, 1994, effective December 17, 1994, 24 Pa.B. 6284.

### § 78.65. Site restoration.

In addition to complying with section 206 of the act (58 P. S. § 601.206), an owner or operator shall meet the following requirements:

(1) A drill hole or bore hole used to facilitate the drilling of a well shall be filled with cement, soil, drill cuttings or other earthen material before moving the drilling equipment from the well site.

(2) If a well site is constructed and the well is not drilled, the well site shall be restored within 30 days after the expiration of the well permit unless the Department approves an extension for reasons of adverse weather or lack of essential fuel, equipment or labor.

(3) Within 60 days after the restoration of the well site, the operator shall submit a well site restoration report to the Department. The report shall be made on forms provided by the Department and shall identify the following:

(i) The date of land application of the tophole water, the results of pH and specific conductance tests and an estimated volume of discharge.

(ii) A description of the method used for disposal or reuse of the free liquid fraction of the waste, and the name of the hauler and disposal facility, if any.

(iii) The location of the pit in relation to the well, the depth of the pit, the type and thickness of the material used for the pit subbase, the type and thickness of the pit liner, the type and nature of the waste, a description of the pit closure procedures used and the pit dimensions.

(iv) The location of the area used for land application of the waste, and the results of a chemical analysis of the waste soil mixture if requested by the Department.

(v) The types and volumes of waste produced and the name and address of the waste disposal facility and waste hauler used to dispose of the waste.

**Source**

The provisions of this § 78.65 adopted December 16, 1994, effective December 17, 1994, 24 Pa.B. 6284.

**§ 78.66. Reporting releases.**

(a) A release of a substance causing or threatening pollution of the waters of this Commonwealth, shall comply with the reporting and corrective action requirements of § 91.33 (relating to incidents causing or threatening pollution).

(b) If a reportable release of brine on or into the ground occurs at the well site, the owner or operator shall notify the appropriate regional office of the Department as soon as practicable, but no later than 2 hours after detecting or discovering the release.

(c) The notice required by subsection (b) shall be by telephone and describe:

(1) The name, address and telephone number of the company and person reporting the incident.

(2) The date and time of the incident or when it was detected.

(3) The location and cause of the incident.

(4) The quantity of the brine released.

(5) Available information concerning the contamination of surface water, groundwater or soil.

(6) Remedial actions planned, initiated or completed.

(d) If, because of an accident, an amount of brine less than the reportable amount as described in § 78.1 (relating to definitions), spills, leaks or escapes, that incident does not have to be reported.

(e) Upon the occurrence of any release, the owner or operator shall take necessary corrective actions to:

(1) Prevent the substance from reaching the waters of this Commonwealth.

(2) Recover or remove the substance which was released.

(3) Dispose of the substance in accordance with this subchapter or as approved by the Department.

**Source**

The provisions of this § 78.66 adopted March 30, 2001, effective March 31, 2001, 31 Pa.B. 1736.

**Subchapter D. WELL DRILLING, OPERATION AND  
PLUGGING****GENERAL**

- Sec.  
78.71. Use of safety devices—well casing.  
78.72. Use of safety devices—blow-out prevention equipment.  
78.73. General provision for well construction and operation.  
78.74. Venting of gas.  
78.75. Alternative methods.  
78.76. Drilling within a gas storage reservoir area.  
78.77. Wells in a hydrogen sulfide area.  
78.78. Pillar permit applications.

**CASING AND CEMENTING**

- 78.81. General provisions.  
78.82. Use of conductor pipe.  
78.83. Surface and coal protective casing and cementing procedures.  
78.84. Casing standards.  
78.85. Cement standards.  
78.86. Defective casing or cementing.  
78.87. Gas storage reservoir protective casing and cementing procedures.

**PLUGGING**

- 78.91. General provisions.  
78.92. Wells in coal areas—surface or coal protective casing is cemented.  
78.93. Wells in coal areas—surface or coal protective casing anchored with a packer or cement.  
78.94. Wells in noncoal areas—surface casing is not cemented or not present.  
78.95. Wells in noncoal areas—surface casing is cemented.  
78.96. Marking the location of a plugged well.  
78.97. Plugging a well stimulated with explosives.  
78.98. Restricting surface water from the well bore.

**INACTIVE STATUS**

- 78.101. General provisions.  
78.102. Criteria for approval of inactive status.  
78.103. Annual monitoring of inactive wells.  
78.104. Term of inactive status.  
78.105. Revocation of inactive status.

**RADIOACTIVE LOGGING SOURCES**

- 78.111. Abandonment.

**Cross References**

This subchapter cited in 25 Pa. Code § 78.401 (relating to storage well construction).

**GENERAL****§ 78.71. Use of safety devices—well casing.**

(a) The operator shall equip the well with one or more strings of casing of sufficient length and strength to prevent blowouts, explosions, fires and casing failures during installation, completion and operation.

(b) The operator shall determine the amount and type of casing to be run and the amount and type of cement to be used in accordance with current prudent industry practices and engineering. In making the determinations, the operator shall consider the following:

- (1) Successful local practices for similar wells.
- (2) Maximum anticipated surface pressure.
- (3) Collapse resistance.
- (4) Tensile strength.
- (5) Chemical environment.
- (6) Potential mechanical damage.
- (7) Manufacturing standards, including American Petroleum Institute or equivalent specifications for pipe used in wells drilled below the Onondaga formation or where blow-out preventers are required.

**Source**

The provisions of this § 78.71 adopted July 28, 1989, effective July 29, 1989, 19 Pa.B. 3229.

**§ 78.72. Use of safety devices—blow-out prevention equipment.**

(a) The operator shall use blow-out prevention equipment when well head pressures or natural open flows are anticipated at the well site that may result in a blow-out or when the operator is drilling in an area where there is no prior knowledge of the pressures or natural open flows to be encountered.

(b) Blow-out prevention equipment used shall be in good working condition at all times.

(c) The operator shall use pipe fittings, valves and unions placed on or connected to the blow-out prevention systems that have a working pressure capability that exceeds the anticipated pressures.

(d) The operator shall conduct a complete test of the ram type blow-out preventer and related equipment for both pressure and ram operation before placing it in service on the well. The operator shall test the annular type blow-out preventer in accordance with the manufacturer's published instructions, or the instructions of a professional engineer, prior to the device being placed in service.

(e) When the equipment is in service, the operator shall visually inspect blow-out prevention equipment during each tour of drilling operation and during actual drilling operations test the pipe rams for closure daily and the blind rams for closure on each round trip. When more than one round trip is made in a day, one daily closure test for blind rams is sufficient. Testing shall be conducted in

accordance with American Petroleum Institute publication API RP53, "API Recommended Practice for Blowout Prevention Equipment Systems for Drilling Wells." The operator shall record the results of the inspection and closure test in the drillers log before the end of the tour.

(f) During drilling when conditions are such that the use of a blowout preventer can be anticipated, there shall be present on the rig floor a certified individual responsible to the operator. Satisfactory completion of a United States Geologic Survey (U.S.G.S.) approved well control course or equivalent study shall be deemed adequate certification for purposes of this subsection.

(g) The minimum amount of cemented casing to which blow-out prevention equipment may be attached, shall be in accordance with the following:

<i>Proposed Total Depth (in feet)</i>	<i>Minimum Cemented Casing Required (in feet of casing cemented)</i>
Up to 5,000	400
5,001 to 5,500	500
5,501 to 6,000	600
6,001 to 6,500	700
6,501 to 7,000	800
7,001 to 8,000	1,000
8,001 to 9,000	1,200
9,001 to 10,000	1,400
Deeper than 10,000	1,800

(h) Upon completion of the drilling operations at a well, the operator shall install and utilize equipment, such as a shut-off valve of sufficient rating to contain anticipated pressure, lubricator or similar device, as may be necessary to enable the well to be effectively shut-in while logging and servicing the well and after completion of the well.

#### Source

The provisions of this § 78.72 adopted July 28, 1989, effective July 29, 1989, 19 Pa.B. 3229.

### § 78.73. General provision for well construction and operation.

(a) The operator shall prevent gas and other fluids from lower formations from entering fresh groundwater.

(b) After a well has been completed, recompleted, reconditioned or altered the operator shall prevent shut-in pressure or producing back pressure at the surface casing seat or coal protective casing seat from exceeding the hydrostatic pressure of the surrounding fresh groundwater system in accordance with the following formula. The maximum allowable shut-in pressure or producing back pressure to be exerted at the surface casing seat or coal protective casing seat may not exceed the hydrostatic pressure calculated as follows: Maximum pressure = (0.433 psi) multiplied by (casing length in feet).

(c) After a well has been completed, recompleted, reconditioned or altered, if the shut-in pressure or producing back pressure exceeds the hydrostatic pressure at the surface casing seat or coal protective casing seat as calculated in subsection (b), the operator shall take action to prevent the migration of gas and other fluids from lower formations into fresh groundwater. To meet this standard the operator may cement or install on a packer sufficient intermediate or production casing or take other actions approved by the Department. This section does not apply during testing for mechanical integrity in accordance with State or Federal requirements.

**Source**

The provisions of this § 78.73 adopted July 28, 1989, effective July 29, 1989, 19 Pa.B. 3229.

**§ 78.74. Venting of gas.**

The venting of gas to the atmosphere from a well is prohibited when the venting produces a hazard to the public health and safety.

**Source**

The provisions of this § 78.74 adopted July 28, 1989, effective July 29, 1989, 19 Pa.B. 3229.

**§ 78.75. Alternative methods.**

(a) A well operator may request approval from the Department to use an alternative method or material for the casing, plugging or equipping of a well under section 211 of the act (58 P. S. § 601.211).

(b) A well operator seeking approval under this section shall file an application with the Department on forms furnished by the Department. The application shall:

(1) Describe the proposed alternative method or material, in reasonable detail.

(2) Indicate the manner in which the alternative will satisfy the goals of the act and this chapter.

(3) Include a drawing or schematic of the alternative method, if appropriate.

(c) The well operator shall notify all coal owners and operators and gas storage operators of record of the proposal, by certified mail. The well operator shall state in the application that he has sent the certified mail notice to the coal owners and operators and gas storage operators of record, either simultaneously with or prior to submitting the proposal to the Department.

(d) The coal owners and operators and gas storage operators of record shall have up to 15 days from their receipt of the notice to file objections or to indicate concurrence with the proposed alternative method or material.

(e) If no objections are filed within 15 days from receipt of the notice, and if none are raised by the Department, the Department will make a determination whether to allow the use of the proposed alternative method or material.

**Source**

The provisions of this § 78.75 adopted July 28, 1989, effective July 29, 1989, 19 Pa.B. 3229; amended March 30, 2001, effective March 31, 2001, 31 Pa.B. 1736. Immediately preceding text appears at serial pages (241916) to (241917).

**Cross References**

This section cited in 25 Pa. Code § 78.81 (relating to general provisions); 25 Pa. Code § 78.87 (relating to gas storage reservoir protective casing and cementing procedures); and 25 Pa. Code § 78.401 (relating to storage well construction).

**§ 78.76. Drilling within a gas storage reservoir area.**

(a) An operator proposing to drill a well within a gas storage reservoir area or a reservoir protective area to produce gas or oil shall forward by certified mail a copy of the well location plat, the drilling, casing and cementing plan and the anticipated date drilling will commence to the gas storage reservoir operator and shall submit proof of notification to the Department with the well permit application.

(b) The storage operator may file an objection with the Department to the drilling, casing and cementing plan or the proposed well location within 15 days of receipt of the notification and request a conference in accordance with section 501 of the act (58 P. S. § 601.501).

**Source**

The provisions of this § 78.76 adopted December 16, 1994, effective December 17, 1994, 24 Pa.B. 6284; amended March 30, 2001, effective March 31, 2001, 31 Pa.B. 1736. Immediately preceding text appears at serial page (241917).

**§ 78.77. Wells in a hydrogen sulfide area.**

(a) An operator proposing to drill a well within a 1-mile radius of a well drilled to or through the same formation where hydrogen sulfide has been found while drilling shall install monitoring equipment during drilling at the well site to detect the presence of hydrogen sulfide in accordance with American Petroleum Institute publication RP49, "Recommended Practices for Safe Drilling of Wells Containing Hydrogen Sulfide."

(b) When hydrogen sulfide is detected in concentrations of 20 ppm or greater, the well shall be drilled in accordance with American Petroleum Institute publication API RP49, "Recommended Practices for Safe Drilling of Wells Containing Hydrogen Sulfide."

(c) An operator who operates a well in which hydrogen sulfide is discovered in concentrations of 20 ppm or greater shall operate the well in a way that presents no danger to human health or to the environment.

(d) When an operator discovers hydrogen sulfide in concentrations of 20 ppm or greater during the drilling of a well, the operator shall notify the Department and identify the location of the well and the concentration of hydrogen sulfide detected. The Department will maintain a list of all notices that will be available to operators for their reference.

**Source**

The provisions of this § 78.77 adopted December 16, 1994, effective December 17, 1994, 24 Pa.B. 6284.

**§ 78.78. Pillar permit applications.**

(a) The Department will use recommendations for coal pillar size and configuration set forth in the coal pillar study, listed in the Department's *Coal Pillar Technical Guidance* Number 550-2100-006 (October 31, 1998) and any updates or revisions, as a basis for approval or disapproval of coal pillar permit applications submitted by underground coal mine operators.

(b) Where proposed coal pillar size and configuration does not conform to the recommendations of the coal pillar study referenced in subsection (a), the underground coal mine operator may request Department approval for an alternate coal pillar size and configuration.

**Source**

The provisions of this § 78.78 adopted March 30, 2001, effective March 31, 2001, 31 Pa.B. 1736.

**CASING AND CEMENTING**

**§ 78.81. General provisions.**

(a) The operator shall conduct casing and cementing activities under this section and §§ 78.82—78.87 or an approved alternate method under § 78.75 (relating to alternative methods). The operator shall case and cement a well to accomplish the following:

- (1) Allow effective control of the well at all times.
- (2) Prevent the migration of gas or other fluids into sources of fresh groundwater.
- (3) Prevent pollution or diminution of fresh groundwater.
- (4) Prevent the migration of gas or other fluids into coal seams.

(b) The operator shall drill through fresh groundwater zones with diligence and as efficiently as practical to minimize drilling disturbance and commingling of groundwaters.

(c) Casing and cementing standards in §§ 78.83—78.85 (relating to surface and coal protective casing and cementing procedures; casing standards; and cement standards) apply to surface casing and coal protective casing, but do not apply to production casing.

**Source**

The provisions of this § 78.81 adopted July 28, 1989, effective July 29, 1989, 19 Pa.B. 3229; amended December 16, 1994, effective December 17, 1994, 24 Pa.B. 6284; amended March 30, 2001, effective March 31, 2001, 31 Pa.B. 1736. Immediately preceding text appears at serial pages (241918) to (241919).

**Cross References**

This section cited in 25 Pa. Code § 78.102 (relating to criteria for approval of inactive status); and 25 Pa. Code § 78.103 (relating to annual monitoring of inactive wells).

**§ 78.82. Use of conductor pipe.**

If the operator installs conductor pipe in the well, the operator may not remove the pipe.

**Source**

The provisions of this § 78.82 adopted July 28, 1989, effective July 29, 1989, 19 Pa.B. 3229.

**Cross References**

This section cited in 25 Pa. Code § 78.81 (relating to general provisions); 25 Pa. Code § 78.102 (relating to criteria for approval of inactive status); and 25 Pa. Code § 78.103 (relating to annual monitoring of inactive wells).

**§ 78.83. Surface and coal protective casing and cementing procedures.**

(a) If the well is to be equipped with threaded and coupled casing, the operator shall drill a hole so that the diameter is at least 1 inch greater than the outside diameter of the casing collar to be installed. If the well is to be equipped with plain-end welded casing, the operator shall drill a hole so that the diameter is at least 1 inch greater than the outside diameter of the casing tube.

(b) Except as provided in subsection (c), the operator shall drill to approximately 50 feet below the deepest fresh groundwater or at least 50 feet into consolidated rock, whichever is deeper, and immediately set and permanently cement a string of surface casing to that depth.

(c) If no fresh groundwater is being utilized as a source of drinking water within a 1,000-foot radius of the well, the operator may set and permanently cement a single string of surface casing through all water zones, including fresh, brackish and salt water zones. Prior to penetrating zones known to contain, or likely containing, oil or gas, the operator shall install and permanently cement the string of casing in a manner that segregates the various waters.

(d) The operator shall permanently cement the surface casing by placing the cement in the casing and displacing it into the annular space between the wall of the hole and the outside of the casing.

(e) Where potential oil or gas zones are anticipated to be found at depths within 50 feet below the deepest fresh groundwater, the operator shall set and permanently cement surface casing prior to drilling into a stratum known to contain, or likely containing, oil or gas.

(f) If additional fresh groundwater is encountered in drilling below the permanently cemented surface casing, the operator shall protect the additional fresh groundwater by installing and cementing a subsequent string of casing or other procedures approved by the Department to completely isolate and protect fresh groundwater. The string of casing may also penetrate zones bearing salty or brackish water with cement in the annular space being used to segregate the various zones. Sufficient cement shall be used to cement the casing at least 20 feet into the permanently cemented casing.

(g) The operator shall set and cement a coal protective string of casing through workable coal seams. The base of the coal protective casing shall be at least 30 feet below the lowest workable coal seam.

(h) When a well is drilled through a coal seam at a location where the coal has been removed, the operator shall drill to a depth of at least 30 feet but no more than 50 feet deeper than the bottom of the coal seam. The operator shall set and cement a coal protection string of casing to this depth. The operator shall equip the casing with a cement basket or other similar device above and as close to the top of the coal seam as practical. The bottom of the casing shall be equipped with an appropriate device designed to prevent deformation of the bottom of the casing. The interval from the bottom of the casing to the bottom of the coal seam shall be filled with cement either by the balance method or by the displacement method. Cement shall be placed on top of the basket between the wall of the hole and the outside of the casing by pumping from the surface. If the operator penetrates more than one coal seam from which the coal has been removed, the operator shall protect each seam with a separate string of casing that is set and cemented or with a single string of casing which is stage cemented so that each coal seam is protected as described in this subsection. The operator shall cement the well to isolate workable coal seams from each other.

(i) If the operator sets and cements casing under subsection (g) or (h) and subsequently encounters additional fresh groundwater zones below the deepest cemented casing string installed, the operator shall protect the fresh groundwater by installing and cementing another string of casing or other method approved by the Department. Sufficient cement shall be used to cement the casing at least 20 feet into the surface or coal protective casing. The additional casing string may also penetrate zones bearing brackish or salt water, but shall be run and cemented prior to penetrating a zone known to or likely to contain oil or gas.

(j) If it is anticipated that cement used to permanently cement the surface casing can not be circulated to the surface a cement basket may be installed immediately above the depth of the last circulation zone. The casing shall be permanently cemented by the displacement method. Additional cement may be added above the cement basket, if necessary, by pumping through a pour string from the surface to fill the annular space.

**Source**

The provisions of this § 78.83 adopted July 28, 1989, effective July 29, 1989, 19 Pa.B. 3229; amended March 6, 1998, effective March 7, 1998, 28 Pa.B. 1234. Immediately preceding text appears at serial pages (193991) to (193993).

**Cross References**

This section cited in 25 Pa. Code § 78.61 (relating to disposal of drill cuttings); 25 Pa. Code § 78.81 (relating to general provisions); 25 Pa. Code § 78.102 (relating to criteria for approval of inactive status); and 25 Pa. Code § 78.103 (relating to annual monitoring of inactive wells).

**§ 78.84. Casing standards.**

(a) The operator shall install casing that can withstand the effects of tension, and prevent burst and collapse during its installation, cementing and subsequent drilling and producing operations.

(b) The operator shall equip the casing string with appropriate equipment to center the casing through the hole in fresh groundwater zones. This equipment is not required when existing hole conditions such as caving or crookedness might cause loss of the well or result in a defective cement job.

(c) When casing through a workable coal seam, the operator shall install coal protective casing that has a minimum wall thickness of 0.23 inches.

**Source**

The provisions of this § 78.84 adopted July 28, 1989, effective July 29, 1989, 19 Pa.B. 3229.

**Cross References**

This section cited in 25 Pa. Code § 78.81 (relating to general provisions); 25 Pa. Code § 78.102 (relating to criteria for approval of inactive status); and 25 Pa. Code § 78.103 (relating to annual monitoring of inactive wells).

**§ 78.85. Cement standards.**

(a) The operator shall use cement that will resist degradation by chemical and physical conditions in the well.

(b) The operator shall permit the cement to set to a minimum compressive strength of 350 pounds per square inch (psi) in accordance with the American Petroleum Institute's API Specification 10. The operator shall permit the cement to set for a minimum period of 8 hours prior to the resumption of actual drilling.

(c) Where special cement or additives are used, the operator may request approval from the Department to reduce the cement setting time specified in subsection (b).

**Source**

The provisions of this § 78.85 adopted July 28, 1989, effective July 29, 1989, 19 Pa.B. 3229.

**Cross References**

This section cited in 25 Pa. Code § 78.81 (relating to general provisions); 25 Pa. Code § 78.102 (relating to criteria for approval of inactive status); and 25 Pa. Code § 78.103 (relating to annual monitoring of inactive wells).

**§ 78.86. Defective casing or cementing.**

In a well that has defective, insufficient or improperly cemented casing, the operator shall report the defect to the Department within 24 hours of discovery by the operator and shall correct the defect. The operator shall correct the defect or submit a plan to correct the defect for approval by the Department within 30 days. If the defect cannot be corrected or an alternate method is not approved by the Department, the well shall be plugged under §§ 78.91—78.98 (relating to plugging).

**Source**

The provisions of this § 78.86 adopted July 28, 1989, effective July 29, 1989, 19 Pa.B. 3229.

**Cross References**

This section cited in 25 Pa. Code § 78.81 (relating to general provisions); 25 Pa. Code § 78.102 (relating to criteria for approval of inactive status); and 25 Pa. Code § 78.103 (relating to annual monitoring of inactive wells).

**§ 78.87. Gas storage reservoir protective casing and cementing procedures.**

(a) In addition to the other provisions in this subchapter, a well drilled through a gas storage reservoir or a gas storage reservoir protective area shall be drilled, cased and cemented as follows:

(1) An operator shall use drilling procedures capable of controlling anticipated gas flows and pressures when drilling from the surface to 200 feet above a gas storage reservoir or gas storage horizon.

(2) An operator shall use drilling procedures capable of controlling anticipated gas storage reservoir pressures and flows at all times when drilling from 200 feet above a gas storage reservoir horizon to the depth at which the gas storage protective casing will be installed. Operators shall use blow-out prevention equipment with a pressure rating in excess of the allowable maximum storage pressure for the gas storage reservoir.

(3) To protect the gas storage reservoir, an operator shall run intermediate or production casing from a point located at least 100 feet below the gas storage horizon to the surface. The operator shall cement this casing by circulating cement to a point at least 200 feet above the gas storage reservoir or gas storage horizon.

(4) When cementing casing in a well drilled through a gas storage reservoir, the operator shall insure that no gas is present in the drilling fluids in an amount that could interfere with the integrity of the cement.

(b) A request by an operator for approval from the Department to use an alternative method or material for the casing, plugging or equipping of a well drilled through a gas storage reservoir under section 211 of the act (58 P. S. § 601.211) shall be made in accordance with § 78.75 (relating to alternative methods).

#### Source

The provisions of this § 78.87 adopted March 30, 2001, effective March 31, 2001, 31 Pa.B. 1736.

#### Cross References

This section cited in 25 Pa. Code § 78.81 (relating to general provisions).

### PLUGGING

#### § 78.91. General provisions.

(a) Upon abandoning a well, the owner or operator shall plug the well under §§ 78.92—78.98 or an approved alternate method under section 211 of the act (58 P. S. § 601.211) to stop the vertical flow of fluids or gas within the well bore unless one of the following applies:

(1) The Department has granted inactive status under §§ 78.101—78.105 (relating to inactive status).

(2) The well is part of a plugging schedule that has been approved by the Department and the operator is complying with that schedule, and the schedule takes into account potential harm that the well poses to the environment or public health and safety.

(3) The Department has approved the identification of the well as an orphan well under section 203 of the act (58 P. S. § 601.203), and the Department has not determined a prior owner or operator received economic benefit after April 18, 1979, from this well other than economic benefit derived only as a landowner or from a royalty interest.

(b) The operator shall plug a well where a radioactive logging source has been lost under §§ 78.92—78.98 and 78.111.

(c) When a well is being plugged from the attainable bottom, the operator shall install a 50-foot plug of cement at the attainable bottom and plug the remainder of the well under §§ 78.92—78.98.

(d) If the production casing cannot be retrieved, the operator shall plug strata bearing or having borne oil, gas or water by perforating the casing and squeezing cement into the annulus or other method approved by the Department. The maximum distance the stub of the uncemented production casing may extend is 100 feet below the surface casing seat or coal protective casing seat, whichever is deeper. The uncemented portion of the casing left in the well above the total depth or attainable bottom may not extend through a formation bearing or having borne oil, gas or water or extend to a point where it interferes with subsequent plugging requirements of §§ 78.92(a)(2) and 78.93(a)(2) and (b)(4) (relating to

wells in coal areas—surface or coal protective casing is cemented; and wells in coal areas—surface or coal protective casing anchored with a packer or cement). The remainder of the well shall be plugged under §§ 78.92—78.98.

(e) When plugging a well, an operator shall insure that no gases are present in the well in an amount that could interfere with cementing the well.

(f) When plugging a well with a casing string cemented through a gas storage reservoir or reservoir protective area, an operator shall use bridge plugs immediately above and below the gas storage reservoir unless an alternate plugging plan has been approved by the Department.

(g) When a well located in a coal area is plugged to allow mining through it, the person authorized by the Department to plug the well under the act or section 13 of the Coal and Gas Resource Coordination Act (58 P. S. § 513) shall clean out the gas well to a depth of at least 200 feet below the coal seam which will be mined and, unless impracticable, to a point 200 feet below the deepest minable coal seam the well penetrates.

(h) In lieu of the plugging requirements of §§ 78.92—78.95 and 78.97, an operator may cement a well from the total depth or attainable bottom to the surface. Wells in coal areas still shall meet the venting requirements of § 78.92 or § 78.93 (relating to wells in coal areas—surface or coal protective casing is cemented; and wells in coal areas—surface or coal protective casing anchored with a packer or cement).

#### Source

The provisions of this § 78.91 adopted July 28, 1989, effective July 29, 1989, 19 Pa.B. 3229; amended December 16, 1994, effective December 17, 1994, 24 Pa.B. 6284; amended March 6, 1998, effective March 7, 1998, 28 Pa.B. 1234; amended March 30, 2001, effective March 31, 2001, 31 Pa.B. 1736. Immediately preceding text appears at serial pages (241923) to (241924).

#### Cross References

This section cited in 25 Pa. Code § 78.86 (relating to defective casing or cementing); 25 Pa. Code § 78.92 (relating to wells in coal areas—surface or coal protective casing is cemented); 25 Pa. Code § 78.93 (relating to wells in coal areas—surface or coal protective casing anchored with a packer or cement); 25 Pa. Code § 78.94 (relating to wells in noncoal areas—surface casing is not cemented or not present); 25 Pa. Code § 78.95 (relating to wells in noncoal areas—surface casing is cemented); and 25 Pa. Code § 78.407 (relating to plugging gas storage wells).

### **§ 78.92. Wells in coal areas—surface or coal protective casing is cemented.**

(a) In a well underlain by a workable coal seam, where the surface casing or coal protective casing is cemented and the production casing is not cemented or the production casing is not present, the owner or operator shall plug the well as follows:

(1) The retrievable production casing shall be removed and the well shall be filled with nonporous material from the total depth or attainable bottom of the well, to a point 20 feet above the top of the lowest stratum bearing or having borne oil, gas or water. At this point there shall be placed a plug of cement,

which shall extend for at least 50 feet above that point. Between this sealing plug and a point 20 feet above the next higher stratum bearing or having borne oil, gas or water, the hole shall be filled with nonporous material and at that point there shall be placed another 50-foot plug of cement which will completely seal the hole. In like manner, the hole shall be filled and plugged, with reference to each of the strata bearing or having borne oil, gas or water. The operator may treat multiple strata as one stratum and plug as described in this subsection with a single column of cement or other materials approved by the Department. Where the production casing is not retrievable, the operator shall plug that portion of the well under § 78.91(d) (relating to general provisions).

(2) After plugging strata bearing or having borne oil, gas or water, the well shall be filled with nonporous material to a point approximately 100 feet below the surface or coal protective casing seat, whichever is deeper. At this point, a 100-foot plug of cement shall be installed.

(3) After the plug has been installed below the casing seat, the inner casing shall be emptied of liquid from the surface to the plug of cement. A vent or other device approved by the Department shall then be installed on top of the inner string of casing to prevent liquids and solids from entering the well but permit access to the full internal diameter of the inner casing when required. The vent or other device approved by the Department shall extend, when finally in place, a distance of no less than 72 inches above ground level and the permit or registration number shall be permanently affixed.

(b) The owner or operator shall plug a well, where the surface casing, coal protective casing and production casing are cemented, as follows:

(1) If the total depth or attainable bottom is deeper than the cemented production casing seat, the operator shall plug that portion of the well under subsection (a)(1).

(2) Cement plugs shall be set in the cemented portion of the production casing so that the plugs will extend from at least 50 feet below each stratum bearing or having borne oil, gas or water, to a point at least 100 feet above each stratum bearing or having borne, oil, gas or water. A Department approved mechanical plug may be set 20 feet above each stratum bearing or having borne oil, gas or water as a substitute for the plug of cement. Nonporous material shall separate each cement plug or mechanical plug. The operator may treat multiple strata as one stratum and plug as described in this subsection with a single column of cement or other materials as approved by the Department.

(3) Following the plugging of the cemented portion of the production casing, the uncemented portion of the production casing shall be separated from the cemented portion and retrieved. The maximum distance the stub of the uncemented portion of the production casing may extend is 100 feet below the surface or coal protective casing whichever is lower. In no case may the uncemented portion of the casing left in the well extend through a formation bearing or having borne oil, gas or water. Other stratum above the cemented por-

tion of the production casing bearing or having borne oil, gas or water shall be plugged by filling the hole with nonporous material to 20 feet above the stratum and setting a 50-foot plug of cement. The operator may treat multiple strata as one stratum and plug as described in this subsection with a single column of cement or other material as approved by the Department. When the uncemented portion of the production casing is not retrievable, the operator shall plug that portion of the well under § 78.91(d).

(4) After plugging all strata bearing or having borne oil, gas or water, the well shall be filled with nonporous material to a point approximately 100 feet below the surface or coal protective casing seat, whichever is deeper. At this point a 200-foot cement plug shall be placed so that the plug extends from 100 feet below the casing seat to a point at least 100 feet above the casing seat.

(5) After the 200-foot plug has been installed, the remainder of the well shall be plugged and vented as described in subsection (a)(3).

(c) A person authorized by the Department under the act or section 13 of the Coal and Gas Resource Coordination Act (58 P. S. § 513) to plug a gas well that penetrates a workable coal seam that was drilled prior to November 30, 1955, or which was permitted after that date but not plugged in accordance with the act, shall plug the well to mine through it in the following manner:

(1) The gas well shall be cleaned out to a depth of at least 200 feet below the coal seam which is proposed to be mined and, unless impracticable, to a point 200 feet below the deepest mineable coal seam that the well penetrates.

(2) The gas well shall be plugged in accordance with section 13(a)(1), (2), (3) or (4) of the Coal and Gas Resource Coordination Act.

#### Source

The provisions of this § 78.92 adopted July 28, 1989, effective July 29, 1989, 19 Pa.B. 3229; amended December 16, 1994, effective December 17, 1994, 24 Pa.B. 6284; amended March 30, 2001, effective March 31, 2001, 31 Pa.B. 1736. Immediately preceding text appears at serial pages (241924) to (241926).

#### Cross References

This section cited in 25 Pa. Code § 78.86 (relating to defective coating or cementing); 25 Pa. Code § 78.91 (relating to general provisions); 25 Pa. Code § 78.97 (relating to plugging a well stimulated with explosives); and 25 Pa. Code § 78.407 (relating to plugging gas storage wells).

### **§ 78.93. Wells in coal areas—surface or coal protective casing anchored with a packer or cement.**

(a) In a well where the surface casing or coal protective casing and production casing are anchored with a packer or cement, the owner or operator shall plug the well as follows:

(1) The retrievable production casing shall be removed and the well shall be filled with nonporous material from the total depth or attainable bottom of the well, to a point 20 feet above the top of the lowest stratum bearing or hav-

ing borne oil, gas or water. At this point there shall be placed a plug of cement, which shall extend for at least 50 feet above that point. Between this sealing plug and a point 20 feet above the next higher stratum bearing or having borne oil, gas or water, the hole shall be filled with nonporous material and at that point there shall be placed another 50-foot plug of cement which will completely seal the hole. In this manner, the hole shall be filled and plugged, with reference to each of the strata bearing or having borne oil, gas or water. The operator may treat multiple strata as one stratum and plug as described in this subsection with a single column of cement or other material as approved by the Department. When the production casing is not retrievable, the operator shall plug this portion of the well under § 78.91(d) (relating to general provisions).

(2) The well shall then be filled with nonporous material to a point approximately 200 feet below the lowest workable coal seam, or surface or coal protective casing seat, whichever is deeper. Beginning at this point a 100-foot plug of cement shall be installed.

(3) After it has been established that the surface casing or coal protective casing is free and can be retrieved, the surface or coal protective casing shall be retrieved and a string of casing with an outside diameter of not less than 4 1/2 inches for gas wells, or not less than 2 inches for oil wells, shall be run to the top of the 100-foot plug described in paragraph (2) and cemented to the surface.

(4) If the surface or coal protective string is not free and cannot be retrieved, it shall be perforated or cut below the lowest workable coal to allow the cement used to cement the 4 1/2-inch or 2-inch casing to communicate between the surface casing or coal protective casing, or both, and the well bore. A string of casing of not less than 4 1/2 inches for gas wells or not less than 2 inches for oil wells shall be run to the top of the 100-foot plug described in paragraph (2) and cemented to the surface.

(5) The inner casing shall then be emptied of liquid and cement from the base of the casing to the surface and a vent or other device approved by the Department shall be installed on the top of the casing to prevent liquids and solids from entering the well, but permit ready access to the full internal diameter of the inner casing. The inner string of casing and the vent or other device approved by the Department shall extend, when finally in place, a distance of no less than 72 inches above ground level and the permit or registration number shall be permanently affixed to the vent.

(b) The owner or operator shall plug a well, where the surface casing and coal protective casing is anchored with a packer or cement and the production casing is cemented, as follows:

(1) If the total depth or attainable bottom is deeper than the cemented production casing seat, the operator shall plug that portion of the well under subsection (a)(1).

(2) A cement plug shall be set in the cemented portion of the production casing so that the plugs extend from at least 50 feet below each stratum bearing or having borne oil, gas or water, to a point at least 100 feet above each stratum bearing or having borne, oil, gas or water. A Department approved mechanical plug may be set 20 feet above the stratum bearing or having borne oil, gas or water as a substitute for the plug of cement. Nonporous material shall separate each cement plug or mechanical plug. The operator may treat multiple strata as one stratum and plug as described in this subsection with a single column of cement or other materials as approved by the Department.

(3) Following the plugging of the cemented portion of the production casing, the uncemented portion of the production casing shall be separated from the cemented portion and retrieved. The maximum distance the stub of the uncemented portion of the production casing may extend is 100 feet below the surface or coal protective casing whichever is lower. In no case may the uncemented portion of the casing left in the well extend through a formation bearing or having borne oil, gas or water. Other stratum above the cemented portion of the production casing bearing or having borne oil, gas or water shall be plugged by filling the hole with nonporous material to 20 feet above the stratum and setting a 50-foot plug of cement. The operator may treat multiple strata as one stratum and plug as described in this paragraph with a single column of cement or other material approved by the Department. When the uncemented portion of the production casing is not retrievable, the operator shall plug that portion of the well under § 78.91(d).

(4) The well shall be filled with nonporous material to a point approximately 300 feet below the bottom of the surface casing or coal protective casing, whichever is deeper. In this case, a 100-foot plug of cement shall then be placed in the well beginning at that point and extending to a point approximately 200 feet below the bottom of the casing seat.

(5) After it has been established that the surface casing or coal protective casing is free and can be retrieved, the surface or coal protective casing shall be retrieved and a string of casing with an outside diameter of not less than 4 1/2 inches for gas wells, or not less than 2 inches for oil wells, shall be run to the top of the 100-foot plug described in paragraph (4) and cemented to the surface.

(6) If the surface or coal protective string is not free and cannot be retrieved, it shall be perforated or cut below the lowest workable coal seam to allow the cement used to cement the 4 1/2-inch or 2-inch casing to communicate between the surface casing or coal protective casing, or both, and the well bore. A string of casing of not less than 4 1/2 inches for gas wells or not less than 2 inches for oil wells shall be run to the top of the 100-foot plug described in paragraph (4) and cemented to the surface.

(7) The inner casing shall then be emptied of liquid and cement from the base of the casing to the surface and a vent or other device approved by the

Department shall be installed on the top of the casing to prevent liquids and solids from entering the well, but permit ready access to the full internal diameter of the inner casing. The inner string of casing and the vent or other device approved by the Department shall extend, when finally in place, a distance of not less than 72 inches above ground level and the permit or registration number shall be permanently affixed to the vent.

(c) A person authorized by the Department under the act or section 13 of the Coal and Gas Resource Coordination Act (58 P. S. § 513) to plug a gas well that penetrates a workable coal seam which was drilled prior to November 30, 1955, or which was permitted after that date but not plugged in accordance with the act shall plug the well to mine through it in the following manner:

(1) The gas well shall be cleaned out to a depth of at least 200 feet below the coal seam which is proposed to be mined and, unless impracticable, to a point 200 feet below the deepest minable coal seam which the well penetrates.

(2) The well shall be plugged in accordance with section 13(a)(2) or (4) of the Coal and Gas Resource Coordination Act.

#### Source

The provisions of this § 78.93 adopted July 28, 1989, effective July 29, 1989, 19 Pa.B. 3229; amended December 16, 1994, effective December 17, 1994, 24 Pa.B. 6284; amended March 30, 2001, effective March 31, 2001, 31 Pa.B. 1736. Immediately preceding text appears at serial pages (241926) to (241928).

#### Cross References

This section cited in 25 Pa. Code § 78.86 (relating to defective casing or cementing); 25 Pa. Code § 78.91 (relating to general provisions); 25 Pa. Code § 78.97 (relating to plugging a well stimulated with explosives); and 25 Pa. Code § 78.407 (relating to plugging gas storage wells).

### **§ 78.94. Wells in noncoal areas—surface casing is not cemented or not present.**

(a) The owner or operator shall plug a noncoal well, where the surface casing and production casing are not cemented, or is not present as follows:

(1) The retrievable production casing shall be removed. The well shall be filled with nonporous material from the total depth or attainable bottom of the well to a point 20 feet above the top of the lowest stratum bearing or having borne oil, gas or water. At that point there shall be placed a plug of cement, which shall extend at least 50 feet above that point. Between this sealing plug and a point 20 feet above the next higher stratum bearing or having borne oil, gas or water, the hole shall be filled with nonporous material and at that point there shall be placed another 50-foot plug of cement. The hole shall be filled and plugged, with reference to each of the strata bearing or having borne oil, gas or water. The operator may treat multiple strata as one stratum and plug as described in this paragraph with a single column of cement or other materials

as approved by the Department. When the production casing is not retrievable, the operator shall plug this portion of the well under § 78.91(d) (relating to general provisions).

(2) After plugging strata bearing or having borne oil, gas or water, the well shall be filled with nonporous material to approximately 100 feet below the surface casing seat and there shall be placed another plug of cement or other equally nonporous material approved by the Department extending at least 50 feet above that point.

(3) After setting the uppermost 50-foot plug, the retrievable surface casing shall be removed and the hole shall be filled from the top of the 50-foot plug to the surface with nonporous material other than gel. If the surface casing is not retrievable, the hole shall be filled from the top of the 50-foot plug to the surface with a noncementing material.

(b) The owner or operator shall plug a well, where the surface casing is not cemented or not present, and the production casing is cemented as follows:

(1) If the total depth or attainable bottom is deeper than the cemented production casing seat, the operator shall plug that portion of the well under subsection (a)(1).

(2) Cement plugs shall be set in the cemented portion of the production casing so that each plug extends from at least 50 feet below each stratum bearing or having borne oil, gas or water, to a point at least 100 feet above each stratum. A Department approved mechanical plug may be used as a substitute for the plug of cement. The mechanical plug shall be set 20 feet above each stratum having borne oil, gas or water. The operator may treat multiple strata as one stratum and plug as described in this subsection with a single column of cement or other material approved by the Department.

(3) Following the plugging of the cemented portion of the production casing, the uncemented portion of the production string shall be separated from the cemented portion and retrieved. The maximum distance the stub of the uncemented portion of the production casing may extend is 100 feet below the surface casing. In no case may the uncemented portion of the production casing left in the hole extend through stratum bearing or having borne oil, gas or water. Other stratum bearing or having borne oil, gas or water shall be plugged by filling the hole with nonporous material to 20 feet above the stratum and setting a 50-foot plug of cement. When the uncemented portion of the production casing is not retrievable, the operator shall plug that portion of the well under § 78.91(d).

(4) The remainder of the well shall be plugged under subsection (a)(2) and (3).

78-50.1

**Source**

The provisions of this § 78.94 adopted July 28, 1989, effective July 29, 1989, 19 Pa.B. 3229; amended December 16, 1994, effective December 17, 1994, 24 Pa.B. 6284. Immediately preceding text appears at serial pages (138846) to (138847).

**Cross References**

This section cited in 25 Pa. Code § 78.86 (relating to defective casing or cementing); 25 Pa. Code § 78.91 (relating to general provisions); 25 Pa. Code § 78.97 (relating to plugging a well stimulated with explosives); and 25 Pa. Code § 78.407 (relating to plugging gas storage wells).

**§ 78.95. Wells in noncoal areas—surface casing is cemented.**

(a) The owner or operator shall plug a well, where the surface casing is cemented and the production casing is not cemented or not present, as follows:

(1) The retrievable production casing shall be removed and the well shall be filled with nonporous material from the total depth or attainable bottom of the well to a point 20 feet above the top of the lowest stratum bearing or having borne oil, gas or water. At this point there shall be placed a plug of cement, which shall extend at least 50 feet above that point. Between this sealing plug and a point 20 feet above the next higher stratum bearing or having borne oil, gas or water, the hole shall be filled with nonporous material and at that point there shall be placed another 50-foot plug of cement. The hole shall be filled and plugged, with reference to each of the strata bearing or having borne oil, gas or water. The operator may treat multiple strata as one stratum and plug as described in this subsection with a single column of cement or other materials as approved by the Department. When the production casing is not retrievable, the operator shall plug this portion of the well under § 78.91(d) (relating to general provisions).

(2) After plugging all strata bearing or having borne oil, gas or water, the well shall be filled with nonporous material to approximately 100 feet below

the surface casing seat. Another plug of cement, or other equally nonporous material approved by the Department, shall be placed extending at least 50 feet above that point.

(3) After setting the 50-foot plug, the hole shall be filled from the top of the 50-foot plug to the surface with a noncementing material or the operator shall set a 100-foot cement plug which extends 50-feet into the surface casing and fill the hole to the surface with noncementing material.

(b) The owner or operator shall plug a noncoal well, where the surface casing and production casing are cemented, as follows:

(1) If the total depth or attainable bottom is deeper than the cemented production casing seat, the operator shall plug that portion of the well under subsection (a)(1).

(2) Cement plugs shall be set in the cemented portion of the production casing so that each plug extends from at least 50 feet below each stratum bearing or having borne oil, gas or water, to a point at least 100 feet above the stratum. A Department approved mechanical plug may be used as a substitute for the plug of cement. The mechanical plug shall be set 20 feet above each stratum having borne oil, gas or water. The operator may treat multiple strata as one stratum and plug as described in this subsection with a single column of cement or other materials approved by the Department.

(3) Following the plugging of the cemented portion of the production casing, the uncemented portion of the production string shall be separated from the cemented portion and retrieved. The maximum distance the stub of the uncemented portion of the production casing may extend is 100 feet below the surface casing. In no case may the uncemented portion of the production casing left in the hole extend through stratum bearing or having borne oil, gas or water. Other stratum bearing or having borne oil, gas or water shall be plugged by filling the hole with nonporous material to 20 feet above the stratum and setting a 50-foot plug of cement. When the uncemented portion of the production casing is not retrievable, the operator shall plug that portion of the well under § 78.91(d).

(4) The remainder of the well shall be plugged under subsection (a)(2) and (3).

#### Source

The provisions of this § 78.95 adopted July 28, 1989, effective July 29, 1989, 19 Pa.B. 3229; amended December 16, 1994, effective December 17, 1994, 24 Pa.B. 6284. Immediately preceding text appears at serial pages (138847) to (138849).

#### Cross References

This section cited in 25 Pa. Code § 78.86 (relating to defective casing or cementing); 25 Pa. Code § 78.91 (relating to general provisions); 25 Pa. Code § 78.97 (relating to plugging a well stimulated with explosives); and 25 Pa. Code § 78.407 (relating to plugging gas storage wells).

**§ 78.96. Marking the location of a plugged well.**

Upon the completion of plugging or replugging a well, the operator shall erect over the plugged well a permanent marker of concrete, metal or metal and concrete. The marker shall extend at least 4 feet above the ground surface and enough below the surface to make the marker permanent. The permit or registration number shall be stamped or cast or otherwise permanently affixed to the marker. In lieu of placing the marker above the ground surface, the marker may be buried below plow depth and shall contain enough metal to be detected at the surface by conventional metal detectors.

**Source**

The provisions of this § 78.96 adopted July 28, 1989, effective July 29, 1989, 19 Pa.B. 3229.

**Cross References**

This section cited in 25 Pa. Code § 78.86 (relating to defective casing or cementing); 25 Pa. Code § 78.91 (relating to general provisions); and 25 Pa. Code § 78.407 (relating to plugging gas storage wells).

**§ 78.97. Plugging a well stimulated with explosives.**

Where strata bearing or having borne oil, gas or water in the well have been stimulated with explosives, thereby creating cavities which cannot be readily filled as described in §§ 78.92—78.95, the well operator shall place at the nearest suitable point, but at least 20 feet above the stratum, a plug of cement which extends at least 50 feet above that point. If the stimulation has been done above one or more strata bearing or having borne oil, gas or water in the well, plugging in the applicable manner specified in §§ 78.92—78.95 shall be done at the nearest suitable points, to at least 20 feet below and at least 20 feet above the stratum stimulated. From a point immediately above and below these plugs, the well shall be plugged under §§ 78.94 and 78.95 (relating to wells in noncoal areas—surface casing is not cemented or not present; and wells in noncoal areas—surface casing is cemented).

**Source**

The provisions of this § 78.97 adopted July 28, 1989, effective July 29, 1989, 19 Pa.B. 3229.

**Cross References**

This section cited in 25 Pa. Code § 78.86 (relating to defective casing or cementing); 25 Pa. Code § 78.91 (relating to general provisions); and 25 Pa. Code § 78.407 (relating to plugging gas storage wells).

**§ 78.98. Restricting surface water from the well bore.**

When casing, including conductor pipe, is left in the well at the surface, the area between the casings or the casing and the well bore shall be permanently filled to the surface with a nonporous material to restrict surface water from the well bore.

**Source**

The provisions of this § 78.98 adopted July 28, 1989, effective July 29, 1989, 19 Pa.B. 3229.

**Cross References**

This section cited in 25 Pa. Code § 78.86 (relating to defective casing or cementing); 25 Pa. Code § 78.91 (relating to general provisions); and 25 Pa. Code § 78.407 (relating to plugging gas storage wells).

**INACTIVE STATUS****§ 78.101. General provisions.**

Upon application, the Department will grant inactive status for 5 years for a permitted or registered well if the application meets the requirements of section 204 of the act (58 P. S. § 601.204) and §§ 78.102—78.105. The Department may require information to demonstrate that the conditions imposed by § 78.102 (relating to criteria for approval of inactive status) are satisfied.

**Source**

The provisions of this § 78.101 adopted July 28, 1989, effective July 29, 1989, 19 Pa.B. 3229; amended December 16, 1994, effective December 17, 1994, 24 Pa.B. 6284. Immediately preceding text appears at serial page (138850).

**Cross References**

This section cited in 25 Pa. Code § 78.91 (relating to general provisions).

**§ 78.102. Criteria for approval of inactive status.**

To obtain inactive status, the applicant shall affirmatively demonstrate to the Department's satisfaction that:

- (1) The condition of the well is sufficient to:
  - (i) Prevent damage to the producing zone or contamination of fresh water or other natural resources or surface leakage of substances.
  - (ii) Stop the vertical flow of fluid or gas within the well bore.
  - (iii) Protect fresh groundwater.
  - (iv) Pose no threat to the health and safety of persons, property or the environment.
- (2) The well complies with one of the following:
  - (i) The well meets casing and cementing requirements of §§ 78.81—78.86 (relating to casing and cementing).

(ii) For wells not drilled in conformance with casing and cementing requirements of §§ 78.81—78.86, and for the purpose of the annual monitoring of wells granted inactive status as required by § 78.103 (relating to annual monitoring of inactive wells), the applicant demonstrates that:

(A) For oil and gas wells equipped with surface casing, the operator shall demonstrate that the liquid level in the well bore is maintained at a level at no higher than the water protection depth. For purposes of this clause where oil or gas bearing formations are encountered less than 100 feet below the surface casing seat, the water protection depth shall be that point midway between the top of the oil or gas bearing formation and the surface casing seat.

(B) If the liquid level in an oil or gas well equipped with surface casing stands above the water protection depth and below the groundwater table depth, the operator shall test the liquid to determine its quality. If the liquid has a total dissolved solids content or conductivity generally equivalent to fresh groundwater in the immediate area, the casing is assumed to be either leaking or not set deep enough to shut off groundwater, and mechanical integrity is not demonstrated and inactive status will not be granted unless the operator demonstrates that the well is in compliance with the shut-in portion of the mechanical integrity test requirements of the Under Ground Injection Control program under the Safe Drinking Water Act (21 U.S.C.A. § 349; 42 U.S.C. §§ 201, 300f—300j-11). If the liquid has a total dissolved solids content or conductivity equivalent to the production formation or production liquid, mechanical integrity is considered to be demonstrated.

(C) For oil wells not equipped with surface casing or for oil wells equipped with surface casing that cannot be approved for inactive status under paragraph (2)(ii)(A) or (B), the operator shall modify the well to meet one of the following:

(I) The operator shall set a string of casing on a packer sufficiently deep to isolate the fresh groundwater system. The casing shall be set to the water protection depth for wells in the area, and the requirements of paragraph (2)(ii)(A) or (B) shall be met.

(II) The operator has set a temporary plug or mechanical seal at the water protection depth and isolated the fresh groundwater system. The operator may demonstrate the integrity of the plug by demonstrating that water standing above the plug is, and continues to be, fresh water not contaminated by production fluids, or by other means acceptable to the Department.

(III) The operator shall fill the well with a freshwater bentonite gel or other material approved by the Department which will restrict vertical migration of gas or fluids in the well bore. The operator shall moni-

tor the gel level and report significant changes to the Department on an annual basis and take remedial action approved by the Department.

(D) For gas wells equipped with production casing separate from the surface casing, the annulus between the surface or coal protective casing and the production casing is vented to the atmosphere. The owner or operator of a well granted inactive status under this clause shall monitor the annular vents for gas flow volumes. If the gas flow volume exceeds 5,000 cubic feet per day, the owner or operator shall notify the Department and take remedial action approved by the Department.

(E) For gas wells not equipped with separate production casing, but with cemented or uncemented surface casing present, the produced gas shut-in pressure is less than the pressure necessary to cause gas migration into the adjacent formation at the surface casing seat. Compliance with this condition may be demonstrated by mechanical tests of the casing and by evidence that the gas wellhead shut-in pressure does not exceed 0.433 psi per foot of surface or coal protective casing depth.

(3) If gas exists at an inactive oil well, the operator may vent the gas to the atmosphere or equip the well to confine the gas to the producing formation. If this gas flow is greater than 5,000 cubic feet per day, the owner or operator shall notify the Department and take remedial action approved by the Department.

(4) The applicant shall certify that the well is of future utility and shall present a viable plan for utilizing the well within a reasonable time. In addition to providing information to demonstrate compliance with paragraphs (1) and (2), the application for inactive status shall include the following:

- (i) A plan showing when the well will be used.
- (ii) A certification identifying that one of the following applies:
  - (A) Significant reserves remain in place and the operator plans to produce the well.
  - (B) The well will be used as a disposal well.
  - (C) The well will be used as a storage well.
  - (D) The well will be used as an observation well.
  - (E) The well will be used as a secondary or tertiary recovery injection well or that the well will be used for other purposes specified by the applicant.
- (iii) Other information necessary for the Department to make a determination on inactive status.

**Source**

The provisions of this § 78.102 adopted July 28, 1989, effective July 29, 1989, 19 Pa.B. 3229.

**Cross References**

This section cited in 25 Pa. Code § 78.91 (relating to general provisions); 25 Pa. Code § 78.101 (relating to general provisions); 25 Pa. Code § 78.103 (relating to annual monitoring of inactive wells); 25 Pa. Code § 78.104 (relating to term of inactive status); and 25 Pa. Code § 78.105 (relating to revocation of inactive status).

**§ 78.103. Annual monitoring of inactive wells.**

The owner or operator of a well granted inactive status shall monitor the integrity of the well on an annual basis and shall report the results to the Department. The owner or operator shall give the Department 3 working days prior notice of the annual monitoring and mechanical integrity testing. For wells that were drilled in accordance with the casing and cementing standards of §§ 78.81—78.86 (relating to casing and cementing), the operator shall monitor the integrity of the well by using the method described in § 78.102(2)(ii)(A), (B), (D) or (E) (relating to criteria for approval of inactive status), as appropriate. For a well that was not drilled in accordance with the casing and cementing standards, the wells shall be monitored in accordance with § 78.102(1). To qualify for continued inactive status, the owner or operator shall demonstrate, by the data in the monitoring reports, that the condition of the well continues to satisfy the requirements of § 78.102. The owner or operator shall submit the report by March 31 of the following year.

**Source**

The provisions of this § 78.103 adopted July 28, 1989, effective July 29, 1989, 19 Pa.B. 3229; amended December 16, 1994, effective December 17, 1994, 24 Pa.B. 6284. Immediately preceding text appears at serial page (138853).

**Cross References**

This section cited in 25 Pa. Code § 78.91 (relating to general provisions); 25 Pa. Code § 78.101 (relating to general provisions); 25 Pa. Code § 78.104 (relating to term of inactive status); 25 Pa. Code § 78.102 (relating to criteria for approval of inactive status); and 25 Pa. Code § 78.105 (relating to revocation of inactive status).

**§ 78.104. Term of inactive status.**

Approval of inactive status for a well is valid for 5 years unless revoked. After 5 years, the owner or operator shall plug or return to active status a well granted inactive status unless the Department grants an application for a 1-year extension. The operator of a well granted inactive status may apply for renewal of inactive status by demonstrating that the well continues to satisfy the conditions imposed on the well by §§ 78.102 and 78.103 (relating to criteria for approval of inactive status; and annual monitoring of inactive wells).

**Source**

The provisions of this § 78.104 adopted July 28, 1989, effective July 29, 1989, 19 Pa.B. 3229; amended December 16, 1994, effective December 17, 1994, 24 Pa.B. 6284. Immediately preceding text appears at serial page (138854).

**Cross References**

This section cited in 25 Pa. Code § 78.91 (relating to general provisions); 25 Pa. Code § 78.101 (relating to general provisions); and 25 Pa. Code § 78.105 (relating to revocation of inactive status).

**§ 78.105. Revocation of inactive status.**

The Department may revoke inactive status and may order the immediate plugging of a well if one of the following applies:

- (1) The well is in violation of the act or regulations administered by the Department.
- (2) The operator of the inactive well has become insolvent, to the extent that the plan provided under § 78.102 (relating to criteria for approval of inactive status) is no longer viable to return the well to active status, or the operator otherwise demonstrates a lack of ability or intention to comply with applicable laws and regulations.
- (3) The condition of the well no longer satisfies the requirements of section 204 of the act (58 P. S. § 601.204) and §§ 78.102—78.104 (relating to criteria for approval of inactive status; annual monitoring of inactive wells; and term of inactive status).
- (4) The owner or operator is unwilling or unable to perform his obligations under the act.

**Source**

The provisions of this § 78.105 adopted July 28, 1989, effective July 29, 1989, 19 Pa.B. 3229; amended December 16, 1994, effective December 17, 1994, 24 Pa.B. 6284. Immediately preceding text appears at serial page (138854).

**Cross References**

This section cited in 25 Pa. Code § 78.91 (relating to general provisions); and 25 Pa. Code § 78.101 (relating to general provisions).

**RADIOACTIVE LOGGING SOURCES****§ 78.111. Abandonment.**

(a) The owner or operator may not abandon a radioactive source licensed by the Commonwealth for logging purposes without consent of the Department. Approval of a plan of abandonment may be arranged with the Department by telephone and is to be followed by a written report to the Department within 30 days after abandonment of the radioactive source. The plan shall be approved by the Department.

(b) The operator shall notify the Department of his intention to leave a radioactive source in a well.

(c) The operator shall mechanically equip a well in which a radioactive source is abandoned to prevent the accidental or intentional mechanical disintegration of the radioactive source.

(1) The operator shall cover the radioactive source being abandoned in the bottom of a well with a substantial standard color-dyed cement plug on top of which a mechanical stop or deflector shall be set. The dye shall contrast with the color of the formation to alert a re-entry operator prior to encountering the source.

(2) In a well where a logging source has been cemented in place behind a casing string and above total depth, upon plugging the well, a color-dyed cement plug shall be placed opposite the abandoned source inside the well bore and a mechanical stop or deflector shall be placed on top of the plug.

(3) If, after expending a reasonable effort, the operator cannot comply with paragraph (1) or (2) because of hole conditions, the operator shall request Department approval to cease efforts to comply with paragraph (1) or (2) and shall obtain approval for an alternate method for abandoning the source and plugging the well.

(d) Upon plugging a well in which a radioactive source is left in the hole, the operator shall place a permanent plaque by welding or bolting or cementing it to the top of the bore hole in a manner approved by the Department that re-entry cannot be accomplished without disturbing the plaque. The plaque shall serve as a visual warning to a person re-entering the hole that a radioactive source has been abandoned in-place in the well. The plaque shall depict the trefoil radiation symbol with the words "Caution, Radioactive Material" under § 219.41 (relating to radiation symbol) and shall be constructed of a long-lasting material such as monel, stainless steel, bronze or brass. The marker shall bear the following information:

- (1) Farm name.
- (2) Permit number.
- (3) Name and address of operator.
- (4) The type and strength of radioactive material abandoned in the well.
- (5) The total well depth.
- (6) Depth at which the source was abandoned.
- (7) A warning not to drill below the plug-back depth or to enlarge the casing.

(e) Prior to workover or re-entry activity, if a radioactive source is present, the operator shall have the plan of operation approved by the Department before the workover or re-entry is permitted.

(f) This section does not relieve the licensee, owner or operator from the obligation to comply with Federal regulations and this title, including Chapters

225 and 226 (relating to radiation safety requirements for industrial radiographic operations; and licenses and radiation safety requirements for well logging).

**Source**

The provisions of this § 78.111 adopted July 28, 1989, effective July 29, 1989, 19 Pa.B. 3229.

**Cross References**

This section cited in 25 Pa. Code § 78.91 (relating to general provisions); and 25 Pa. Code § 226.3a (relating to abandonment of a sealed source).

**Subchapter E. WELL REPORTING**

Sec.

- 78.121. Annual production report.
- 78.122. Well record and completion report.
- 78.123. Logs and additional data.
- 78.124. Certificate of plugging.
- 78.125. Disposal and enhanced recovery well reports.

**§ 78.121. Annual production report.**

(a) The well operator shall submit an annual production and status report for each well on an individual basis, on or before March 31 of each year. Production shall be reported for the preceding calendar year. When the production data is not available to the operator on a well basis, the operator shall report production on the most well-specific basis available. The annual production report shall include information on the amount and type of waste produced and the method of waste disposal or reuse. Waste information submitted to the Department in accordance with this subsection shall satisfy the residual waste biennial reporting requirements of § 287.52 (relating to biennial report).

(b) The annual production report shall be submitted on forms prescribed by, and available from, the Department or in a similar manner approved by the Department.

**Source**

The provisions of this § 78.121 adopted July 28, 1989, effective July 29, 1989, 19 Pa.B. 3229; amended December 16, 1994, effective December 17, 1994, 24 Pa.B. 6284. Immediately preceding text appears at serial page (169986).

**§ 78.122. Well record and completion report.**

(a) For each well that is drilled or altered, the operator shall keep a detailed drillers log at the well site available for inspection until drilling is completed. Within 30 calendar days of cessation of drilling or altering a well, the well opera-

tor shall submit a well record to the Department on a form provided by the Department that includes the following information:

- (1) Name, address and telephone number of the permittee.
- (2) Permit number, and farm name and number.
- (3) Township and county.
- (4) Date drilling started and completed.
- (5) Method of drilling.
- (6) Size and depth of conductor pipe, surface casing, coal protective casing, production casing and borehole.
- (7) Type and amount of cement and results of cementing procedures.
- (8) Elevation and total depth.
- (9) Drillers log that includes the name and depth of formations from the surface to total depth, depth of oil and gas producing zone, depth of fresh water and brines and source of information.
- (10) Other information required by the Department.

(b) Within 30 calendar days after completion of the well, the well operator shall submit a completion report to the Department on a form provided by the Department that includes the following information:

- (1) Name, address and telephone number of the permittee.
- (2) Name, address and telephone number of the service companies.
- (3) Permit number and farm name and number.
- (4) Township and county.
- (5) Perforation record.
- (6) Stimulation record.
- (7) Actual open flow production and rock pressure.
- (8) Open flow production and rock pressure, measured 24 hours after treatment.

(c) No information described in subsection (b)(5)—(8) will be required as part of the report unless the operator has had the information compiled in the ordinary course of business. No interpretation of the data is to be filed.

#### Source

The provisions of this § 78.122 adopted July 28, 1989, effective July 29, 1989, 19 Pa.B. 3229; amended December 16, 1994, effective December 17, 1994, 24 Pa.B. 6284. Immediately preceding text appears at serial pages (169986) and (138857).

#### § 78.123. Logs and additional data.

(a) If requested by the Department within 90 calendar days after the completion of drilling or recompletion of a well, the well operator shall submit to the Department a copy of the electrical, radioactive or other standard industry logs run on the well. In addition, if requested by the Department within 1 year of the completion of drilling or recompletion of a well, the well operator shall file with the Department a copy of the drill stem test charts, formation water analysis,

porosity, permeability or fluid saturation measurements, core analysis and lithologic log or sample description or other similar data as compiled. No information will be required unless the operator has had the information described in this subsection compiled in the ordinary course of business. No interpretation of the data is to be filed.

(b) Upon notification by the Department prior to drilling, the well operator shall collect additional data specified by the Department, such as representative drill cuttings and samples from cores taken, and other geological information that the operator can reasonably compile.

(c) The information requested by the Department under subsections (a) and (b) shall be provided to the Department by the operator, within 3 years after completion of the well unless the Department has granted an extension or unless the Department has requested information as described in subsection (d). If the Department has granted an extension, the information shall be submitted in accordance with the extension, but in no case may the extension exceed 5 years from the date of completion of the well.

(d) In accordance with the request of the Department, the operator shall submit the information described in this section for use in investigation or enforcement proceedings, or in aggregate form for statistical purposes.

#### Source

The provisions of this § 78.123 adopted July 28, 1989, effective July 29, 1989, 19 Pa.B. 3229; amended March 6, 1998, effective March 7, 1998, 28 Pa.B. 1234. Immediately preceding text appears at serial pages (194014) to (194015).

### § 78.124. Certificate of plugging.

(a) Within 30 calendar days after the well has been plugged, the owner or operator of the well shall submit a certificate of plugging to the Department and each coal operator, lessee or owner who was sent notice by certified mail of the intent to plug the well.

(b) The certificate of plugging shall be on a form provided by the Department and contain information required by the Department.

(c) The certificate of plugging shall be prepared and signed by two experienced and qualified people who participated in the work, and shall also be signed by the well owner or operator.

#### Source

The provisions of this § 78.124 adopted July 28, 1989, effective July 29, 1989, 19 Pa.B. 3229.

### § 78.125. Disposal and enhanced recovery well reports.

(a) The operator of a disposal or enhanced recovery well shall submit to the Department, upon request, a copy of the annual monitoring report submitted to the EPA summarizing the results of the operator's monitoring as required by 40

CFR Part 146 (relating to underground injection control program) when these reports are submitted to the EPA. This summary, at a minimum, shall include the following:

- (1) Monthly records of major changes in characteristics or sources of injected fluids.
  - (2) Reports of volumes and pressures of injection fluids.
  - (3) Reports of mechanical integrity testing.
  - (4) Other information or reports required to be submitted to the EPA under 40 CFR Part 146.
- (b) The operator of a disposal or enhanced recovery well shall submit to the Department copies of periodic monitoring reports or reports of failures, releases, accidents or other incidents required to be submitted to the EPA under 40 CFR 146 when these reports are submitted to the EPA.
- (c) The operator of a disposal well or enhanced recovery well may submit monitoring reports to the Department on a field or project basis rather than on an individual well basis provided manifold monitoring is used.

#### Source

The provisions of this § 78.125 adopted December 16, 1994, effective December 17, 1994, 24 Pa.B. 6284; amended March 6, 1998, effective March 7, 1998, 28 Pa.B. 1234. Immediately preceding text appears at serial page (194016).

### Subchapter F. [Reserved]

#### § 78.141—78.146. [Reserved].

#### Source

The provisions of these §§ 78.141—78.146 adopted July 28, 1989, effective July 29, 1989, 19 Pa.B. 3229; reserved January 27, 2006, effective January 28, 2006, 36 Pa.B. 465. Immediately preceding text appears at serial pages (241942) to (241944) and (276341).

### Subchapter G. BONDING REQUIREMENTS

- Sec.
- 78.301. Scope.
- 78.302. Requirement to file a bond.
- 78.303. Form, terms and conditions of the bond.
- 78.304. Terms and conditions for surety bonds.
- 78.305. Terms and conditions for collateral bonds—general.
- 78.306. Collateral bonds—letters of credit.
- 78.307. Collateral bonds—certificates of deposit.
- 78.308. Collateral bonds—negotiable bonds.
- 78.309. Phased deposit of collateral.
- 78.310. Replacement of existing bond.

- 78.311. Failure to maintain adequate bond.
- 78.312. Forfeiture determination.
- 78.313. Incapacity of operators.
- 78.314. Preservation of remedies.

### § 78.301. Scope.

In addition to the requirements of section 215 of the act (58 P. S. § 601.215), this subchapter specifies certain requirements for surety bonds, collateral bonds, replacement of existing bonds, maintaining adequate bond and bond forfeiture.

#### Source

The provisions of this § 78.301 adopted July 28, 1989, effective July 29, 1989, 19 Pa.B. 3229.

### § 78.302. Requirement to file a bond.

For a well that has not been plugged, the owner or operator shall file a bond or otherwise comply with the bonding requirements of section 215 of the act (58 P. S. § 601.215) and this chapter. A bond or bond substitute is not required for a well drilled before April 18, 1985.

#### Source

The provisions of this § 78.302 adopted July 28, 1989, effective July 29, 1989, 19 Pa.B. 3229; amended March 30, 2001, effective March 31, 2001, 31 Pa.B. 1736. Immediately preceding text appears at serial page (241946).

### § 78.303. Form, terms and conditions of the bond.

- (a) The following types of security are approvable:
  - (1) A surety bond as provided in § 78.304 (relating to terms and conditions for surety bonds).
  - (2) A collateral bond as provided in §§ 78.305—78.308. For individuals who meet the requirements of section 215(d.1) of the act, a phased deposit of collateral bond as provided in § 78.309(b) (relating to phased deposit of collateral).
- (b) A person submitting a bond shall comply with the Department guidelines establishing minimum criteria for execution and completion of the bond forms and related documents.
- (c) A bond shall be conditioned upon compliance with the drilling, water supply replacement, restoration and plugging requirements in the act, this chapter and permit conditions relating thereto. The bonds are penal in nature and are designed to ensure compliance by the operator to protect the environment, public health and safety affected by the oil and gas well.
- (d) The person named in the bond or other security shall be the same as the person named in the permit.
- (e) The bond amounts required under section 215 of the act are as follows:
  - (1) Two thousand five hundred dollars for a single well.

- (2) Twenty-five thousand dollars for a blanket bond.

**Source**

The provisions of this § 78.303 adopted July 28, 1989, effective July 29, 1989, 19 Pa.B. 3229; amended December 16, 1994, effective December 17, 1994, 24 Pa.B. 6284; amended March 30, 2001, effective March 31, 2001, 31 Pa.B. 1736. Immediately preceding text appears at serial page (241946).

**§ 78.304. Terms and conditions for surety bonds.**

(a) The bond of a surety company that has failed, refused or unduly delayed to pay, in full, on a forfeited surety bond is not approvable.

(b) Only the bond of a surety authorized to do business in this Commonwealth is approvable. If the principal place of business of the surety is outside of this Commonwealth, or if the surety is not a Pennsylvania corporation, the surety bond shall also be signed by an authorized resident agency of the surety that maintains an office in this Commonwealth.

(c) The surety may cancel the bond by filing written notice of cancellation with the Department, the operator and the principal on the bond, only under the following conditions:

(1) The notice of cancellation shall be sent by certified mail, return receipt requested. Cancellation may not take effect until 120 days after receipt of the notice of cancellation by the Department, the operator and the principal on the bond as evidenced by return receipts.

(2) Within 30 days after receipt of a notice of cancellation, the operator shall provide the Department with a replacement bond under § 78.310 (relating to replacement of existing bond).

(d) The Department will not accept surety bonds from a surety company when the total bond liability to the Department on the bonds filed by the operator, the principal and related parties exceeds the surety company's single risk limit as provided by The Insurance Company Law of 1921 (40 P. S. §§ 341—991).

(e) The bond shall provide that the surety and the principal shall be jointly and severally liable for payment of the bond amount.

(f) The bond shall provide that the amount shall be confessed to judgment and execution upon forfeiture.

(g) The Department will retain, during the term of the bond, and upon forfeiture of the bond, a property interest in the surety's guarantee of payment under the bond which is not affected by the bankruptcy, insolvency or other financial incapacity of the operator or principal on the bond.

(h) The surety shall give written notice to the Department, if permissible under law, to the principal and the Department within 10 days of a notice received or action filed by or with a regulatory agency or court having jurisdiction over the surety alleging one of the following:

- (1) The insolvency or bankruptcy of the surety.

(2) A violation of regulatory requirements applicable to the surety, when as a result of the violation, suspension or revocation of the surety's license to do business in this Commonwealth or another state is under consideration by a regulatory agency.

**Source**

The provisions of this § 78.304 adopted July 28, 1989, effective July 29, 1989, 19 Pa.B. 3229.

**Cross References**

This section cited in 25 Pa. Code § 78.303 (relating to form, terms and conditions of the bond).

**§ 78.305. Terms and conditions for collateral bonds—general.**

(a) Collateral documents shall be executed by the owner or operator.

(b) The market value of collateral deposited shall be at least equal to the required bond amount with the exception of United States Treasury Zero Coupon Bonds which shall have a maturity date of not more than 10 years after the date of purchase and at maturity a value of at least \$25,000.

(c) Collateral shall be pledged and assigned to the Department free from claims or rights. The pledge or assignment shall vest in the Department a property interest in the collateral which shall remain until release as provided by law and is not affected by the bankruptcy, insolvency or other financial incapacity of the operator.

(d) The Department's ownership rights to deposited collateral shall be such that the collateral is readily available to the Department upon forfeiture. The Department may require proof of ownership, and other means, such as secondary agreements, as it deems necessary to meet the requirements of this subchapter. If the Department determines that deposited collateral does not meet the requirements of this subchapter, it may take action under the law to protect its interest in the collateral.

**Source**

The provisions of this § 78.305 adopted July 28, 1989, effective July 29, 1989, 19 Pa.B. 3229; amended December 16, 1994, effective December 17, 1994, 24 Pa.B. 6284. Immediately preceding text appears at serial page (138865).

**Cross References**

This section cited in 25 Pa. Code § 78.303 (relating to form, terms and conditions of the bond).

**§ 78.306. Collateral bonds—letters of credit.**

(a) Letters of credit submitted as collateral for collateral bonds shall be subject to the following conditions:

(1) The letter of credit shall be a standby or guarantee letter of credit issued by a Federally insured or equivalently protected financial institution,

regulated and examined by the Commonwealth or a Federal agency and authorized to do business in this Commonwealth.

(2) The letter of credit shall be irrevocable and shall be so designated. However, the Department may accept a letter of credit for which a limited time period is stated if the following conditions are met and are stated in the letter:

(i) The letter of credit is automatically renewable for additional time periods unless the financial institution gives at least 90 days prior written notice to both the Department and the operator of its intent to terminate the credit at the end of the current time period.

(ii) The Department has the right to draw upon the credit before the end of its time period, if the operator fails to replace the letter of credit with other acceptable means of compliance with section 215 of the act (58 P. S. § 601.215) within 30 days of the financial institution's notice to terminate the credit.

(3) Letters of credit shall name the Department as the beneficiary and be payable to the Department, upon demand, in part or in full, upon presentation of the Department's drafts, at sight. The Department's right to draw upon the letter of credit does not require documentary or other proof by the Department that the customer has violated the conditions of the bond, the permit or other requirements.

(4) A letter of credit shall be subject to 13 Pa.C.S. (relating to the Uniform Commercial Code) and the latest revision of *Uniform Customs and Practices for Documentary Credits* as published in the International Chamber of Commerce Publication No. 400.

(5) The Department will not accept a letter of credit from a financial institution which has failed, refused or unduly delayed to pay, in full, on a letter of credit or a certificate of deposit previously submitted as collateral to the Department.

(6) The issuing financial institution shall waive rights of set-off or liens which it has or might have against the letter of credit.

(b) If the Department collects any amount under the letter of credit due to failure of the operator to replace the letter of credit after demand by the Department, the Department will hold the proceeds as cash collateral as provided by this subchapter. The operator may obtain the cash collateral after he has submitted and the Department has approved a bond or other means of compliance with section 215 of the act.

#### Source

The provisions of this § 78.306 adopted July 28, 1989, effective July 29, 1989, 19 Pa.B. 3229; amended December 16, 1994, effective December 17, 1994, 24 Pa.B. 6284. Immediately preceding text appears at serial pages (138865) to (138866).

#### Cross References

This section cited in 25 Pa. Code § 78.303 (relating to form, terms and conditions of the bond).

**§ 78.307. Collateral bonds—certificates of deposit.**

A certificate of deposit submitted as collateral for collateral bonds is subject to the following conditions:

- (1) The certificate of deposit shall be made payable to the operator and shall be assigned to the Department by the operator, in writing, as required by the Department and on forms provided by the Department. The assignment shall be recorded upon the books of the financial institution issuing the certificate.
- (2) The certificate of deposit shall be issued by a Federally-insured or equivalently protected financial institution which is authorized to do business in this Commonwealth.
- (3) The certificate of deposit shall state that the financial institution issuing it waives rights of setoff or liens which it has or might have against the certificate.
- (4) The certificate of deposit shall be automatically renewable and fully assignable to the Department. Certificates of deposit shall state on their face that they are automatically renewable.
- (5) The operator shall submit certificates of deposit in amounts which will allow the Department to liquidate those certificates prior to maturity, upon forfeiture, for the full amount of the bond without penalty to the Department.
- (6) The Department will not accept certificates of deposit from financial institutions which have failed, refused or unduly delayed to pay, in full, on certificates of deposit or letters of credit which have previously been submitted as collateral to the Department.
- (7) The operator is not entitled to interest accruing after forfeiture is declared by the Department, until the forfeiture declaration is ruled invalid by a court having jurisdiction over the Department, and the ruling is final.

**Source**

The provisions of this § 78.307 adopted July 28, 1989, effective July 29, 1989, 19 Pa.B. 3229; amended December 16, 1994, effective December 17, 1994, 24 Pa.B. 6284. Immediately preceding text appears at serial pages (138866) to (138867).

**Cross References**

This section cited in 25 Pa. Code § 78.303 (relating to form, terms and conditions of the bond).

**§ 78.308. Collateral bonds—negotiable bonds.**

Negotiable bonds submitted and pledged as collateral for collateral bonds under section 215(a)(3) of the act (58 P. S. § 601.215(a)(3)) are subject to the following conditions:

- (1) The Department will use the current market value of governmental securities, other than United States Treasury Zero Coupon Bonds, for the purpose of establishing the value of the securities for bond deposit.
- (2) The current market value shall be at least equal to the amount of the required bond.

(3) The Department may periodically evaluate the securities and may require additional amounts if the current market value is insufficient to satisfy the bond amount requirements for the oil or gas well operations.

(4) The operator may request and receive the interest accruing on governmental securities filed with the Department as the interest becomes due and payable. An operator will not receive interest accruing on governmental securities until the full amount of the bond has been accumulated. No interest may be paid for postforfeiture interest accruing during appeals and after resolution of the appeals, when the forfeiture is adjudicated, decided or settled in favor of the Commonwealth.

#### Source

The provisions of this § 78.308 adopted July 28, 1989, effective July 29, 1989, 19 Pa.B. 3229; amended December 16, 1994, effective December 17, 1994, 24 Pa.B. 6284. Immediately preceding text appears at serial pages (138867) to (138868).

#### Cross References

This section cited in 25 Pa. Code § 78.303 (relating to form, terms and conditions of the bond).

### § 78.309. Phased deposit of collateral.

#### (a) Operators.

(1) *Eligibility.* An operator who had a phased deposit of collateral in effect as of November 26, 1997, may maintain that bond for wells requiring bonding, for new well permits and for wells acquired by transfer.

(i) An operator may not have more than 200 wells.

(ii) Under the following schedule, an operator shall make a deposit with the Department of approved collateral prior to the issuance of a permit for a well or the transfer of a permit for a well, and shall make subsequent annual deposits and additional well payments. For the purpose of calculating the required deposit, all of the operator's wells are included in the number of wells.

<i>Number of Wells</i>	<i>Annual Deposit</i>	<i>Per Additional Well</i>
1-10 with no intention to operate more than 10	\$50/well	N.A.
11-25 or 1-10 and applies for additional well permits	\$1,150	\$ 150
26-50	\$1,300	\$ 400
51-100	\$1,500	\$ 400
101-200	\$1,600	\$1,000

(iii) An operator shall make the phased deposits of collateral as required by the bond.

(2) *Termination of eligibility.* An operator is no longer eligible to make phased deposits of collateral when one or more of the following occur:

(i) The operator shall fully bond the wells immediately, if an operator has more than 200 wells.

(ii) If the operator misses a phased deposit of collateral payment, the operator shall do one of the following:

(A) Immediately submit the appropriate bond amount in full.

(B) Cease all operations and plug the wells covered by the bond in accordance with the plugging requirements of section 210 of the act (58 P. S. § 601.210).

(b) *Individuals.*

(1) *Eligibility.*

(i) An individual who seeks to satisfy the collateral bond requirements of the act by submitting phased deposit of collateral under section 215(d.1) of the act (58 P. S. § 601.215(d.1)), may not drill more than ten new wells per calendar year. A well in which the individual has a financial interest is to be considered one of the wells permitted under this section. A partnership, association or corporation is not eligible for phased deposit of collateral under this subsection.

(ii) The individual shall deposit with the Department \$500 per well in approved collateral prior to issuance of a new permit.

(iii) The individual shall deposit 10% of the remaining amount of bond in approved collateral in each of the next 10 years. Annual payments shall become due on the anniversary date of the issuance of the permit, unless otherwise established by the Department. Payments shall be accompanied by appropriate bond documents required by the Department.

(iv) The individual shall make the phased collateral payments as required by the bond.

(2) *Termination of eligibility.* If the individual misses a phased deposit of collateral payment, the individual will no longer be eligible to make phased deposits of collateral and shall do one of the following:

(i) Immediately submit the appropriate bond amount in full.

(ii) Cease operations and plug the wells covered by the bond in accordance with the plugging requirements of section 210 of the act.

(c) *Interest earned.* Interest earned by collateral on deposit by operators and individuals under this section shall be accumulated and become part of the bond amount until the operator completes deposit of the requisite bond amount in accordance with the schedule of deposit. Interest earned by the collateral shall be returned to the operator or the individual upon release of the bond. Interest may not be paid for postforfeiture interest accruing during appeals and after resolution of the appeals, when the forfeiture is adjudicated, decided or settled in favor of the Commonwealth.

**Source**

The provisions of this § 78.309 adopted July 28, 1989, effective July 29, 1989, 19 Pa.B. 3229; amended December 16, 1994, effective December 17, 1994, 24 Pa.B. 6284; amended March 30, 2001, effective March 31, 2001, 31 Pa.B. 1736. Immediately preceding text appears at serial pages (241951) to (241953).

**Cross References**

This section cited in 25 Pa. Code § 78.303 (relating to form, terms and conditions of the bond).

**§ 78.310. Replacement of existing bond.**

(a) An owner or operator may replace an existing surety or collateral bond with another surety or collateral bond that satisfies the requirements of this chapter, if the liability which has accrued against the bond, the owner or operator who filed the first bond and the well operation is transferred to the replacement bond. An owner or operator may not substitute a phased deposit of collateral bond under section 215(d) and (d.1) of the act (58 P. S. § 601.215(d) and (d.1)) for a valid surety bond or collateral that has been filed and approved by the Department.

(b) The Department will not release existing bonds until the operator has submitted and the Department has approved acceptable replacement bonds.

**Source**

The provisions of this § 78.310 adopted July 28, 1989, effective July 29, 1989, 19 Pa.B. 3229; amended December 16, 1994, effective December 17, 1994, 24 Pa.B. 6284; amended March 30, 2001, effective March 31, 2001, 31 Pa.B. 1736. Immediately preceding text appears at serial page (241953).

**Cross References**

This section cited in 25 Pa. Code § 78.304 (relating to terms and conditions for surety bonds).

**§ 78.311. Failure to maintain adequate bond.**

The permittee shall maintain a bond in an amount and with sufficient guarantee as provided by this chapter. If a surety company that had provided surety bonds, or a financial institution that had provided certificates of deposit or letters of credit for an operator enters into bankruptcy or liquidation, has its license suspended or revoked or for another reason indicates an inability or unwillingness to provide an adequate financial guarantee of the obligations under the bond, the operator shall submit a bond within 45 days of notice from the Department.

**Source**

The provisions of this § 78.311 adopted July 28, 1989, effective July 29, 1989, 19 Pa.B. 3229; amended December 16, 1994, effective December 17, 1994, 24 Pa.B. 6284. Immediately preceding text appears at serial page (138869).

**§ 78.312. Forfeiture determination.**

(a) A collateral or surety bond may be forfeited when the Department determines that the operator fails or refuses to comply with the act, this title, an order of the Department, or the terms or conditions of the permit relating to drilling, water supply replacement, plugging and site restoration.

(b) If forfeiture of the bond is required, the Department will:

(1) Send written notification by mail to the permittee, and the surety, if any, of the Department's intent to forfeit the bond and describe the grounds for forfeiture. The notification will also provide an opportunity to take remedial action or submit a schedule for taking remedial actions acceptable to the Department within 30 days of the notice of intent to forfeit, in lieu of collecting the bond.

(2) If the permittee and surety, if any, fail either to take remedial action or to submit a plan acceptable to the Department within 30 days of the notice of the intent to forfeit, the bond will be subject to forfeiture and collection up to the face amount thereof. The Department will issue a declaration to forfeit the bond.

(3) The declaration to forfeit is an action which may be appealable to the Environmental Hearing Board under section 4 of the Environmental Hearing Board Act (35 P. S. § 7514).

**Source**

The provisions of this § 78.312 adopted July 28, 1989, effective July 29, 1989, 19 Pa.B. 3229.

**§ 78.313. Incapacity of operators.**

An owner or operator shall notify the Department by certified mail within 10 calendar days after commencement of a voluntary or involuntary proceeding under 11 U.S.C.A. §§ 101—1330, known as the Federal Bankruptcy Act, naming the owner or operator as debtor.

**Source**

The provisions of this § 78.313 adopted July 28, 1989, effective July 29, 1989, 19 Pa.B. 3229.

**§ 78.314. Preservation of remedies.**

Remedies provided or authorized by law for violation of statutes, including the act, the applicable environmental protection acts, this title, the terms and conditions of permits and orders of the Department, are expressly preserved. Nothing in this subchapter is an exclusive penalty or remedy for the violations. No action under this subchapter waives or impairs another remedy or penalty provided in law or equity.

**Source**

The provisions of this § 78.314 adopted July 28, 1989, effective July 29, 1989, 19 Pa.B. 3229.

**Subchapter H. UNDERGROUND GAS STORAGE**

- Sec.  
 78.401. Storage well construction.  
 78.402. Inspections by the gas storage operator.  
 78.403. Gas storage well integrity testing.  
 78.404. Maximum storage pressure.  
 78.405. Emergency repairs.  
 78.406. Recordkeeping.  
 78.407. Plugging gas storage wells.

**Source**

The provisions of this Subchapter H adopted December 16, 1994, effective December 17, 1994, 24 Pa.B. 6284, unless otherwise noted.

**§ 78.401. Storage well construction.**

(a) In addition to the casing and cementing requirements of Subchapter D (relating to well drilling, operation and plugging), when constructing new gas storage wells the operator shall:

(1) Cement the surface and intermediate casings with sufficient cement to circulate cement to the surface or to equal at least 120% of the calculated volume to fill the annular space on the outside of the casing.

(2) Cement the production casing with sufficient cement to fill the calculated annular space with cement to a point at least 500 feet above the casing shoe and at least 200 feet above the upper most perforations.

(b) Gas storage wells being reconditioned shall meet the requirements of this section unless an alternate method of casing and cementing has been approved by the Department under § 78.75 (relating to alternative methods).

(c) The storage operator shall give the Department notice at least 15 days prior to reconditioning or altering a gas storage well and describe the procedure that the operator will use to recondition or alter the gas storage well. If no objections are raised by the Department within 10 days, the operator may proceed to recondition or alter the well as proposed. The operator shall submit an updated well record within 30 days of completing a reconditioning or alteration.

**Cross References**

This section cited in 25 Pa. Code § 78.405 (relating to emergency repairs).

**§ 78.402. Inspections by the gas storage operator.**

(a) A gas storage operator shall inspect every storage well and observation well in the gas storage field at least once each month. The results of the inspections shall be recorded and retained by the operator and shall be available for review by the Department and the coal owner or operator.

(b) Inspections at a minimum shall determine:

(1) The well-head pressure or water level measurement, as appropriate.

(2) The open flow on the annulus of the production casing or the annulus pressure if the annulus is shut in.

(3) If there is evidence of gas escaping from a well using measurement or best estimate of quantity.

(4) If there is evidence of progressive corrosion, rusting or other signs of equipment deterioration.

(c) Storage operators shall inspect the gas storage reservoir and storage protective area at least annually to discover if material changes have occurred that require an amendment or supplement of the map and data as required in section 301(a) and (b) of the act (58 P. S. § 601.301(a) and (b)). As part of that inspection, gas storage operators shall inspect known abandoned wells and plugged wells within the gas storage reservoir area and the gas storage protective area,

subject to the right of entry, at the end of the injection season when the storage pressure is at its highest. The inspection record shall include observed evidence of gas leaking and other conditions that may be hazardous to the public or property.

(d) Evidence of a new gas leak and leaks that exceed 5,000 cubic feet per day shall be reported to the Department within 24 hours. Following notification, the gas storage reservoir operator shall file a written report including corrective action taken, or planned, and a detailed explanation of the problem within 10 days. Subsequent reports describing additional corrective action and acquired data may be requested by the Department.

#### Cross References

This section cited in 25 Pa. Code § 78.403 (relating to gas storage well integrity testing); and 25 Pa. Code § 78.406 (relating to recordkeeping).

### § 78.403. Gas storage well integrity testing.

(a) A gas storage reservoir operator shall develop an integrity monitoring and integrity testing program for each gas storage field.

(b) A gas storage reservoir operator shall test the integrity of each gas storage well at least once every 5 years. By June 15, 1995, each gas storage operator shall submit, for Department approval, an integrity testing plan for each gas storage field.

(c) The testing program may consist of geophysical well logging, pressure testing or other procedures approved by the Department. The testing program shall indicate a well's integrity, whether there has been gas loss in quantities in excess of those amounts in § 78.402(d) (relating to inspections by the gas storage operator), and whether there is a well condition that requires reconditioning, plugging or other remedial action.

(d) Gas storage field monitoring may consist of annular and tubing pressure monitoring, reservoir engineering evaluation in the form of pressure/volume inventory studies, gauge calibration programs, wellsite inspection programs, casing inspection programs, pressure and flow testing programs, internal and external inventory auditing programs or a combination of monitoring procedures approved by the Department that verify the gas storage reservoir's integrity.

(e) The gas storage reservoir operator shall retain the information gathered in subsections (a)—(d) and shall make the information available to the Department for 15 years.

(f) For an observation well for which a gas storage operator does not retain monitoring data, the gas storage operator shall plug the well or apply for inactive status.

(g) The Department may require the operator to perform additional tests it deems necessary after a conference is held under section 501 of the act (58 P. S. § 601.501).

#### Cross References

This section cited in 25 Pa. Code § 78.406 (relating to recordkeeping).

**§ 78.404. Maximum storage pressure.**

A gas storage reservoir operator, who has not requested approval of a maximum storage pressure for a gas storage reservoir, shall request, by February 15, 1995, Department approval of a maximum gas storage reservoir pressure in accordance with the following:

(1) The maximum shut-in wellhead pressure (psig) may not exceed the highest shut-in wellhead pressure (psig) found to exist during the production history of the reservoir, unless a higher pressure is established through testing of caprock and pool containment. The methods used for determining the higher pressure shall be determined in conference with the Department in accordance with section 501 of the act.

(2) If the original discovery shut-in wellhead pressure (psig) is not known, or the highest production shut-in wellhead pressure (psig) is not known, or a higher pressure has not been established through a method as approved by the Department as established in paragraph (1), the maximum storage reservoir pressure shall be limited to a freshwater hydrostatic gradient.

**§ 78.405. Emergency repairs.**

When emergency repairs are necessary, prior notification under § 78.401(c) (relating to storage well construction) is not required. The operator shall give notice to the Department within 24 hours of the repairs. Within 5 days of the emergency, the operator shall submit a written explanation of the emergency and the corrective action taken, or planned. If corrective action requires a permit, an application shall be filed within 10 days.

**§ 78.406. Recordkeeping.**

(a) The gas storage reservoir operator shall retain records for each gas storage well and shall make these records available to the Department. These records shall include, but not be limited to, the following:

(1) Well inspection results and pressure data for the preceding 7 years.

(2) Integrity testing data for each gas storage well required by § 78.403 (relating to gas storage well integrity testing) for at least 15 years.

(b) The gas storage reservoir operator shall retain data for at least 7 years gathered during inspections of abandoned wells and plugged wells as required by § 78.402 (relating to inspections by the gas storage operator) and shall make these records available to the Department.

**§ 78.407. Plugging gas storage wells.**

In addition to complying with the plugging requirements in §§ 78.91—78.98 (relating to plugging), the gas storage reservoir operator shall:

(1) Notify the Department of an intent to plug a gas storage well at least 15 days before beginning to plug the well. This notice shall describe the intended plugging procedure.

(2) Clean out the portions of the well that penetrate the storage horizon.

(3) Set cement across the perforations in a manner that prevents the migration of gas or other fluids within or outside of the well.

(4) For an open hole, set a bridge plug immediately above the storage horizon followed by a 500 foot cement plug, or use another method approved by the Department.

**Subchapter X. STATEMENTS OF POLICY  
INSPECTION POLICY REGARDING OIL AND GAS  
WELL ACTIVITIES**

Sec.	
78.901.	[Reserved].
78.902.	Policy.
78.903.	Frequency of inspections.
78.904.	Manner of inspection.
78.905.	Additional inspections.
78.906.	Limitation.

**INSPECTION POLICY REGARDING OIL AND GAS  
WELL ACTIVITIES**

**§ 78.901. [Reserved].**

**Source**

The provisions of this § 78.901 adopted July 28, 1989, effective July 29, 1989, 19 Pa.B. 3229; reserved March 30, 2001, effective March 31, 2001, 31 Pa.B. 1736. Immediately preceding text appears at serial page (241959).

**§ 78.902. Policy.**

(a) This statement of policy sets forth the policy of the Department in regard to inspections of oil and gas well locations, sites, property, facilities, operations or activities governed by the act, the Coal and Gas Resource Coordination Act (58 P. S. §§ 501—518) or the Oil and Gas Conservation Law (58 P. S. §§ 401—419). This policy does not create a duty or obligation upon the Department to conduct a minimum or maximum number of inspections per year or during a certain period of time.

(b) Inspections are conducted to administer, implement, enforce and determine compliance with the statutes set forth in subsection (a) and with Article XIX-A of The Administrative Code of 1929 (71 P. S. §§ 510-1—510-108), The Clean Streams Law (35 P. S. §§ 691.1—691.1001) and the Solid Waste Management Act (35 P. S. §§ 6018.101—6018.1003) and other statutes administered by the Department that apply to activities associated with gas and oil operations.

**Source**

The provisions of this § 78.902 adopted July 28, 1989, effective July 29, 1989, 19 Pa.B. 3229.

**Cross References**

This section cited in 25 Pa. Code § 78.903 (relating to frequency of inspections); and 25 Pa. Code § 78.905 (relating to additional inspections).

**§ 78.903. Frequency of inspections.**

The Department, its employees and agents intend to conduct inspections at the following frequencies:

- (1) At least once prior to the issuance of a permit, if a waiver or exception is requested by the permit applicant.
- (2) At least once in verifying or resolving objections or determining the Department's response to objections, when objections are raised to a permit application.
- (3) At least once during each of the phases of siting, drilling, casing, cementing, completing, altering and stimulating a well.
- (4) At least once during, or within 3 months after, the time period in which the owner or operator is required to restore the site, after drilling the well.
- (5) At least once prior to the authorization to use an alternate method for plugging, casing or equipping the well.
- (6) At least once during the periods that an alternative method for plugging, casing or equipping the well is being used or installed.
- (7) At least once when a well is being reconditioned or repaired or when casing is being replaced.
- (8) At least once prior to a well being granted inactive status.
- (9) At least once during the plugging of the well.
- (10) At least once during, or within 3 months after, the period in which the owner or operator is required to restore the site, after the well is plugged or abandoned.
- (11) At least once before the bond or other financial security is released.
- (12) At least once a year, if there is onsite brine disposal or residual waste disposal subject to the statutes referenced in § 78.902 (relating to policy).
- (13) At least twice a year if the well is located in a gas storage reservoir or in a gas storage reservoir protective area.
- (14) At least once a year to determine whether compliance with the statutes administered by the Department has been achieved.
- (15) If there is a violation, at least once to determine whether the violation has been corrected, or whether there is a continuing violation.
- (16) At least once, in response to a complaint.

**Source**

The provisions of this § 78.903 adopted July 28, 1989, effective July 29, 1989, 19 Pa.B. 3229; reserved March 30, 2001, effective March 31, 2001, 31 Pa.B. 1736. Immediately preceding text appears at serial pages (241959) to (241960).

**§ 78.904. Manner of inspection.**

The inspections described in this subchapter may be conducted separately, or in combination, whichever manner is deemed by the Department to permit maximum efficiency, accuracy and thoroughness in implementing the statutes administered by the Department.

**Source**

The provisions of this § 78.904 adopted July 28, 1989, effective July 29, 1989, 19 Pa.B. 3229.

**§ 78.905. Additional inspections.**

The Department, its employees and agents may conduct additional inspections, including follow-up inspections, inspections to observe a practice or condition related to the public health or safety and inspections to determine compliance with the statutes set forth in § 78.902 (relating to policy), with the laws administered by the Department, with the Department's regulations, with the terms or conditions of a permit or with the requirements of an order.

**Source**

The provisions of this § 78.905 adopted July 28, 1989, effective July 29, 1989, 19 Pa.B. 3229.

**§ 78.906. Limitation.**

The provisions of this statement of policy are subject to the availability of personnel and financial resources. This statement of policy does not create a duty or obligation upon the Department to conduct a minimum or maximum number of inspections per year or during a certain period.

**Source**

The provisions of this § 78.906 adopted July 28, 1989, effective July 29, 1989, 19 Pa.B. 3229.

[Next page is 79-1.]

78-78

(317212) No. 377 Apr. 06

*Copyright © 2006 Commonwealth of Pennsylvania*