with the revegetation requirements of §§ 817.111, 817.113, 817.114, and 817.116 of this chapter.

[48 FR 22101, May 16, 1983, as amended at 71 FR 51706, Aug. 30, 2006; 81 FR 93418, Dec. 20, 2016; 82 FR 54999, Nov. 17, 2017]

§ 817.41 Hydrologic-balance protection.

(a) *General.* All underground mining and reclamation activities shall be conducted to minimize disturbance of the hydrologic balance within the permit and adjacent areas, to prevent material damage to the hydrologic balance outside the permit area, and to support approved postmining land uses in accordance with the terms and conditions of the approved permit and the performance standards of this part. The regulatory authority may require additional preventative, remedial, or monitoring measures to assure that material damage to the hydrologic balance outside the permit area is prevented. Mining and reclamation practices that minimize water pollution and changes in flow shall be used in preference to water treatment.

(b) *Ground-water protection.* In order to protect the hydrologic balance underground mining activities shall be conducted according to the plan approved under § 784.14(g) of this chapter and the following.

(1) Ground-water quality shall be protected by handling earth materials and runoff in a manner that minimizes acidic, toxic, or other harmful infiltration to ground-water systems and by managing excavations and other disturbances to prevent or control the discharge of pollutants into the ground water.

(c) *Ground-water monitoring.* (1) Ground-water monitoring shall be conducted according to the ground-water monitoring plan approved under § 784.14(h) of this chapter. The regulatory authority may require additional monitoring when necessary.

(2) Ground-water monitoring data shall be submitted every 3 months to the regulatory authority or more frequently as prescribed by the regulatory authority. Monitoring reports shall include analytical results from each sample taken during the reporting period. When the analysis of any ground-water sample indicates noncompliance with the permit conditions, then the operator shall promptly notify the regulatory authority and immediately take the actions provided for in §§ 773.17(e) and 784.14(g) of this chapter.

(3) Ground-water monitoring shall proceed through mining and continue during reclamation until bond release. Consistent with the procedures of § 774.13 of this chapter, the regulatory authority may modify the monitoring requirements including the parameters covered and the sampling frequency if the operator demonstrates, using the monitoring data obtained under this paragraph, that—

(i) The operation has minimized disturbance to the prevailing hydrologic balance in the permit and adjacent areas and prevented material damage to the hydrologic balance outside the permit area; water quantity and quality are suitable to support approved postmining land uses; or

(ii) Monitoring is no longer necessary to achieve the purposes set forth in the monitoring plan approved under § 784.14(h) of this chapter.

(4) Equipment, structures, and other devices used in conjunction with monitoring the quality and quantity of ground water onsite and offsite shall be properly installed, maintained, and operated and shall be removed by the operator when no longer needed.

(d) *Surface-water protection.* In order to protect the hydrologic balance, underground mining activities shall be conducted according to the plan approved under § 784.14(g) of this chapter, and the following:

(1) Surface-water quality shall be protected by handling earth materials, ground-water discharges, and runoff in a manner that minimizes the formation of acidic or toxic drainage; prevents, to the extent possible using the best technology currently available, additional contribution of suspended solids to streamflow outside the permit area; and otherwise prevent water pollution. If drainage control, restabilization and revegetation of disturbed areas, diversion of runoff, mulching, or other reclamation and remedial practices are not adequate to meet the requirements of this section and § 817.42, the operator shall use and maintain

the necessary water-treatment facilities or water quality controls.

(2) Surface-water quantity and flow rates shall be protected by handling earth materials and runoff in accordance with the steps outlined in the plan approved under § 784.14(g) of this chapter.

(e) *Surface-water monitoring.* (1) Surface-water monitoring shall be conducted according to the surface-water monitoring plan approved under § 784.14(i) of this chapter. The regulatory authority may require additional monitoring when necessary.

(2) Surface-water monitoring data shall be submitted every 3 months to the regulatory authority or more frequently as prescribed by the regulatory authority. Monitoring reports shall include analytical results from each sample taken during the reporting period. When the analysis of any surface-water sample indicates noncompliance with the permit conditions, the operator shall promptly notify the regulatory authority and immediately take the actions provided for in §§ 773.17(e) and 784.14(g) of this chapter. The reporting requirements of this paragraph do not exempt the operator from meeting any National Pollutant Discharge Elimination System (NPDES) reporting requirements.

(3) Surface-water monitoring shall proceed through mining and continue during reclamation until bond release. Consistent with § 774.13 of this chapter, the regulatory authority may modify the monitoring requirements, except those required by the NPDES permitting authority, including the parameters covered and sampling frequency if the operator demonstrates, using the monitoring data obtained under this paragraph, that—

(i) The operation has minimized disturbance to the hydrologic balance in the permit and adjacent areas and prevented material damage to the hydrologic balance outside the permit area; water quantity and quality are suitable to support approved postmining land uses; and

(ii) Monitoring is no longer necessary to achieve the purposes set forth in the monitoring plan approved under § 784.14(i) of this chapter.

(4) Equipment, structures, and other devices used in conjunction with monitoring the quality and quantity of surface water onsite and offsite shall be properly installed, maintained, and operated and shall be removed by the operator when no longer needed.

(f) *Acid- and toxic-forming materials.* (1) Drainage from acid- and toxic-forming materials and underground development waste into surface water and ground water shall be avoided by—

(i) Identifying and burying and/or treating, when necessary, materials which may adversely affect water quality, or be detrimental to vegetation or to public health and safety if not buried and/or treated, and

(ii) Storing materials in a manner that will protect surface water and ground water by preventing erosion, the formation of polluted runoff, and the infiltration of polluted water. Storage shall be limited to the period until burial and/or treatment first become feasible, and so long as storage will not result in any risk of water pollution or other environmental damage.

(2) Storage, burial or treatment practices shall be consistent with other material handling and disposal provisions of this chapter.

(g) *Transfer of wells.* Before final release of bond, exploratory or monitoring wells shall be sealed in a safe and environmentally sound manner in accordance with §§ 817.13 and 817.15. With the prior approval of the regulatory authority, wells may be transferred to another party for further use. However, at a minimum, the conditions of such transfer shall comply with State and local laws and the permittee shall remain responsible for the proper management of the well until bond release in accordance with §§ 817.13 to 817.15.

(h) *Discharges into an underground mine.* (1) Discharges into an underground mine are prohibited, unless specifically approved by the regulatory authority after a demonstration that the discharge will—

(i) Minimize disturbance to the hydrologic balance on the permit area, prevent material damage outside the permit area and otherwise eliminate public hazards resulting from underground mining activities;

(ii) Not result in a violation of applicable water quality standards or effluent limitations;

(iii) Be at a known rate and quality which shall meet the effluent limitations of § 817.42 for pH and total suspended solids, except that the pH and total suspended solids limitations may be exceeded, if approved by the regulatory authority; and

(iv) Meet with the approval of the Mine Safety and Health Administration.

(2) Discharges shall be limited to the following:

(i) water;

(ii) Coal-processing waste;

(iii) Fly ash from a coal-fired facility;

(iv) Sludge from an acid-mine-drainage treatment facility;

(v) Flue-gas desulfurization sludge;

(vi) Inert materials used for stabilizing underground mines; and

(vii) Underground mine development wastes.

(3) Water from one underground mine may be diverted into other underground workings according to the requirements of this section.

(i) *Gravity discharges from underground mines.* (1) Surface entries and accesses to underground workings shall be located and managed to prevent or control gravity discharge of water from the mine. Gravity discharges of water from an underground mine, other than a drift mine subject to paragraph (i)(2) of this section, may be allowed by the regulatory authority if it is demonstrated that the untreated or treated discharge complies with the performance standards of this part and any additional NPDES permit requirements.

(2) Notwithstanding anything to the contrary in paragraph (i)(1) of this section, the surface entries and accesses of drift mines first used after the implementation of a State, Federal, or Federal Lands Program and located in acid-producing or iron-producing coal seams shall be located in such a manner as to prevent any gravity discharge from the mine.

(j) *Drinking, domestic or residential water supply.* The permittee must promptly replace any drinking, domestic or residential water supply that is contaminated, diminished or interrupted by underground mining activities conducted after October 24, 1992, if the affected well or spring was in existence before the date the regulatory authority received the permit application for the activities causing the loss, contamination or interruption. The baseline hydrologic information required in §§ 780.21 and 784.14 of this chapter and the geologic information concerning baseline hydrologic conditions required in §§ 780.21 and 784.22 of this chapter will be used to determine the impact of mining activities upon the water supply.

[48 FR 43992, Sept. 26, 1983, as amended at 52 FR 45924, Dec. 2, 1987; 60 FR 16749, Mar. 31, 1995; 81 FR 93418, Dec. 20, 2016; 82 FR 54999, Nov. 17, 2017]

§ 817.42 Hydrologic balance: Water quality standards and effluent limitations.

Discharges of water from areas disturbed by underground mining activities shall be made in compliance with all applicable State and Federal water quality laws and regulations and with the effluent limitations for coal mining promulgated by the U.S. Environmental Protection Agency set forth in 40 CFR part 434.

[47 FR 47222, Oct. 22, 1982, as amended at 48 FR 44051, Sept. 26, 1983; 81 FR 93418, Dec. 20, 2016; 82 FR 54999, Nov. 17, 2017]

§ 817.43 Diversions.

(a) *General requirements.* (1) With the approval of the regulatory authority, any flow from mined areas abandoned before May 3, 1978, and any flow from undisturbed areas or reclaimed areas, after meeting the criteria of § 817.46 for siltation structure removal, may be diverted from disturbed areas by means of temporary or permanent diversions. All diversions shall be designed to minimize adverse impacts to the hydrologic balance within the permit and adjacent areas, to prevent material damage outside the permit area and to assure the safety of the public. Diversions shall not be used to divert water into underground mines without approval of the regulatory authority in accordance with § 817.41(h).

(2) The diversion and its appurtenant structures shall be designed, located, constructed, and maintained to—