



Summary of Major Provisions of Proposed Rule

Protection of the hydrologic balance

1. Material damage to the hydrologic balance outside the permit area. (30 CFR 701.5)

Under section 510(b)(3) of SMCRA, the regulatory authority may not approve a permit application unless it first finds that the proposed operation has been designed to prevent material damage to the hydrologic balance outside the permit area. Neither SMCRA nor the existing regulations define this term.

The proposed rule would define this term as meaning any adverse impact from mining operations on the quality or quantity of surface water or groundwater, or on the biological condition of a perennial or intermittent stream, that would—

- Preclude attainment of a designated use of surface water under the Clean Water Act;
- Cause groundwater or surface water to be incapable of supporting existing or reasonably foreseeable uses of that water; or
- Adversely impact threatened or endangered species, or have an adverse effect on designated critical habitat, outside the permit area in violation of the Endangered Species Act.

The proposed definition would apply to all surface coal mining and reclamation operations, both surface and underground, and to subsidence resulting from underground mining. It would not apply to lands within the permit area.

Proposed 30 CFR 780.21(b)(6) and 784.21(b)(6) would require that the regulatory authority establish permit-specific numerical material damage criteria for each parameter of concern (pH, iron, total suspended solids, conductivity, etc.) to identify the level or concentration at which the parameter would adversely impact groundwater or surface water to the extent of causing material damage to the hydrologic balance outside the permit area.

2. Baseline data collection. (30 CFR 780.19 and 784.19)

We propose to establish more comprehensive baseline data requirements for proposed coal mining operations to document premining conditions in the proposed permit and adjacent areas to the extent necessary to ensure establishment of an adequate baseline against which the impacts of mining can be compared. The proposed rule would require—

- Collection of baseline information for seven individual water-quality parameters, (ammonia, arsenic, cadmium, copper, nitrogen, selenium, and zinc) for both groundwater and surface water, in addition to the four water-quality parameters that the existing rules require for groundwater (pH, total iron, total manganese, and total dissolved solids or specific conductance) and the five water-quality parameters that the existing rules require for surface water (the four required for groundwater plus total suspended solids).
- Collection of baseline information on major anions, major cations, and the cation-anion balance. These parameters are determinants of conductivity, which, at elevated levels, can have negative impacts on aquatic life in streams, particularly in relatively undisturbed watersheds.
- Collection of baseline information on acidity and alkalinity in all cases. The existing rules require collection of this information only when there is a potential for acid mine drainage.
- Sampling of each baseline information collection point at equally spaced monthly intervals for a minimum of 12 months.
- Establishment of baseline information collection sampling locations upgradient and downgradient of the proposed operation, as well as within the permit area.
- Groundwater sampling locations must include underground mine pools (when present) and properly screened wells to collect information from each water-bearing stratum within the proposed permit and adjacent areas.
- Surface-water sampling locations must include each intermittent and perennial stream within the proposed permit and adjacent areas, as well as a representative sample of ephemeral streams.
- Precipitation measurements for the proposed permit area.

- Assessments of the hydrological characteristics and riparian vegetation for all perennial, intermittent, and ephemeral streams within the proposed permit and adjacent areas.
 - Measurement of the biological condition of each perennial and intermittent stream within the proposed permit area or that would receive discharges from the proposed operation, as well as a representative sample of ephemeral streams.
3. Water monitoring. (30 CFR 780.23, 784.23, 800.42(a)(2), 816.35 through 816.37, and 817.35 through 817.37)

We propose to revise surface-water and groundwater monitoring requirements to provide a mechanism whereby, in combination with improved baseline data, the impacts of mining on surface water and groundwater can be identified more clearly and more timely than under the existing rules. The revised monitoring requirements largely parallel the changes that we propose to make to our baseline data requirements with respect to sampling methodology, monitoring locations, and the parameters to be monitored, although the quarterly sampling frequency in the existing rules would remain unchanged.

The proposed rule would require continuation of all water monitoring until final bond release to provide a window for detection of problems that are slow to develop.

The proposed rule also would require annual monitoring of the biological condition of perennial and intermittent streams within the permit and adjacent areas.

We propose to require that each application for partial or complete bond release include an analysis of monitoring results. Under proposed 30 CFR 800.42(a)(2), the regulatory authority may not release any bond if, after an evaluation of the monitoring data, it determines that adverse trends exist that may result in material damage to the hydrologic balance outside the permit area. These provisions are intended to prevent premature release of funds that may be needed to address future water quality problems.

4. Determination of the probable hydrologic consequences (PHC determination) and cumulative hydrologic impact assessment (CHIA). (30 CFR 780.20, 780.21, 784.20, and 784.21)

In addition to existing requirements, we propose to require that the PHC determination include an evaluation of—

- Whether aquifers are likely to form in spoil in the backfilled area.

- Impacts on additional water quality parameters, including major anions and cations, alkalinity, pH, specific conductance, selenium, iron, and manganese.
- Impacts on precipitation runoff patterns and characteristics.
- Impacts on the biological condition of perennial, intermittent, and ephemeral streams within the permit and adjacent areas.
- Impacts on underground mine pools, both those currently in existence and those that may form in the future after mine closure.

The existing rules require preparation of a CHIA, but they do not specify what the CHIA must include. We propose to add detailed, specific content and finding requirements to ensure that the CHIA provides a scientifically sound, documented basis for a finding that the operation has been designed to prevent material damage to the hydrologic balance outside the permit area. See proposed 30 CFR 780.21 and 784.21 for a detailed listing of what the CHIA must contain.

In a related action, we propose to revise the definition of “cumulative impact area” in 30 CFR 701.5 to, among other things, specify that this area must include the HUC-12 (U.S. Geological Survey 12-digit Watershed Boundary Dataset) watershed or watersheds in which the proposed permit area is located. However, the area outside the proposed permit area within which baseline data must be collected would continue to be determined by the definition of “adjacent area.”

We also propose to require that the regulatory authority review the adequacy and accuracy of the CHIA during the permit renewal process or no less than every 5 years.

5. Handling of toxic-forming materials. (30 CFR 816.38 and 817.38)

The proposed rule would require that the permittee cover exposed coal seams and the stratum immediately below the lowest coal seam mined with a layer of compacted material with a hydraulic conductivity of at least two orders of magnitude lower than the hydraulic conductivity of the adjacent less-compacted spoil. This measure would minimize contact and interaction with water.

The proposed rule would require that the permittee selectively handle all acid-forming and toxic-forming materials in the overburden, using one of the following methods when placing these materials in the backfill:

- Completely surround the materials with compacted material with a hydraulic conductivity of at least two orders of magnitude lower than the hydraulic conductivity of the adjacent less-compacted spoil.
- Place the materials in a location below the water table where they will remain fully saturated at all times. This option is available only if the permittee demonstrates—and the regulatory authority finds—that complete saturation will prevent the formation of acid or toxic leachate.
- Treat or otherwise neutralize the materials to prevent the formation of acid or toxic mine drainage.

The proposed rule would discourage temporary storage of acid-forming and toxic-forming materials by requiring certain demonstrations and findings and by requiring that the regulatory authority specify a maximum time for temporary storage, which may not exceed the period until burial first becomes feasible.

6. Surface-water runoff control plan. (30 CFR 780.29, 784.29, 816.34(d), and 817.34(d))

We propose to require preparation, approval, and implementation of a surface-water runoff control plan to prevent or minimize any increased risk of damage from flooding and other offsite adverse impacts such as sedimentation of streams.

7. Coal mine waste disposal. (30 CFR 784.26, 816.81(b) and (d) and 817.81(b) and (d))

In addition to the requirements of the existing regulations, the proposed rule would require that coal mine waste disposal facilities (refuse piles and slurry impoundments) be designed and operated in a manner that would ensure that the disposal facility will not—

- Result in an increase in damage from flooding.
- Preclude any existing or reasonably foreseeable use of surface water or groundwater or, for surface water downstream of the facility, preclude attainment of any designated use under the Clean Water Act.
- Cause or contribute to a violation of applicable water quality standards.
- Discharge acid or toxic mine drainage.

- A qualified registered professional engineer must certify that any existing or planned underground workings in the vicinity of the refuse pile or slurry impoundment will not adversely impact the stability of the structure.

Finally, proposed 30 CFR 784.26 would revise the requirements for backstowing of coal processing waste in abandoned underground mine workings by requiring that the permit application describe the chemicals used to process the coal, the quantity of those chemicals remaining in the coal processing waste, and the likely impact of those chemicals on groundwater and any persons, aquatic life, or wildlife using that groundwater. In addition, we propose to require that the monitoring plan be consistent with the monitoring requirements of proposed 30 CFR 784.23 and include monitoring of the chemicals contained in the coal processing waste.

Activities in or near streams

8. Mining in or near streams. (30 CFR 780.28, 784.28, 816.57, and 817.57)

Like the existing regulations, the proposed rule would prohibit mining through a perennial or intermittent stream or the conduct of mining activities on the surface of land within 100 feet of a perennial or intermittent stream. Also like the existing regulations, the proposed rule would allow exceptions to this prohibition if certain criteria are met.

To qualify for an exception, the existing regulations require that the regulatory authority find that the proposed activities would not cause or contribute to a violation of state or federal water quality standards and that they will not adversely affect the water quantity and quality or other environmental resources of the stream.

The proposed rule would replace that requirement with regulations that would require demonstrations by the applicant (with corresponding findings by the regulatory authority) that are tailored to the type of activities to be conducted in, through, or within 100 feet of the stream:

- A person proposing to conduct activities on the surface of land within the buffer zone of a perennial or intermittent stream must demonstrate that the proposed activities would not—
 - Preclude any premining use or any designated use of the affected stream segment following the completion of mining and reclamation.
 - Result in conversion of the affected stream segment from perennial to intermittent, from intermittent to ephemeral, or from perennial to ephemeral.

- Cause or contribute to a violation of water quality standards.
- Cause material damage to the hydrologic balance outside the permit area.
- A person proposing to mine through or divert a perennial or intermittent stream must make the demonstrations required for conducting mining-related activities within the buffer zone. In addition, the applicant must—
 - Demonstrate that there is no reasonable alternative that would avoid mining through or diverting the stream.
 - Design the operation to minimize the extent to which the stream is mined through or diverted.
 - Demonstrate that restoration of the hydrological form and ecological function of the affected stream segment is feasible. (The proposed rule also would require that the regulatory authority establish objective restoration standards in coordination with the Clean Water Act permitting authority. The standards must ensure that the stream is capable of supporting premining and designated uses.)
 - Comply with all applicable stream-channel restoration and stream-channel diversion design requirements.
 - Post a surety bond or collateral bond to cover the cost of restoring the form and function of the affected stream segment.
- A person proposing to construct an excess spoil fill or coal mine waste facility that would cover or encroach upon any part of a perennial or intermittent stream is not subject to the requirements for mining through a stream or within the buffer zone. Instead, the applicant must demonstrate that—
 - The operation has been designed to minimize the amount of excess spoil or coal mine waste generated.
 - After evaluating all potential upland locations in the vicinity of the proposed operation, there is no practicable alternative that would avoid placement of excess spoil or coal mine waste in the stream.

- The proposed excess spoil fill or coal mine waste facility has been designed to minimize both placement of excess spoil or coal mine waste in a perennial or intermittent stream and adverse impacts on fish, wildlife, and related environmental values.
- The fish and wildlife enhancement plan includes measures that would fully and permanently offset the long-term adverse effects of the fill or waste facility would have on fish, wildlife, and related environmental values within the footprint of the fill or waste facility.
- The fill or waste facility has been designed in a manner that will not cause or contribute to a violation of applicable water quality standards or result in the formation of toxic mine drainage.
- The revegetation plan requires reforestation of the fill if the land is forested at the time of application or would revert to forest under conditions of natural succession.

The proposed rule would require restoration of the premining drainage pattern of perennial, intermittent, and ephemeral stream channels unless the regulatory authority approves a different pattern to ensure stability, to prevent or minimize downcutting of reconstructed stream channels, or to promote enhancement of fish and wildlife habitat.

We propose to require establishment of a 100-foot riparian corridor along perennial, intermittent, and ephemeral stream channels to the extent that mining activities disturb those streams or, for perennial and intermittent streams, their buffer zones. The corridor must be planted with native species, including, where appropriate, species adapted to floodplains and other areas with high soil moisture levels and subject to inundation. Riparian vegetation is critical to maintenance or restoration of the ecological function of streams. In addition, riparian corridors provide valuable habitat and travel zones for terrestrial wildlife.

The riparian corridor requirement would not apply to prime farmland, to stream segments buried beneath an excess spoil fill or coal mine waste facility, or when establishment of the corridor would be inconsistent with an approved postmining land use that is implemented before the end of the revegetation responsibility period.

Approximate original contour and exceptions to restoration to approximate original contour

9. Minimization of excess spoil. (30 CFR 780.35(b) and 784.35(b))

We propose to require that all mining operations be designed to minimize the creation of excess spoil, which is spoil that is not required to restore the approximate original contour and that is placed outside the mining excavation. This requirement would reduce the need to construct excess spoil fills that bury streams.

The proposed rule would require that as much spoil as possible (after taking stability, revegetation, postmining land use, and other regulatory requirements into account) be returned to the mined-out area, even when doing so would result in surface contours that differ from premining contours, provided the final surface configuration is compatible with the surrounding terrain and generally resembles landforms found in the surrounding area.

10. Construction of excess spoil fills. (30 CFR 780.35, 784.35, 816.71 through 816.74, and 817.71 through 817.74)

Proposed 30 CFR 780.35(c) and 784.35(c) would require that excess spoil fills be designed with no more capacity than is necessary to dispose of the amount of excess spoil that the operation is expected to generate. These requirements would minimize the footprint of excess spoil fills and, hence, the length of stream segments covered by excess spoil fills.

We propose to revise our performance standards for excess spoil disposal to prohibit the practice of dumping or pushing of excess spoil into valleys without mechanical placement and compaction. This practice is known as end-dumping and the resulting fills are known as durable rock fills. The proposed rule would ban end-dumping and durable rock fills because SMCRA requires that excess spoil be “transported and placed in a controlled manner in position of concurrent compaction.” The lack of compaction in durable rock fills results in drainage that is higher in ions that increase conductivity levels in receiving streams, often to the detriment of aquatic life.

We also propose to revise our excess spoil disposal performance standards to—

- Improve the stability and durability of underdrains in fills.
- Promote use of landforming principles on the surface of fills to provide a more natural appearance.
- Require placement of excess spoil in a manner that minimizes discharges that degrade receiving streams.

11. Permanent impoundments. (30 CFR 816.49(b) and 817.49(b))

We propose to revise our regulations to prohibit the approval of permanent impoundments, including final-cut impoundments, that would result in either the creation of an excess spoil fill elsewhere within the permit area or the retention of spoil piles or ridges that are inconsistent with the definition of approximate original contour. In addition, we propose to require that all permanent impoundments be designed with a configuration and other characteristics that will enhance fish and wildlife habitat to the extent that doing so is not inconsistent with the intended use of the impoundment.

12. Exceptions to restoration of approximate original contour—Mountaintop removal mining operations. (30 CFR 785.14 and Part 824)

Section 515(c)(4) of SMCRA prohibits approval of mountaintop removal mining operations that would damage natural watercourses. Our existing rules apply this requirement only to natural watercourses below the lowest coal seam to be mined. The proposed rule would remove this limitation, which means that the prohibition would apply to all natural watercourses within the permit and adjacent areas, as it does in the statute.

Proposed 30 CFR 785.14(b)(9) would require that the applicant demonstrate—and the regulatory authority find—that the proposed operation will meet all three of the following criteria to satisfy the no-damage determination:

- There would be no increase in the amount or concentration of parameters of concern in discharges to surface water and groundwater.
- There would be no increase in damage from flooding compared to the impacts that would occur if the site were mined and restored to approximate original contour.
- The total volume of flow from the permit area during every season of the year would not vary in a way that would adversely affect any existing or reasonably foreseeable use of surface water or groundwater or any designated use of surface water under the Clean Water Act.

We propose to require that the applicant demonstrate—and the regulatory authority find—that the proposed operation will meet the following additional criteria for approval of a mountaintop removal mining operation:

- The operation will not increase pollutants or flood hazards when compared to conditions that would exist if the site were mined and restored to approximate original contour.

- Flows from the permit area will not vary in a way that would adversely affect any existing or reasonably foreseeable use of groundwater or surface water or any designated use of streams under the Clean Water Act.

The proposed rule would require that the permit applicant post a bond amount adequate to fund restoration to approximate original contour if the approved postmining land use is not implemented before the end of the revegetation responsibility period.

Finally, we propose to revise the performance standards to require that mountaintop removal mining operations construct drains through the outcrop barrier on the lowest coal seam being mined to prevent saturation of the backfill.

13. Exceptions to restoration of approximate original contour—Variances for steep-slope mining operations. (30 CFR 785.16)

The proposed rule would establish the following additional criteria for approval of a variance from approximate original contour restoration requirements for non-mountaintop removal steep-slope mining operations:

- The variance will not result in construction of an excess spoil fill in an intermittent or perennial stream.
- The variance will reduce both pollutants discharged to groundwater or surface water and flood hazards in the watershed when compared to premining conditions or, alternatively, to conditions that would exist if the site were mined and restored to AOC. The existing rule only requires reduction of either pollutants or flood hazards, not both.
- Flows from the permit area will not vary in a way that would adversely affect any existing or reasonably foreseeable use of groundwater or surface water or any designated use of streams under the Clean Water Act.
- The impact on perennial and intermittent streams will be less than the impact that would occur if the site were mined and restored to approximate original contour.
- There will be a lesser adverse impact on the aquatic ecology of the cumulative impact area than if the site were mined and restored to approximate original contour.
- The proposed deviation from the premining surface configuration is necessary and appropriate to achieve the postmining land use.

- The surface landowner has knowingly requested the variance and he has not and will not receive any monetary or other consideration for doing so.

Finally, under the proposed rule, the permittee must post a bond amount sufficient to restore areas covered by steep-slope variances to approximate original contour if the postmining land use for which the steep-slope variance was granted is not implemented by the end of the revegetation responsibility period.

Revegetation, soils, and fish and wildlife protection and enhancement

14. Soils. (30 CFR 780.12(e), 784.12(e), 816.22, and 817.22)

We propose to require salvage and redistribution of topsoil, subsoil, and other soil materials from minesites to a depth adequate to provide a plant growth medium with a root zone sufficient to support vegetation on a permanent, sustainable basis and to restore premining productivity. The proposed rule would require use of a statistically valid sampling technique to document that soil materials have been redistributed in the locations and depths required by the soil handling plan approved in the permit.

The proposed rule would require that all soil materials be placed and graded in a manner that will minimize compaction of the root zone. Excessive compaction severely restricts plant growth (especially for row crops and trees), reduces the productivity of the site, and contributes to adverse changes in the hydrology of the watershed.

We propose to require salvage and redistribution or reuse of all organic matter (including duff, vegetative debris, woody materials, and root balls) produced by native plants to promote speedier revegetation with native species. Organic matter serves as a source of seeds and soil inoculants when redistributed on topsoiled areas. The rule also would allow use of organic matter to enhance fish and wildlife habitat through construction of brush piles or stream improvement structures.

15. Revegetation. (30 CFR 779.19, 780.12(g), 783.19, 784.12(g), 816.111 through 816.116, and 817.111 through 817.116)

We propose to require revegetation of disturbed areas with native species consistent with the native plant communities that existed on the permit area before mining or that would exist on the site under conditions of natural succession. This requirement would apply regardless of the postmining land use unless that land use is implemented during the revegetation responsibility period and the use either precludes revegetation (as would be the case with areas occupied by structures or developed water resources) or requires the use of non-native species (as may be the case with agricultural land uses). Revegetation with native plants would enhance fish and wildlife habitat and would assist in

demonstrating restoration of the capability of the land to support the uses it was capable of supporting before mining.

To facilitate implementation of this requirement, we propose to require that each permit application describe both the existing premining vegetation and the plant communities that would exist on the proposed permit area under conditions of natural succession. These descriptions must be prepared using the National Vegetation Classification Standard or other generally-accepted vegetation classification systems approved by the regulatory authority.

The proposed rule would require that a professional forester or ecologist develop and certify all revegetation plans that include trees and shrubs. It also would require that those revegetation plans include site-specific planting prescriptions for canopy trees, understory trees and shrubs, and herbaceous ground cover compatible with establishment of trees and shrubs.

The proposed rule would require that revegetation success standards demonstrate restoration of premining capability, not just the capability to support a single postmining land use.

16. Fish and wildlife. (30 CFR 773.15, 779.20, 780.16, 783.20, 784.16, 816.97, and 817.97)

The proposed rule would update and strengthen procedures for protection of Federally-listed threatened and endangered species. Among other things, the rule would require implementation of any species-specific protective measures developed during the coordination process with the U.S. Fish and Wildlife Service. It also would codify the dispute resolution process that applies whenever the regulatory authority and the U.S. Fish and Wildlife Service disagree on measures necessary to protect listed species or critical habitat.

The proposed rule would provide protection for species proposed for listing as threatened or endangered. As a precondition for approval of a permit application, we propose to require a finding that the operation will not jeopardize the continued existence of species proposed for listing under section 4 of the Endangered Species Act. The current finding applies that requirement only to listed species.

We propose to expand provisions concerning enhancement of fish and wildlife to provide more examples of enhancement measures and to specify that enhancement measures would be mandatory whenever an operation causes long-term environmental harm (for example, long-term loss of mature native hardwood forest or the burial of a segment of a perennial or intermittent stream). When mandatory enhancement measures are required, the following provisions would apply:

- The scope of the mandatory enhancement measures must be commensurate with the magnitude of the long-term environmental harm.
- Mandatory enhancement measures must be located within the same watershed as the mine unless opportunities for enhancement are not available within that watershed. In the latter case, enhancement measures must be implemented in the closest watershed in which opportunities exist.
- The permit must include a condition requiring completion of mandatory enhancement measures.
- If the enhancement measures would involve more than a de minimis disturbance of land outside the area disturbed by mining, the land to be disturbed by enhancement measures must be included within the permit area.

The proposed rule would allow the regulatory authority, in coordination with other state and federal agencies, to designate stream segments, wildlife habitats, or watersheds within the proposed permit or adjacent areas as having such exceptional environmental value that any adverse mining-related impacts must be prohibited.

Finally, proposed 30 CFR 779.22(b)(3) and 783.22(b)(3) would require that each permit application include an evaluation of the premining productivity of the proposed permit area for fish and wildlife.

17. Land use. (30 CFR 779.22, 780.24, 783.22, 784.24, 816.133, and 817.133)

The proposed rule would remove the 5-year limitation on the required description of historical uses of the proposed permit area. It also would require that each permit application discuss the utility and capability of the reclaimed land to support the uses that the land was capable of supporting before any mining.

Under the proposed rule, the alternative postmining land use requirements would not apply to uses that the land was capable of supporting before any mining. The current regulations apply those requirements to all changes from the existing premining land use, regardless of whether the land was already capable of supporting the proposed use.

When the alternative postmining land use provisions do apply under the proposed rule, we propose to add two new criteria for approval. First, the application must disclose any monetary compensation or other consideration that the landowner either received or expects to receive in exchange for agreeing to the proposed postmining land use. Second, the application must demonstrate that the proposed use would not—

- Change peak flows from the reclaimed area in a way that would cause an increase in damage from flooding compared to the conditions that would exist if the land were restored to a condition capable of supporting the uses that it was capable of supporting before any mining.
- Cause the total volume of flow from the reclaimed area to vary in a way that would preclude any existing or reasonably foreseeable use of surface water or groundwater or any designated use of surface water under the Clean Water Act.
- Cause a change in the temperature or chemical composition of water discharged from the reclaimed area that would preclude any existing or reasonably foreseeable use of surface water or groundwater or any designated use of surface water under the Clean Water Act.

Finally, we propose to require that any mining-related structures (other than roads) to be retained as part of the approved postmining land use possess characteristics consistent with that use and be of a size proportional to the needs of the postmining land use. The proposed rule would require removal of any structure that is not in use as part of the approved postmining land use by the end of the revegetation responsibility period. Sufficient bond must be retained to ensure implementation of this requirement.

Bonding

18. Financial assurances for treatment of long-term discharges. (30 CFR 800.5 and 800.18)

We propose to establish performance bond and financial assurance requirements that would apply whenever any discharge from a mine or other facility regulated under SMCRA requires treatment and both the discharge and the need for treatment are expected to continue after the completion of mining, backfilling, regrading, and revegetation. These requirements also would apply to discharges that develop after the completion of land reclamation.

We propose to limit acceptable forms of bond and financial assurances for this purpose to collateral bonds and trusts or annuities because the need for treatment may well outlast the company that operated the mine.

19. Alternative bonding systems. (30 CFR 800.9)

We propose to require that all alternative bonding systems include provisions analogous to the bond release procedures and criteria in proposed 30 CFR 800.40 through 800.44 and the bond forfeiture provisions of 30 CFR 800.50.

We also propose to prohibit an alternative bonding system from covering restoration of the hydrological function and ecological function of a perennial or intermittent stream because those costs should be borne by the person making the decision to mine through a stream.

Similarly, the proposed rule would prohibit an alternative bonding system from covering treatment of long-term discharges that come into existence after the effective date of the rule unless the permittee contributes an amount equivalent to the anticipated treatment costs. Permittees with long-term discharges already covered by an alternative bonding system would be required to make a similar contribution. In both cases, the alternative bonding system must place the contribution in a separate account available only for treatment of the discharge for which the contribution is made.

20. Self-bonds. (30 CFR 800.12 and 800.23)

We propose to prohibit the use of self-bonds to guarantee restoration of the hydrological form and ecological function of a perennial or intermittent stream. A self-bond is not an appropriate mechanism to guarantee restoration of ecological function because of the risk that the company may cease to exist during the time required to accomplish that restoration.

We also propose to allow the use of ratings issued by any nationally recognized statistical rating organization registered with the Securities and Exchange Commission to determine eligibility for self-bonding. The current rule requires use of either Moody's or Standard and Poor's.

21. Bond replacement. (30 CFR 800.30)

We propose to revise our regulations to allow the regulatory authority to decline to accept a proffered replacement surety bond if, in the judgment of the regulatory authority, the new surety does not have adequate reinsurance or other resources sufficient to cover the default of one or more mining companies for which the surety has provided bond coverage.

The proposed rule would require issuance of a notice of violation when a permittee fails to comply with an order from the regulatory authority to replace a bond within a specified time.

22. Bond release. (30 CFR 800.40 through 800.44)

We propose to require that each bond release application include an analysis of the results of the monitoring of groundwater, surface water, and the biological condition of streams.

We propose to specify that the time within which the regulatory authority must process a bond release application begins with the submittal of a complete application, which we propose to define as an application that includes all items required under proposed 30 CFR 800.40.

The proposed rule would establish the following new criteria for bond release:

- The regulatory authority may not release any bond if, after an evaluation of the monitoring data submitted with the application, it determines that adverse trends exist that may result in material damage to the hydrologic balance outside the permit area.
- Before any portion of the existing bond for the permit area may be released, the applicant must post a separate bond or financial assurance to guarantee treatment of any discharge in need of long-term treatment that exists either on the permit area or at a point that is hydrologically connected to the permit area.
- If the permit includes a steep-slope variance under 30 CFR 785.16, the regulatory authority must retain sufficient bond to cover the cost of returning the variance area to approximate original contour and revegetating that area. This requirement would not apply after implementation of the postmining land use for which the variance was issued. Nor would it apply if the permittee returns the area to approximate original contour and completes revegetation of the site.

Note: Although not specified in proposed 30 CFR 800.42, proposed 30 CFR 785.14(b)(11) would effectively apply the same standard to mountaintop removal mining operations.

- If the permit includes approval to retain a mining-related structure as part of the postmining land use, the regulatory authority must retain sufficient bond to cover the cost of removing the structure and reclaiming the land upon which it was

sited. This requirement would not apply after the structure is in use as part of the postmining land use or if the permittee removes the structure and completes revegetation of the site.

- In determining the amount of bond to release, the regulatory authority must consider the results of an evaluation of the degree of difficulty to complete the remaining reclamation, whether pollution of surface or subsurface water is occurring, the probability of future occurrence of such pollution, and the estimated cost of abating such pollution.

The proposed rule would specify that the permittee must complete restoration of the form of perennial and intermittent streams before the regulatory authority may release Phase I bond.

We propose to require that the regulatory authority develop standards defining successful establishment of revegetation for purposes of Phase II bond release.

The proposed rule would prohibit Phase III bond release before completion of any fish and wildlife enhancement measures required in the permit.