

FEDERAL REGISTER: 42 FR 63394 (DECEMBER 16, 1977)

DEPARTMENT OF THE INTERIOR
AGENCY: Bureau of Indian Affairs (BIA)

25 CFR Part 177
Indian Coal Mining Regulations

ACTION: Final rules.

SUMMARY: These regulations implement Section 710(c) of the Surface Mining Control and Reclamation Act of 1977 (Pub.L. 95-87). That section requires the Secretary of the Interior to incorporate certain of the Act's performance and reclamation standards in all existing and new coal mining leases on Indian lands.

EFFECTIVE DATE: December 16, 1977.

ADDRESSES: Director, Office of Surface Mining Reclamation and Enforcement, Department of the Interior, Washington, D.C. 20240, 202-343-4237; and Director, Office of Trust Responsibilities, Bureau of Indian Affairs, Department of the Interior, Washington, D.C. 20240, 202-343-5831.

FOR FURTHER INFORMATION CONTACT: Richard Wilson, 202-343-3722; Tim Vallmann, 202-343-6967.

SUPPLEMENTARY INFORMATION: The Surface Mining Control and Reclamation Act of 1977 (the Act), Pub.L. 95-87, requires the Secretary of the Interior to publish environmental protection regulations that are applicable to all coal mining operations.

Final regulations governing coal mining on non-Indian lands were published in the FEDERAL REGISTER on December 13, 1977 (42 FR 62639). These final rules are designed to implement the Act insofar as it requires the Secretary of the Interior to incorporate certain of the Act's performance and reclamation standards in all existing and new coal mining leases on Indian lands. Section 710(c) of the Act provides that those requirements will take effect on December 16, 1977. Proposed regulations on this subject were published in the FEDERAL REGISTER on September 15, 1977 (42 FR 46352).

The performance and reclamation standards set out below are nearly identical to the standards found in 30 CFR Part 715, which were published in the FEDERAL REGISTER on December 13, 1977 (42 FR 62639). While the standards applicable to Indian lands are little different from those applicable to non-Indian lands, they do recognize specific procedures and considerations which apply only to Indian lands. These regulations do not include any of the provisions governing use of explosives found in 30 CFR 715.19. However, the standards for steep slope mining found in 30 CFR 716.2 are included in this part.

Sections 177.112 through 177.114 set up enforcement procedures similar to these found in 30 CFR Parts 721-723. However, the enforcement procedures published here differ from those in 30 CFR in their provision for tribal involvement in the process and their preservation of tribal remedies in the enforcement scheme.

DRAFTING INFORMATION

These rules were drafted by members of the Office of Surface Mining Task Force and the Office of the Solicitor in cooperation with the Bureau of Indian Affairs. The principal authors are listed in the FEDERAL REGISTER of December 13, 1977 (42 FR 62675). The following individuals were also specifically responsible for the regulations governing Indian lands: Richard Wilson of the Office of Trust Responsibilities, Bureau of Indian Affairs, (202) 343-3722, and Tim Vollman, Division of Indian Affairs, Office of the Solicitor, (202) 343-6967. Additional background on the drafting process and public comments received after proposed rulemaking may also be found in the FEDERAL REGISTER of December 13, 1977.

In addition to the changes made to the proposed rules which are discussed in the December 13, 1977, FEDERAL REGISTER, one other change was made in the regulations governing surface coal mining on Indian lands. One commentator noted that there was nothing in the proposed rules to implement section 710(e) of the Act which requires the Secretary to enforce terms and conditions in addition to those required by the Act, as may be requested by the Indian Tribe. A new paragraph, Section 177.113(i), has been added to implement that authority.

The Solicitor of the Department of the Interior has been delegated the authority to promulgate these regulations by order of the Secretary of the Interior.

NOTE. - The Department of the Interior has determined that this document does not contain a major proposal requiring preparation of an Economic Impact Statement under Executive Order 11821 and OMB circular A-107

Dated: December 13, 1977.

LEO M. KRULITZ, Solicitor of the Interior.

25 CFR Part 177 is amended by designating existing regulations under that part as "Subpart A - General Provisions," and by adding new Subpart B, reading as follows:

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SUBPART B – COAL OPERATIONS

25 CFR PART 177

Section

177.100	Applicability.
177.101	Definitions.
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177.103	Signs and markers.
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177.105	Backfilling and grading.
177.106	Disposal of spoil and waste materials in areas other than the mine workings or excavations.
177.107	Topsoil handling.
177.108	Protection of the hydrologic system.
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177.110	Revegetation.
177.111	Steep slope mining.
177.112	Inspections.
177.113	Enforcement procedures.
177.114	Civil penalties.

AUTHORITY: Secs. 201, 501, Pub.L 95-87, 91 Stat, 445 (30 U.S.C. 1201) (25 U.S.C. 396d).

SUBPART B – COAL OPERATIONS

PART 177

Section 177.100 - Applicability.

(a) The performance standards in this subpart shall apply to all coal mining operations on Indian lands on or after December 16, 1977.

(b) The requirements of this subpart shall be incorporated in all existing and new contracts entered into for coal mining on Indian lands.

Section 177.101 - Definitions.

As used throughout the regulations in this subpart, except where otherwise indicated:

ACID DRAINAGE means water with a pH of less than 6.0 discharged from active or abandoned mines and from areas affected by coal mining operations.

ACID-FORMING MATERIALS means earth materials that contain sulfide mineral or other materials which, if exposed to air, water, or weathering processes, will cause acids that may create acid drainage.

ACT means the Surface Mining Control and Reclamation Act of 1977, (Pub.L. 95-87).

ALLUVIAL VALLEY FLOORS means unconsolidated stream-laid deposits holding streams where water availability is sufficient for subirrigation or flood irrigation agricultural activities but does not include upland areas which are generally overlain by a thin veneer of colluvial deposits composed chiefly of debris from sheet erosion, deposits by unconcentrated runoff or slope wash, together with talus, other mass movement accumulation and windblown deposits.

APPROXIMATE ORIGINAL CONTOUR means that surface configuration achieved by backfilling and grading of the mined area so that the reclaimed area, including any terracing or access roads, closely resembles the general surface configuration of the land prior to mining and blends into and complements the drainage pattern of the surrounding terrain, with all highwalls and spoil piles eliminated; water impoundments may be permitted where the regulatory authority determines that they are in compliance with Section 177.108.

AQUIFER means a zone, stratum, or group of strata that can store and transmit water in sufficient quantities for a specific use.

AUGER MINING means a method of mining coal at a cliff or highwall by drilling holes laterally into an exposed coal seam from the highwall and transporting the coal along an auger bit to the surface.

COAL means combustible carbonaceous rock, classified as anthracite, bituminous, subbituminous, or lignite by A.S.T.M. designation 0-388-666.

COMBUSTIBLE MATERIAL means organic material that is capable of burning either by fire or through a chemical process (oxidation) accompanied by the evolution of heat and a significant temperature rise.

COMPACTION means the reduction of pore spaces among the particles of soil or rock, generally done by running heavy equipment over the earth materials.

DIRECTOR means the Director, Office of Surface Mining Reclamation and Enforcement, or his representative.

DISTURBED AREA means those lands that have been affected by surface coal mining and reclamation operations.

DIVERSION means a channel, embankment, or other manmade structure constructed for the purpose of diverting water from one area to another.

DOWNSLOPE means the land surface between a valley floor and the projected outcrop of the lowest coalbed being mined along each highwall.

EMBANKMENT means an artificial deposit of material that is raised above the natural surface of the land and used to contain, divert, or store water, support roads or railways, or other similar purposes.

ESSENTIAL HYDROLOGIC FUNCTIONS means with respect to alluvial valley floors, the role of the valley floor in collecting, storing, and regulating the natural flow of surface water and ground water, and in providing a place for irrigated and subirrigated farming, by reason of its position in the landscape and the characteristics of its underlying material.

FLOOD IRRIGATION means irrigation through natural overflow or the temporary diversion of high flows in which the entire surface of the soil is covered by a sheet of water.

GROUND WATER means subsurface water that fills available openings in rock or soil materials such that they may be considered water-saturated.

HIGHWALL means the face of exposed overburden and coal in an open cut of a surface or underground coal mine.

HYDROLOGIC BALANCE means the relationship between the quality and quantity of inflow to, outflow from, and storage in a hydrologic unit such as a drainage basin, aquifer, soil zone, lake, or reservoir. It encompasses the quantity and quality relationships between precipitation, runoff, evaporation, and the change in ground and surface water storage.

HYDROLOGIC REGIME means the entire state of water movement in a given area. It is a function of the climate, and includes the phenomena by which water first occurs as atmospheric water vapor passes into a liquid or solid form and falls as precipitation, moves thence along or into the ground surface, and returns to the atmosphere as vapor by means of evaporation and transpiration.

IMMINENT DANGER TO THE HEALTH AND SAFETY OF THE PUBLIC means the existence of any condition, or practice, or any violation of a permit or other requirement of the Act in a surface coal mining and reclamation operation, which condition, practice, or violation could reasonably be expected to cause substantial physical harm to persons outside the permit area before such condition, practice, or violation can be abated. A reasonable expectation of death or serious injury before abatement exists if a rational person, subjected to the same condition or practice giving rise to the peril, would not expose himself or herself to the danger during the time necessary for abatement.

IMPOUNDMENT means a closed basin formed naturally or artificially built, which is dammed or excavated for the retention of water, sediment, or waste.

INDIAN LANDS means all lands, including mineral interest, within the exterior boundaries of any Federal Indian reservation, notwithstanding the issuance of any patent, and including rights-of-way, and all lands including mineral interests held in trust for or supervised by an Indian tribe.

INDIAN TRIBE means any Indian Tribe, band, group or community having a governing body recognized by the Secretary.

INTERMITTENT OR PERENNIAL STREAM means a stream or part of a stream that flows continuously during all (perennial) or for at least one month (intermittent) of the calendar year as a result of groundwater discharge or surface runoff. The term does not include an ephemeral stream which is one that flows for less than one month of a calendar year and only in direct response to precipitation in the immediate watershed and whose channel bottom is always above the local water table.

LEACHATE means a liquid that has percolated through soil, rock, or waste and has extracted dissolved or suspended materials.

NOXIOUS PLANTS means species that have been included on official State lists of noxious plants for the State in which the operation occurs.

OFFICE means the Office of Surface Mining Reclamation and Enforcement established under Title II of the Act.

OPERATOR means any person, partnership or corporation engaged in coal mining who removes or intends to remove more than 250 tons of coal from the earth by mining within 12 consecutive calendar months in any one location.

OUTSLOPE means the exposed area sloping away from a bench or terrace being constructed as a part of a surface coal mining and reclamation operation.

OVERBURDEN means material of any nature, consolidated or unconsolidated, that overlies a coal deposit, excluding topsoil.

PERMIT means an approval by the Secretary of the Interior to conduct surface coal mining and reclamation operations on Indian lands.

{63396} PERMITTEE means a person holding a permit to conduct surface coal mining and reclamation operations on Indian lands.

PERSON means an individual, partnership, association, society, joint stock company, firm, company, corporation, or other business organization.

PRODUCTIVITY means the vegetative yield produced by a unit area for a unit of time.

RECHARGE CAPACITY means the ability of the soils and underlying materials to allow precipitation and runoff to infiltrate and reach the zone of saturation.

RECURRENCE INTERVAL means the precipitation event expected to occur, on the average, once in a specified interval. For example, the 10-year 24-hour precipitation event would be that 24-hour precipitation event expected to be exceeded on the average once in 10 years. Magnitude of such events are as defined by the National Weather Service Technical Paper No. 40, "Rainfall Frequency Atlas of the U.S.," May 1961, and subsequent amendments or equivalent regional or rainfall probability information developed therefrom.

REGULATORY AUTHORITY means the Secretary.

ROADS means access and haul roads constructed, used, reconstructed, improved, or maintained for use in surface coal mining and reclamation operations, including use by coal-hauling vehicles leading to transfer, processing, or storage areas. The term includes any such road used and not graded to approximate original contour within 45 days of construction other than temporary roads used for topsoil removal and coal haulage roads within the pit area. Roads maintained with public funds such as all Federal, State, tribal, and county roads are excluded.

RUNOFF means precipitation that flows overland before entering a defined stream channel and becoming streamflow.

SAFETY FACTOR means the ratio of the available shear strength to the developed shear stress on a potential surface of sliding determined by accepted engineering practice.

SECRETARY means the Secretary of the Interior or his representative.

SEDIMENT means undissolved organic and inorganic material transported or deposited by water.

SEDIMENTATION POND means any natural or artificial structure or depression used to remove sediment from water and store sediment or other debris.

SIGNIFICANT IMMINENT ENVIRONMENTAL HARM TO LAND, AIR OR WASTE RESOURCES is determined as follows:

(i) An environmental harm is any adverse impact on land, air, or water resources, including plant and animal life.

(ii) An environmental harm is imminent if a condition, practice or violation exists which (a) is causing such harm or (b) may reasonably be expected to cause such harm at any time before the end of the reasonable abatement time that would be set under Section 177.123(b) of these regulations.

(iii) An environmental harm is significant if that harm is appreciable and not immediately reparable.

SLOPE means average inclination of a surface, measured from the horizontal. Normally expressed as a unit of vertical distance to a given number of units of horizontal distance (e.g., 1v to 5h = 20 percent = 11.3 degrees).

SOIL HORIZONS means contrasting layers of soil lying one below the other, parallel or nearly parallel to the land surface. It is the part of the soil in which basis of field characteristics and laboratory data. The three major soil horizons are -

(1) A horizon. The uppermost layer in the soil profile often called the surface soil. It is the part of the soil in which organic matter is most abundant, and where leaching of soluble or suspended particles is the greatest.

(2) B horizon. The layer immediately beneath the A horizon and often called the subsoil. This middle layer commonly contains more clay, iron, or aluminum than the A or C horizons.

(3) C horizon. The deepest layer of the soil profile. It consists of loose material or weathered rock that is relatively unaffected by biologic activity.

SPOIL means overburden that has been removed during surface mining.

STABILIZE means any method used to control movement of soil, spoil piles, or areas of disturbed earth and includes increasing bearing capacity, increasing shear strength, draining, compacting, or revegetating.

SUBIRRIGATION means irrigation of plants with water delivered to the roots from underneath.

SURFACE COAL MINING OPERATIONS means: (a) activities conducted on the surface of lands in connection with a surface coal mine and surface impacts incident to an underground coal mine. Such activities include excavation for the purpose of obtaining coal including such common methods as contour, strip, auger, mountaintop removal, box cut, open pit, and area mining, the uses of explosives and blasting, and in situ distillation or retorting, leaching or other chemical or physical processing, and the cleaning, concentrating, or other processing or preparation, loading of coal for commerce at or near the mine site: Provided, however, That such activities do not include the extraction of coal incidental to the extraction of other minerals where coal does not exceed 16 2/3 per centum of the tonnage of minerals removed for purposes of commercial use or sale, or coal exploration; and (b) the areas upon which such activities occur or where such activities disturb the natural land surface. Such areas shall also include any adjacent land, the use of which is incidental to any such activities, all lands affected by the construction of new roads or the improvement or use of existing roads to gain access to the site of such activities and for haulage and excavation, workings, impoundments, dams, ventilation shafts, entryways, refuse banks, dumps, stockpiles, overburden piles, spoil banks, culm banks, tailings, holes or depressions, repair areas, storage areas, processing areas, shipping areas and other areas upon which are sited structures, facilities, or other property or material on the surface, resulting from or incident to such activities.

SURFACE COAL MINING AND RECLAMATION OPERATIONS means surface coal mining operations and all activities necessary and incidental to the reclamation of such operations. This term includes the term "surface coal mining operations."

SURFACE WATER means water, either flowing or standing, on the surface of the earth.

SUSPENDED SOLIDS means organic or inorganic materials carried or held in suspension in water that will remain on a 0.45 micron filter.

TON means 2,000 pounds avoirdupois (.90718 metric ton).

TOXIC-FORMING MATERIALS means earth materials or wastes which, if acted upon by air, water, weathering, or microbiological processes, are likely to produce chemical or physical conditions in soils or water that are detrimental

to biota or uses of water.

TOXIC-MINE DRAINAGE means water that is discharged from active or abandoned mines and from other areas affected by coal mining operations and which contains a substance which through chemical action or physical effects is likely to kill, injure, or impair biota commonly present in the area that might be exposed to it.

VALLEY FILL and **HEAD-OF-HOLLOW FILL** means a structure consisting of any materials other than waste placed so as to encroach upon or obstruct to any degree any natural stream channel other than those minor channels located on highland areas where overland flow in natural rills and gullies is the predominant form of runoff. Such fills are normally constructed in the uppermost portion of a V-shaped valley in order to reduce the upstream drainage area (head-of-hollow fills). Fills located farther downstream valley fills) must have larger diversion structures to minimize infiltration. Both fills are characterized by rock underdrains and are constructed in compacted lifts from the toe to the upper surface in a manner to promote stability.

WASTE means earth materials, which are combustible, physically unstable, or acid-forming or toxic-forming, wasted or otherwise separated from product coal and are slurried or otherwise transported from coal processing facilities or preparation plants after physical or chemical processing, cleaning, or concentrating of coal.

WATER TABLE means upper surface of a zone of saturation, where the body of ground water is not confined by an overlying impermeable zone.

Section 177.102 - General obligations.

(a) Authorizations to operate. A copy of all current permits, licenses, approved plans or other authorizations to operate the mine shall be available for inspection at or near the mine site.

{63397} (b) Mine Maps. Any person conducting surface coal mining and reclamation operations on and after Dec. 16, 1977, shall submit two copies of an accurate map of the mine and permit area at a scale of 1:6000 or larger. The maps shall show as of Dec. 16, 1977, the lands from which coal has not yet been removed, and the lands and structures which have been used or disturbed to facilitate mining. One copy of the mine map shall be submitted to the appropriate agency of the local governing Indian Tribe, and one copy shall be submitted to the Regional Director, OSM, before March 16, 1978.

Section 177.103 - Signs and markers.

(a) Specifications. All signs required to be posted shall be of a standard design that can be seen and read easily and shall be made of durable material. The signs and other markers shall be maintained during all operations to which they pertain and shall conform to local ordinances and codes.

(b) Mine and permit identification signs. Signs identifying the mine area shall be displayed at all points of access to the permit area from public roads and highways. Signs shall show the name, business address, and telephone number of the permittee and identification numbers of current mining and reclamation permits or other authorizations to operate. Such signs shall not be removed until after release of all bonds.

(c) Perimeter markers. The perimeter of the permit area shall be clearly marked by durable and easily recognized markers, or by other means approved by the regulatory authority.

(d) Buffer zone markers. Buffer zones as defined in Section 177.108 shall be marked in a manner consistent with the perimeter markers along the interior boundary of the buffer zone.

(e) Blasting signs. If blasting is necessary to conduct surface coal mining operations, signs reading "Blasting Area" shall be displayed conspicuously at the edge of blasting areas along access and haul roads within the mine property.

Signs reading "Blasting Area" and explaining the blasting warning and all-clear signals shall be posted at all entrances to the permit area.

(f) Topsoil markers. Where topsoil or other vegetation-supporting material is segregated and stockpiled according to Section 177.107(c), the stockpiled material shall be marked. Markers shall remain in place until the material is removed.

Section 177.104 - Postmining use of land.

(a) General. All disturbed areas shall be restored in a timely manner (1) to conditions that are capable of supporting the uses which they were capable of supporting before any mining, or (2) to higher or better uses achievable under criteria and procedures of paragraph (d) of this section.

(b) Determining premining use of land. The premining uses of land to which the postmining land use is compared shall be those uses which the land previously supported if the land had not been previously mined and had been properly managed.

(1) The postmining land use for land that has been previously mined and not reclaimed shall be judged on the basis of the highest and best use that can be achieved and is compatible with surrounding areas.

(2) The postmining land use for land that has received improper management shall be judged on the basis of the premining use of surrounding lands that have received proper management.

(3) If the premining use of the land was changed within 5 years of the beginning of mining, the comparison of postmining use to premining use shall include a comparison with the historic use of the land as well as its use immediately preceding mining.

(c) Land-use categories. Land use is categorized in the following groups. Change from one to another land use category in premining to postmining constitutes an alternate land use and the permittee shall meet the requirements of paragraph (d) of this section and all other applicable environmental protection performance standards of this part.

(1) Heavy industry. Manufacturing facilities, powerplants, airports or similar facilities.

(2) Light industry and commercial services. Office buildings, stores, parking facilities, apartment houses, motels, hotels, or similar facilities.

(3) Public services. Schools, hospitals, churches, libraries, water-treatment facilities, solid-waste disposal facilities, public parks and recreation facilities, major transmission lines, major pipelines, highways, underground and surface utilities, and other servicing structures and appurtenances.

(4) Residential. Single- and multiple-family housing (other than apartment houses) with necessary support facilities. Support facilities may include commercial services incorporated in and comprising less than 5 percent of the total land area of housing capacity, associated open space, and minor vehicle parking and recreation facilities supporting the housing.

(5) Cropland. Land used primarily for the production of cultivated and close growing crops for harvest alone or in association with sod crops. Land used for facilities in support of farming operations are included.

(6) Rangeland. Includes rangelands and forest lands which support a cover of herbaceous or scrubby vegetation suitable for grazing or browsing use.

(7) Hayland or pasture. Land used primarily for the long-term production of adapted, domesticated forage plants to be grazed by livestock or cut and cured for livestock feed.

(8) Forest land. Land with at least a 25 percent tree canopy or land at least 10 percent stocked by forest trees of any size, including land formerly having had such tree cover and that will be naturally or artificially reforested.

(9) Impoundments of water. Land used for storing water for beneficial uses such as stock ponds, irrigation, fire protection, recreation, or water supply.

(10) Fish and wildlife habitat and recreation lands. Wetlands, fish and wildlife habitat, and areas managed primarily for fish and wildlife or recreation.

(11) Combined uses. Any appropriate combination of land uses where one land use is designated as the primary land use and one or more other land uses are designated as secondary land uses.

(d) Criteria for approving alternative postmining use of land. An alternative postmining land use shall be approved by the regulatory authority, after consultation with the landowner or the land management agency on Federal lands, if the following criteria are met.

(1) The proposed land use is compatible with adjacent land use and, where applicable, with existing Tribal and Federal land use policies and plans.

A written statement of the views of the authorities with statutory responsibilities for land use policies and plans shall accompany the request for approval. The permittee shall obtain any required approval of Tribal or Federal land management agencies, including any necessary zoning or other changes necessarily required for the final land use.

(2) Specific plans have been prepared which show the feasibility of the proposed land use as related to needs, projected land use trends, and markets and that include a schedule showing how the proposed use will be developed and achieved within a reasonable time after mining and be sustained. The regulatory authority may require appropriate demonstrations to show that the planned procedures are feasible, reasonable, and integrated with mining and reclamation, and that the plans will result in successful reclamation.

(3) Provision of any necessary public facilities is assured as evidenced by letters of commitment from parties other than the permittee, as appropriate, to provide them in a manner compatible with the permittee's plans.

(4) Specific and feasible plans for financing attainment and maintenance of the postmining land use including letters of commitment from parties other than the permittee as appropriate, if the postmining land use is to be developed by such parties.

(5) The plans are designed under the general supervision of a registered professional engineer, or other appropriate professional, who will ensure that the plans conform to applicable accepted standards for adequate land stability, drainage, and vegetative cover, and aesthetic design appropriate for the postmining use of the site.

(6) The proposed use or uses will neither present actual or probable hazard to public health or safety nor will they pose any actual or probable threat of water flow diminution or pollution.

(7) The use or uses will not involve unreasonable delays in reclamation.

{63398} (8) Necessary approval of measures to prevent or mitigate adverse effects on fish and wildlife has been obtained from the regulatory authority and appropriate Tribal and Federal fish and wildlife management agencies.

(9) Proposals to change premining land uses of range, fish and wildlife habitat, forest land, hayland, or pasture to a postmining cropland use, where the cropland would require continuous maintenance such as seeding, plowing, cultivation, fertilization, or other similar practices to be practicable or to comply with applicable Federal and Tribal laws, shall be reviewed by the regulatory authority to assure that:

(i) There is a firm written commitment by the permittee or by the landowner or land manager to provide sufficient crop management after release of applicable performance bonds to assure that the proposed postmining cropland use remains practical and reasonable;

(ii) There is sufficient water available and committee to maintain crop production; and

(iii) Topsoil quality and depth are shown to be sufficient to support the proposed use.

(10) The regulatory authority has provided by public notice not less than 45 days nor more than 60 days for interested citizens and Tribal and Federal agencies to review and comment on the proposed land use.

Section 177.105 - Backfilling and grading.

In order to achieve the approximate original contour, the permittee shall, except as provided in this section, transport, backfill, compact (where advisable to ensure stability or to prevent leaching of toxic materials), and grade all spoil material to eliminate all highwalls, spoil piles, and depressions. Cut-and-fill terraces may be used only in those situations expressly identified in this section. The postmining graded slopes must approximate the premining natural slopes in the area as defined in paragraph (a) of this section.

(a) Slope measurements.

(1) To determine the natural slopes of the area before mining, sufficient slopes to adequately represent the land surface configuration, and as approved by the regulatory authority in accordance with site conditions, must be accurately measured and recorded. Each measurement shall consist of an angle of inclination along the prevailing slope extending 100 linear feet above and below or beyond the coal outcrop or the area to be disturbed; or, where this is impractical, at locations specified by the regulatory authority. Where the area has been previously mined, the

measurements shall extend at least 100 feet beyond the limits of mining disturbances as determined by the regulatory authority to be representative of the premining configuration of the land. Slope measurements shall take into account natural variations in slope so as to provide accurate representation of the range of natural slopes and shall reflect geomorphic differences of the area to be disturbed. Slope measurements may be made from topographic maps showing contour lines, having sufficient detail and accuracy consistent with the submitted mining and reclamation plan.

(2) After the disturbed area has been graded, the final graded slopes shall be measured at the beginning and end of lines established on the prevailing slope at locations representative of premining slope conditions and approved by the regulatory authority. These measurements must not be made so as to allow unacceptably steep slopes to be constructed.

(b) Final graded slopes.

(1) The final graded slopes shall not exceed either the approximate premining slopes as determined according to paragraph (a)(1) of this section and approved by the regulatory authority or any lesser slope specified by the regulatory authority based on consideration of soil, climate, or other characteristics of the surrounding area. Postmining final graded slopes need not be uniform. The requirements of this paragraph may be modified by the regulatory authority where the mining is re-affecting previously mined lands that have not been restored to the standards of this section and sufficient spoil is not available to return to the slope determined according to paragraph (a)(1) of this section. Where such modifications are approved, the permittee shall, as a minimum, be required to:

(i) Retain all overburden and spoil on the solid portion of existing or new benches; and

(ii) Backfill and grade to the most moderate slope possible to eliminate the highwall which does not exceed the angle of repose or such lesser slopes as is necessary to assure stability.

(2) On approval by the regulatory authority and in order to conserve soil moisture, ensure stability, and control erosion on final graded slopes, cut-and-fill terraces may be allowed if the terraces are compatible with the postmining land use approved under Section 177.104, and are appropriate substitutes for construction of lower grades on the reclaimed lands. The terraces shall meet the following requirements:

(i) The width of the individual terrace bench shall not exceed 20 feet unless specifically approved by the regulatory authority as necessary for stability, erosion control, or roads included in the approved postmining land use plan.

(ii) The vertical distance between terraces shall be as specified by the regulatory authority to prevent excessive erosion and to provide long-term stability.

(iii) The slope of the terrace outslope shall not exceed 1 v:2h (50 percent). Outsoles which exceed 1v:2 (50 percent) may be approved if they have a minimum static safety factor of more than 1.5 and provide adequate control over erosion and closely resemble the surface configuration of the land prior to mining. In no case may highwalls be left as part of terraces.

(iv) Culverts and underground rock drains shall be used on the terrace only when approved by the regulatory authority.

(3) All operations on steep slopes of 20 degrees or more or on such lesser slopes as the regulatory authority defines as a steep slope shall meet the provisions of Section 177.111 of this part.

(c) Mountaintop removal. The requirements of this paragraph shall apply to surface mining operations which remove entire coal seams in the upper part of a mountain, ridge, or hill by removing all of the overburden, and where the requirements for achieving the approximate original contour of this section cannot be met. Final graded top plateau slopes on the mined area shall be less than 1v:5h so as to create a level plateau or gently rolling configuration and the outsoles of the plateau shall not exceed 1v:2, except where engineering data substantiates and the regulatory authority finds that a minimum static safety factor of 1.5 (or higher factors specified by the regulatory authority) will be attained. Although the area need not be restored to approximate original contour, all highwalls, spoil piles, and depressions except as provided in paragraphs (d) and (e) of this section shall be eliminated.

(d) Small depressions. The requirement of this section to achieve approximate original contour does not prohibit construction of small depressions if they are approved by the regulatory authority to minimize erosion, conserve soil moisture or promote revegetation. These depressions shall be compatible with the approved postmining land use and shall not be inappropriate substitutes for construction of lower grades on the reclaimed lands. Depressions approved under this section shall have a holding capacity of less than 1 cubic yard of water or, if it is necessary that they be

larger, shall not restrict normal access throughout the area or constitute a hazard. Large, permanent impoundments shall be governed by paragraph (e) of this section and by Section 177.108.

(e) Permanent impoundments. Permanent impoundments may be retained in mined and reclaimed areas provided all highwalls are eliminated by grading to appropriate contour and the provisions for postmining land use (Section 177.104) and protection of the hydrologic balance (Section 177.108) are met. No impoundments shall be constructed on top of areas in which excess materials are deposited pursuant to Section 177.106 of this part. Impoundments shall not be used to meet the requirements of paragraph (j) of this section.

(f) Definition of thin and thick restored overburden. The thin overburden provisions of paragraph (g) of this section may apply only where the final thickness is less than 0.8 of the initial thickness. The thick overburden provisions of paragraph (h) of this section may apply only where the final thickness is greater than 1.2 of the initial thickness. Initial thickness is the sum of the overburden thickness and coal thickness. Final thickness is the product of the overburden thickness times the bulking factor to be determined for each mine area. The provisions of paragraphs (g) and (h) apply only when operations cannot be carried out to comply with the requirements of paragraph (a) of this section to achieve the approximate original contour.

{63399} (g) Thin overburden. In surface coal mining operations carried out continuously in the same limited pit area for more than 1 year from the day coal-removal operations begin and where the volume of all available spoil and suitable waste materials is demonstrated to be insufficient to achieve approximate original contour, surface coal mining operations shall be conducted to meet, at a minimum, the following standards:

(1) Transport, backfill, and grade, using all available spoil and suitable waste materials from the entire mine area, to attain the lowest practicable stable grade, which may not exceed the angle of repose, and to provide adequate drainage and long-term stability of the regraded areas.

(2) Eliminate highwalls by grading or backfilling to stable slopes not exceeding 1v:2h (50 percent), or such lesser slopes as the regulatory authority may specify to reduce erosion, maintain the hydrologic balance, or allow the approved postmining land use.

(3) Transport, backfill, grade, and revegetate to achieve an ecologically sound land use compatible with the prevailing land use in unmined areas surrounding the permit area.

(4) Transport, backfill, and grade to ensure the impoundments are constructed only where it has been demonstrated to the regulatory authority's satisfaction that all requirements of Section 177.108 have been met and that the impoundments have been approved by the regulatory authority as meeting the requirements of this part and all other applicable Federal and Tribal regulations.

(h) Thick overburden. In surface coal mining operations where the volume of spoil is demonstrated to be more than sufficient to achieve the approximate original contour surface coal mining operations shall be conducted to meet at a minimum the following standards:

(1) Transport, backfill, and grade all spoil and wastes not required to achieve approximate original contour in the surface mining area to the lowest practicable grade.

(2) Deposit, backfill, and grade excess spoil and wastes only within the permit area and dispose of such materials in conformance with this part.

(3) Transport, backfill, and grade excess spoil and wastes to maintain the hydrologic balance in accordance with this part and to provide long-term stability.

(4) Transport, backfill, grade and revegetate wastes and excess spoil to achieve an ecologically sound land use compatible with the prevailing land uses in unmined areas surrounding the permit area.

(5) Eliminate all highwalls and depressions except as stated in paragraph (e) of this section by backfilling with spoil and suitable waste materials.

(i) Regrading or stabilizing rills and gullies. When rills or gullies deeper than 9 inches form in areas that have been regraded and the topsoil replaced but vegetation has not yet been established, the permittee shall fill, grade, or otherwise stabilize the rills and gullies and reseed or replant the areas according to Section 177.110. The regulatory authority shall specify that rills or gullies of lesser size be stabilized if the rills or gullies will be disruptive to the approved postmining land use or may result in additional erosion and sedimentation.

(j) Covering coal and acid-forming, toxic-forming, combustible, and other waste materials; stabilizing backfilled materials; and using waste material for fill.

(1) Cover. All exposed coal seams remaining after mining and any acid-forming, toxic-forming, combustible materials, or any other waste materials identified by the regulatory authority that are exposed, used, or produced during mining shall be covered with a minimum of 4 feet of nontoxic and noncombustible material; or, if necessary, treated to neutralize toxicity in order to prevent water pollution and sustained combustion, and to minimize adverse effects on plant growth and land uses. Where necessary to protect against upward migration of salts, exposure by erosion, to provide an adequate depth for plant growth, or to otherwise meet local conditions, the regulatory authority shall specify thicker amounts of cover using nontoxic material. Acid-forming or toxic-forming material shall not be buried or stored in proximity to a drainage course so as to cause or pose a threat of water pollution or otherwise violate the provisions of Section 177.108 of this part.

(2) Stabilization. Backfilled materials shall be selectively placed and compacted wherever necessary to prevent leaching of toxic-forming materials into surface or subsurface waters in accordance with Section 177.108 and wherever necessary to ensure the stability of the backfilled materials. The method of compacting material and the design specifications shall be approved by the regulatory authority before the toxic materials are covered.

(3) Use of waste materials as fill. Before waste materials from a coal preparation or conversion facility or from other activities conducted outside the permit area such as municipal wastes are used for fill material, it must be demonstrated to the regulatory authority by hydrogeological means and chemical and physical analyses that use of these materials will not adversely affect water quality, water flow, and vegetation; will not present hazards to public health and safety; and will not cause instability in the backfilled area.

(k) Grading along the contour. All final grading, preparation of overburden before replacement of topsoil, and placement of topsoil, in accordance with Section 177.107, shall be done along the contour to minimize subsequent erosion and instability. If such grading, preparation or placement along the contour would be hazardous to equipment operators then grading, preparation or placement in a direction other than generally parallel to the contour may be used. In all cases, grading, preparation or placement shall be conducted in a manner which minimizes erosion and provides a surface for replacement of topsoil which will minimize slippage.

Section 177.106 - Disposal of spoil and waste materials in areas other than the mine workings or excavations.

(a) Disposal of spoil in other than valley or head-of-hollow fills. Spoil not required to achieve the approximate original contour shall be transported to and placed in a controlled (engineered) manner in disposal areas other than the mine workings or excavations only if all the following conditions, in addition to the other requirements of this part, are met:

(1) The disposal areas shall be within the permit area, and they must be approved by the regulatory authority as suitable for construction of fills in accordance with the requirements of this paragraph;

(2) The disposal areas shall be located on the most moderate sloping and naturally stable areas available as approved by the regulatory authority. Where possible, fill materials suitable for disposal shall be placed upon or above a natural terrace, bench, or berm if such placement provides additional stability and prevents mass movement;

(3) The fill shall be designed using recognized professional standards, certified by a registered professional engineer, and approved by the regulatory authority;

(4) Where the slope in the disposal area exceeds 1 v;2.8h (36 percent), or such lesser slope designated by the regulatory authority based on local conditions, measures such as keyway cuts (excavations to stable bedrock) or rock toe buttresses shall be constructed to stabilize the fill.

(5) The disposal area does not contain springs, natural water courses or wet weather seeps unless lateral drains are constructed from the wet areas to the underdrains in such a manner that infiltration of the water into the spoil pile will be prevented.

(6) All organic material shall be removed from the disposal area and the topsoil must be removed and segregated pursuant to Section 177.107 before the material is placed in the disposal area. However, if approved by the regulatory authority, organic material may be used as mulch or may be included in the topsoil.

(7) The spoil shall be transported and placed in a controlled manner, concurrently compacted as necessary to ensure mass stability and prevent mass movement covered, and graded to allow surface and subsurface drainage to be compatible with the natural surroundings, and to ensure long-term stability. The final configuration of the fill must be

suitable for postmining land uses approved in accordance with Section 177.104. Terraces shall not be constructed unless approved by the regulatory authority.

{63400} (8) If any portion of the fill interrupts, obstructs, or encroaches upon any natural drainage channel, the entire fill is classified as a valley or head-or-hollow fill and must be designed and constructed in accordance with the requirements of paragraph (b) of this section.

(9) The fill shall be inspected for stability by a registered engineer or qualified professional specialist during critical construction periods to assure removal of all organic material and topsoil, placement of under-drainage systems, and proper construction of terraces according to the approved plan. The registered engineer or other qualified professional specialist shall provide a certified report after each inspection that the fill has been constructed as specified in the design approved by the regulatory authority.

(b) Disposal of spoil in valley or head-or-hollow fills. Waste material must not be disposed of in valley or head-of-hollow fills. Spoil to be disposed of in natural valleys must be placed in accordance with the following requirements:

(1) The disposal areas shall be within the permit area, and they must be approved by the regulatory authority as suitable for construction of fills in accordance with the requirements of paragraph (b) of this section.

(2) The disposal site shall be near the ridge top of a valley selected to increase the stability of the fill and to reduce the drainage area above the fill. Where possible, spoil shall be placed above a natural terrace, bench, or berm, if such placement provides additional stability and prevents mass movement.

(3) The fill shall be designed using recognized professional standards, certified by a registered professional engineer and approved by the regulatory authority.

(4) All organic material shall be removed from the disposal area and the topsoil must be removed and segregated pursuant to Section 177.107 of this part before the material is placed in the disposal area. However, if approved by the regulatory authority, organic material may be used as mulch or may be included in the topsoil.

(5) Where the slope in the disposal area exceeds 1 v:2.8h (36 percent), or such lesser slope designated by the regulatory authority based on local conditions, measures such as keyway cuts (excavations to stable bedrock) or rocktoe buttresses shall be constructed to stabilize the fill.

(6) A system of under drains constructed of durable rock shall be installed along the natural drainage system shall extend from the toe to the head of the fill and contain lateral drains to each area of potential drainage or seepage. In constructing the underdrains, no more than of 10 percent of the rock may be less than 12 inches in size and no single rock may be larger than 25 percent of the width of the drain. No rock shall be used in underdrains if it tends to easily disintegrate and thereby clog the drain or if it is acid-forming or toxic-forming. The minimum size of the main underdrain shall be:

Total amount of fill material	Predominant type of fill material	Minimum size of drain in feet	
		Width	Height
Less than 1,000,000 yd ³ .	Sandstone	10	4
Do	Shale	16	8
More than 1,000,000 yd ³ .	Sandstone	16	8
Do	Shale	16	8

(7) Spoil shall be transported and placed in a controlled manner and concurrently compacted as specified by the regulatory authority in lifts that are less than 4 feet thick in order to achieve the densities designed to ensure mass stability, to prevent mass movement, to avoid contamination of the rock underdrain and to prevent formation of voids. The final configuration of the fill must be suitable for postmining land uses approved in accordance with Section 177.104.

(8) Terraces shall be constructed to stabilize the face of the fill. The outslope of each terrace shall not exceed 50 feet in length and the width of the terrace shall not be less than 20 feet.

(9) The tops of the fill and each terrace shall be graded no steeper than 1 v :20 h (5 percent) and shall be constructed to drain surface water to the sides of the fill where stabilized surface channels shall be established off the

fill to carry drainage away from the fill. Drainage shall not be directed over the outslope of the fill unless approved by the regulatory authority.

(10) All surface drainage from the undisturbed area above the fill shall be diverted away from the fill by approved structures leading into water courses.

(11) The outslope of the fill shall not exceed 1 v :2h (50 percent). The regulatory authority may require a flatter slope.

(12) The fill shall be inspected for stability by a registered engineer or qualified professional specialist during critical construction periods and at least quarterly throughout construction to assure removal of all organic material and topsoil, placement of under drainage systems, and proper construction of terraces according to the approved plan. The registered engineer or other qualified professional specialist shall provide a certified report, after each inspection that the fill has been constructed as specified in the design approved by the regulatory authority.

Section 177.107 - Topsoil handling.

To prevent topsoil from being contaminated by spoil or waste materials, the permittee shall remove the topsoil as a separate operation from areas to be disturbed. Topsoil shall be immediately redistributed according to the requirements of paragraph (b) of this section on areas graded to the approved postmining configuration. The topsoil shall be segregated, stockpiled, and protected from wind and water erosion and from contaminants which lessen its capability to support vegetation if sufficient graded areas are not immediately available for redistribution.

(a) Topsoil removal. - All topsoil to be salvaged shall be removed before any drilling for blasting, mining, or other surface disturbance.

(1) All topsoil shall be removed unless use of alternative materials is approved by the regulatory authority in accordance with paragraph (a)(4) of this section. Where the removal of topsoil results in erosion that may cause air or water pollution, the regulatory authority shall limit the size of the area from which topsoil may be removed at any one time and specify methods of treatment to control erosion of exposed overburden.

(2) All of the A horizon of the topsoil as identified by soil surveys shall be removed according to paragraph (a) of this section and then replaced on disturbed areas as the surface soil layers. Where the A horizon is less than 6 inches, a 6-inch layer that includes the A horizon and the unconsolidated material immediately below the A horizon (or all unconsolidated material if the total available is less than 6 inches) shall be removed and the mixture segregated and replaced as the surface soil layer.

(3) Where necessary to obtain soil productivity consistent with postmining land use, the regulatory authority may require that the B horizon or portions of the C horizon or other underlying layers demonstrated to have comparable quality for root development be segregated and replaced as subsoil.

(4) Selected overburden materials may be used instead of, or as a supplement to, topsoil where the resulting soil medium is equal to or more suitable for vegetation, and if all the following requirements are met:

(i) The permittee demonstrates that the selected overburden materials or an overburden-topsoil mixture is more suitable for restoring land capability and productivity by the results of chemical and physical analyses. These analyses shall include determinations of pH, percent organic material, nitrogen, phosphorus, potassium, texture class, and water-holding capacity, and such other analyses as required by the regulatory authority. The regulatory authority also may require that results of field-site trials or greenhouse tests be used to demonstrate the feasibility of using such overburden materials.

(ii) The chemical and physical analyses and the results of field-site trials and greenhouse tests are accompanied by a certification from a qualified soil scientist or agronomist.

(iii) The alternative material is removed, segregated, and replaced in conformance with this section.

{63401} (b) Topsoil redistribution -

(1) After final grading and before the topsoil is replaced, regraded land shall be scarified or otherwise treated to eliminate slippage surfaces and to promote root penetration.

(2) Topsoil shall be redistributed in a manner that -

(i) Achieves an approximate uniform thickness consistent with the postmining land uses;

(ii) Prevents excess compaction of the spoil and topsoil; and

(iii) Protects the topsoil from wind and water erosion before it is seeded and planted.

(c) Topsoil storage. - If the permit allows storage of topsoil, the stockpiled topsoil shall be placed on a stable area within the permit area where it will not be disturbed or be exposed to excessive water, wind erosion, or contaminants which lessen its capability to support vegetation before it can be redistributed on terrain graded to final contour. Stockpiles shall be selectively placed and protected from wind and water erosion, unnecessary compaction, and contamination by undesirable materials either by a vegetative cover as defined in Section 177.110(g) or by other methods demonstrated to provide equal protection such as snow fences, chemical binders, and mulching. Unless approved by the regulatory authority, stockpiled topsoil shall not be moved until required for redistribution on a disturbed area.

(d) Nutrients and soil amendments. - Nutrients and soil amendments in the amounts and analyses as determined by soil tests shall be applied to the surface soil layer so that it will support the postmining requirements of Section 177.104 and the revegetation requirements of Section 177.110.

Section 177.108 - Protection of the hydrologic system.

The permittee shall plan and conduct coal mining and reclamation operations to minimize disturbance to the prevailing hydrologic balance in order to prevent long-term adverse changes in the hydrologic balance that could result from surface coal mining and reclamation operations, both on- and off-site. Changes in water quality and quantity, in the depth to ground water, and in the location of surface water drainage channels shall be minimized such that the postmining land use of the disturbed land is not adversely affected and applicable Federal and Tribal statutes and regulations are not violated. The permittee shall conduct operations so as to minimize water pollution and shall, where necessary, use treatment methods to control water pollution. The permittee shall emphasize surface coal mining and reclamation practices that will prevent or minimize water pollution and changes in flows in preference to the use of water treatment facilities. Practices to control and minimize pollution include, but are not limited to, stabilizing disturbed areas through grading, diverting runoff, achieving quick growing stands of temporary vegetation, lining drainage channels with rock or vegetation, mulching, sealing acid-forming and toxic-forming materials, and selectively placing waste materials in backfill areas. If pollution can be controlled only by treatment, the permittee shall operate and maintain the necessary water-treatment facilities for as long as treatment is required.

(a) Water quality standards and effluent limitations. All surface drainage from the disturbed area, including disturbed areas that have been graded, seeded, or planted shall be passed through a sedimentation pond or a series of sedimentation ponds before leaving the permit area. Sedimentation ponds shall be retained until drainage from the disturbed area have met the water quality requirements of this section and the revegetation requirements of Section 177.110 have been met. The regulatory authority may grant exemptions from this requirement only when the disturbed drainage area within the total disturbed area is small and if the permittee shows that sedimentation ponds are not necessary to meet the effluent limitations of this paragraph and to maintain water quality in downstream receiving waters. For purpose of this section only, disturbed area shall not include those areas in which only diversion ditches, sedimentation ponds, or roads are installed in accordance with this section and the upstream area is not otherwise disturbed by the permittee. Sedimentation ponds required by this paragraph shall be constructed in accordance with paragraph (e) of this section in appropriate locations prior to any mining in the affected drainage area in order to control sedimentation or otherwise treat water in accordance with this paragraph. Discharges from areas disturbed by surface coal mining and reclamation operations must meet all applicable Federal and Tribal laws and regulations and, at a minimum, the following numerical effluent limitations:

*3*Effluent limitations,
in milligrams per liter,
(mg/l) except for pH

Effluent characteristics	Maximum allowable n1	Average of daily values for 30 consecutive discharge days n1
Iron, total	7.0	3.5
Manganese, total	4.0	2.0
Total suspended solids n2.	70.0	35.0
pH n3	Within the range 6.0 to 9.0.	

n1 Based on representative sampling.

n2 In Arizona, Colorado, Montana, New Mexico, North Dakota, South Dakota, Utah, and Wyoming, total suspended solids limitations will be determined on a case-by-case basis, but they must not be greater than 45 mg/l (maximum allowable) and 30 mg/l (average of daily value for 30 consecutive discharge days) based on a representative sampling.

n3 Where the application of neutralization and sedimentation treatment technology results in inability to comply with the manganese limitations set forth, the regulatory authority may allow the pH level in the discharge to exceed to a small extent the upper limit of 9.0 in order that the manganese limitations will be achieved.

(1) Any overflow or other discharge of surface water from the disturbed area within the permit area demonstrated by the permittee to result from a precipitation event larger than a 10-year, 24-hour frequency event will not be subject to the effluent limitations of paragraph (a) of this section.

(2) The permittee shall install, operate, and maintain adequate facilities to treat any water discharged from the disturbed area that violates applicable Federal or Tribal laws or regulations or the limitations of paragraph (a) of this section. If the pH of waters to be discharged from the disturbed area is normally less than 6.0, and automatic lime feeder or other neutralization process approved by the regulatory authority shall be installed, operated, and maintained. If the regulatory authority finds (1) that small and infrequent treatment requirements to meet applicable standards do not necessitate use of an automatic neutralization process, and (2) that the mine normally produces less than 500 tons of coal per day, then the regulatory authority may approve the use of a manual system if the permittee ensures consistent and timely treatment.

(b) Surface-water monitoring.

(1) The permittee shall submit for approval by the regulatory authority a surface-water monitoring program which meets the following requirements:

(i) Provides adequate monitoring of all discharge from the disturbed area.

(ii) Provides adequate data to describe the likely daily and seasonal variation in discharges from the disturbed area in terms of water flow, pH, total iron, total manganese, and total suspended solids and, if requested by the regulatory authority, any other parameter characteristic of the discharge.

(iii) Provides monitoring at appropriate frequencies to measure normal and abnormal variations in concentrations.

(iv) Provides an analytical quality control system including standard methods of analysis such as those specified in 40 CFR 136.

(v) Provides a regular report of all measurements to the regulatory authority within 60 days of sample collection unless violations of permit conditions occur in which case the regulatory authority shall be notified immediately after receipt of analytical results by the permittee. If the discharge is subject to regulation by a Federal permit issued in compliance with the Federal Water Pollution Control Act Amendment of 1972 (33 U.S.C. Sections

1251-1378), a copy of the completed reporting form supplied to meet the permit requirements may be submitted to the regulatory authority to satisfy the reporting requirements, if the data meet the sampling frequency and other requirements of this paragraph.

(2) After disturbed areas have been regraded and stabilized in accordance with this part, the permittee shall monitor surface water flow and quality. Data from this monitoring shall be used to demonstrate that the quality and quantity of runoff without treatment will be consistent with the requirement of this section to minimize disturbance to the prevailing hydrologic balance and with the requirements of this part to attain the approved postmining land use. These data shall provide a basis for approval by the regulatory authority for removal of water quality or flow control systems and for determining when the requirements of this section are met. The regulatory authority shall determine the nature of data, frequency of collection, and reporting requirements.

{63402} (3) Equipment, structures, and other measures necessary to accurately measure and sample the quality and quantity of surface water discharges from the disturbed area of the permit area shall be properly installed, maintained, and operated and shall be removed when no longer required.

(c) Diversion and conveyance of overland flow away from disturbed areas. In order to minimize erosion and to prevent or remove water from contacting toxic-producing deposits, overland flow from undisturbed areas may, if required or approved by the regulatory authority, be diverted away from disturbed areas by means of temporary or permanent diversion structures. The following requirements shall be met:

(1) Temporary diversion structures are those used during mining and reclamation. When no longer needed, these structures shall be removed and the area reclaimed. Temporary diversion structures shall be constructed to safely pass the peak runoff from a precipitation event with a 10-year recurrence interval, or a larger event as specified by the regulatory authority.

(2) Permanent diversion structures are those remaining after mining and reclamation and approved for retention by the regulatory authority and other appropriate Tribal and Federal agencies. To protect fills and property and to avoid danger to public health and safety, permanent diversion structures shall be constructed to safely pass the peak runoff from a precipitation event with a 100-year recurrence interval, or a larger event as specified by the regulatory authority. Permanent diversion structures shall be constructed with gently sloping banks that are stabilized by vegetation. Asphalt, concrete, or other similar linings shall not be used unless specifically required to prevent seepage or to provide stability and are approved by the regulatory authority.

(3) Diversions shall be designed, constructed, and maintained in a manner to prevent additional contributions of suspended solids to streamflow or to runoff outside the permit area to the extent possible, using the best technology currently available. In no event shall such contributions be in excess of requirements set by applicable Tribal or Federal law. Appropriate sediment control measures for these diversions shall include, but not be limited to, maintenance of appropriate gradients, channel lining, revegetation, roughness structures, and detention basins.

(d) Stream channel diversions.

(1) Flow from perennial and intermittent streams within the permit area may be diverted only when the diversions are approved by the regulatory authority and they are in compliance with Tribal and Federal statutes and regulations. When streamflow is allowed to be diverted, the new stream channel shall be designed and constructed to meet the following requirements:

(i) The average stream gradient shall be maintained and the channel designed, constructed, and maintained to remain stable and to prevent additional contributions of suspended solids to streamflow, or to runoff outside the permit area to the extent possible, using the best technology currently available. In no event shall such contributions be in excess of requirements set by applicable Tribal or Federal law. Erosion control structures such as channel lining structures, retention basins, and artificial channel roughness structures shall be used only when approved by the regulatory agency for temporary diversions where necessary or for permanent diversions where they are stable and will require only infrequent maintenance.

(ii) Channel, bank, and flood-plain configurations shall be adequate to safely pass the peak runoff of a precipitation event with a 10-year recurrence interval for temporary diversions and a 100-year recurrence interval for permanent diversions, or larger events as specified by the regulatory authority.

(iii) Fish and wildlife habitat and water and vegetation of significant value for wildlife shall be protected in consultation with appropriate Tribal and Federal fish and wildlife management agencies.

(2) All temporary diversion structures shall be removed and the affected land regraded and revegetated consistent with the requirements of Section 177.105 and Section 177.110. At the time such diversions are removed,

the permittee shall ensure that downstream water treatment facilities previously protected by the diversion are modified or removed to prevent over-topping or failure of the facilities.

(3) Buffer zone . No land within 100 feet of an intermittent or perennial stream shall be disturbed by surface coal mining and reclamation operations unless the regulatory authority specifically authorizes surface coal mining and reclamation operations through such a stream. The area not to be disturbed shall be designated a buffer zone and marked as specified in Section 177.103.

(e) Sediment control measures . Appropriate sediment control measures shall be designed, constructed, and maintained to prevent additional contributions of sediment to streamflow or to runoff outside the permit area to the extent possible, using the best technology currently available. Sediment control measures may include, but are not limited to, sedimentation ponds, diversion structures, sediment traps, straw dikes, riprap, check dams, vegetative filters, dugout ponds, and chemical treatment. Sedimentation ponds may be used individually or in a series and shall (either individually or in series) meet the following criteria:

(1) Sedimentation ponds must provide at least a 24-hour detention time and a surface area of at least 1 square foot for each 50 gallons per day of inflow for runoff entering the pond(s) that results from a 10-year, 24-hour precipitation event. Runoff diverted, in accordance with paragraphs (c) and (d) of this section, away from disturbed drainage areas need not be considered in sedimentation pond design. Required sedimentation pond surface area and detention time may be accordingly reduced by the appropriate use of chemical treatment measures such as flocculation and coagulation if approved by the regulatory authority.

(2) An additional sediment storage volume must be provided equal to 0.2 acre-feet for each acre of disturbed area within the upstream drainage area. Upon approval of the regulatory authority, the sediment storage volume may be reduced in an amount, as demonstrated by the permittee equal to the sediment removed by other appropriate sediment control measures.

(3) Ponds may be of the permanent pool or self-dewatering type. Dewatering-type ponds shall use siphon or other dewatering methods approved by the regulatory authority to prevent discharges of pollutants within the design flow.

(4) Spillway systems shall be properly located to maximize the distances from the point of inflow into the pond to maximize detention times. Spillway systems shall be provided to safely discharge the peak runoff from a precipitation event with a 25-year recurrence interval, or larger event as specified by the regulatory authority.

(5) Sediment shall be removed from sedimentation ponds when the volume of sediment accumulates to 80 percent of the sediment storage volume required. Sediment removal shall be done in a manner that minimizes adverse effects on surface waters due to its chemical and physical characteristics, on infiltration, on vegetation, and on surface and ground water quality. Sediment that has been removed from sedimentation ponds and that meets the requirements for topsoil may be redistributed over graded areas in accordance with Section 177.107.

(6) If a sedimentation pond has an embankment that is more than 20 feet in height, as measured from the upstream toe of the embankment to the crest of the emergency spillway, or has a storage volume of 20 acre-feet or more, the following additional requirements shall be met:

(i) An appropriate combination of principal and emergency spillways shall be provided to safely discharge the runoff resulting from a 100-year, 6-hour precipitation event, or larger event as specified by the regulatory authority.

{63403} (ii) Ponds shall be designed and constructed with an acceptable static safety factor of at least 1.5 of maximum design flood elevation of the pool to ensure embankment slope stability.

(iii) The minimum top width of the embankment shall not be less than the quotient of $H+35/5$ where H is the height of the embankment as measured from the upstream toe of the top of the embankment.

(iv) Ponds shall have appropriate barriers to control seepage along conduits that extend through the embankment.

(7) All ponds shall be designed and inspected under the supervision of, and certified after construction by a registered professional engineer.

(8) All ponds, including those not meeting the size or other criteria of 30 CFR Section 77.216(a), shall be examined for structural weakness, erosion, and other hazardous conditions in accordance with the inspection requirements contained in 30 CFR Section 77.216-3.

(9) All ponds shall be removed and the affected land regarded and revegetated consistent with the requirements of Section 177.105 and Section 177.110, unless the regulatory authority approves retention of the ponds pursuant to paragraph (k) of this section.

(f) Discharge structures. Discharges from sedimentation ponds and diversions shall be controlled, where necessary, using energy dissipators, surge ponds, and other devices to reduce erosion and prevent deepening or enlargement of stream channels and to minimize disturbances to the hydrologic balance.

(g) Acid and toxic materials . Drainage from acid-forming and toxic-forming mine waste materials and soils into ground and surface water shall be avoided by:

(1) Identifying, burying, and treating where necessary, spoil or other materials that, in the judgment of the regulatory authority, will be toxic to vegetation or that will adversely affect water quality if not treated or buried. Such material shall be disposed of in accordance with the provision of Section 177.105(j);

(2) Preventing or removing water from contact with toxic-producing deposits;

(3) Burying or otherwise treating all toxic or harmful materials within 30 days, if such materials are subject to wind and water erosion, or within a lesser period designated by the regulatory authority. If storage of such materials is approved, the materials shall be placed on impermeable material and protected from erosion and contact with surface water. Coal waste ponds and other coal waste materials shall be maintained according to Section 177.108(g)(4), and Section 177.109 shall apply;

(4) Burying or otherwise treating waste materials from coal preparation plants no later than 90 days after the cessation of the filling of the disposal area. Burial or treatment shall be in accordance with Section 177.105(j);

(5) Casing, sealing or otherwise managing boreholes, shafts, wells, and auger holes or other more or less horizontal holes to prevent pollution of surface or ground water and to prevent mixing of ground waters of significantly different quality. All boreholes that are within the permit area but are outside the surface coal mining area or which extend beneath the coal to be mined and into water bearing strata shall be plugged permanently in a manner approved by the regulatory authority, unless the boreholes have been approved for use in monitoring.

(6) Taking such other actions as required by the regulatory authority.

(h) Ground water. -

(1) Recharge capacity of reclaimed lands . The disturbed area shall be reclaimed to restore approximate premining recharge capacity through restoration of the capability of the reclaimed areas as a whole to transmit water to the ground water system. The recharge capacity should be restored to support the approved postmining land use and to minimize disturbances to the prevailing hydrologic balance at the mined area and in associated offsite areas. The permittee shall be responsible for monitoring according to paragraph (h)(3) of this section to ensure operations conform to this requirement.

(2) Ground water systems . Backfilled materials shall be placed to minimize adverse effects on ground water flow and quality, to minimize offsite effects, and to support the approved postmining land use. The permittee shall be responsible for performing monitoring according to paragraph (h)(3) of this section to ensure operations conform to this requirement.

{63403} (3) Monitoring . Ground water levels, infiltration rates, subsurface flow and storage characteristics, and the quality of ground water shall be monitored in a manner approved by the regulatory authority to determine the effects of surface coal mining and reclamation operations on the recharge capacity of reclaimed lands and on the quantity and quality of water in ground water systems at the mine area and in associated offsite areas. When operations are conducted in such a manner that may affect the ground water system, ground water levels and ground water quality shall be periodically monitored using wells that can adequately reflect changes in ground water quantity and quality resulting from such operations. Sufficient water wells must be used by the permittee. The regulatory authority may require drilling and development of additional wells if needed to adequately monitor the ground-water system. As specified and approved by the regulatory authority, additional hydrologic tests, such as infiltration tests and aquifer tests must be undertaken by the permittee to demonstrate compliance with paragraphs (h)(1) and (2) of this section.

(i) Water rights and replacement . The permittee shall replace the water supply of an owner of interest in real property who obtains all or part of his supply of water for domestic, agricultural, industrial, or other legitimate use from an underground or surface source where such supply has been affected by contamination, diminution or interruption proximately resulting from surface coal mine operation by the permittee.

(j) Alluvial valley floors west of the 100th meridian west longitude.

(1) Surface coal mining operations conducted in or adjacent to alluvial valley floors shall be planned and conducted so as to preserve the essential hydrologic functions of these alluvial valley floors throughout the mining and reclamation process. These functions shall be preserved by maintaining or reestablishing those hydrologic and biologic characteristics of the alluvial valley floor that are necessary to support the functions. The permittee shall provide information to the regulatory authority as required in paragraph (j)(3) of this section to allow identification of essential hydrologic functions and demonstrate that the functions will be preserved. The characteristics of an alluvial valley floor to be considered include, but are not limited to:

(i) The longitudinal profile (gradient), cross-sectional shape, and other channel characteristics of streams that have formed within the alluvial valley floor and that provide for maintenance of the prevailing conditions of surface flow;

(ii) Aquifers (including capillary zones and perched water zones) and confining beds within the mined area which provide for storage, transmission, and regulation of natural ground water and surface water that supply the alluvial valley floors;

(iii) Quantity and quality of surface and ground water that supply alluvial valley floors;

(iv) Depth to and seasonal fluctuations of ground water beneath alluvial valley floors;

(v) Configuration and stability of the land surface in the flood plain and adjacent low terraces in alluvial valley floors as they allow or facilitate irrigation with flood waters or subirrigation and maintain erosional equilibrium; and

(vi) Moisture-holding capacity of soils (or plant growth medium) within the alluvial valley floors, and physical and chemical characteristics of the subsoil which provide for sustained vegetation growth or cover through dry months.

(2) Surface coal mining operations located west of the 100th meridian west longitude shall not interrupt, discontinue, or preclude farming on alluvial valley floors and shall not materially damage the quantity or quality of surface or ground water that supplies these valley floors unless the premining land use has been undeveloped rangeland which is not significant to farming on the alluvial valley floors or unless the area of affected alluvial valley floor is small and provides negligible support for the production from one or more farms. This subparagraph (2) does not apply to those surface coal mining operations that:

(i) Were in production in the year preceding August 3, 1977, were located in or adjacent to an alluvial valley floor, and produced coal in commercial quantities during the year preceding August 3, 1977; or
{63404} (ii) Had specific permit approval by the Bureau of Indian Affairs before August 3, 1977, to conduct surface coal mining operations for an area within an alluvial valley floor.

(3) (i) Before surface mining and reclamation operations authorized under paragraph (j)(2) of this section may be issued a new, revised or amended permit, the permittee shall submit, for regulatory authority approval, detailed surveys and baseline data to establish standards against which the requirements of paragraph (j)(1) of this section may be measured and from which the degree of material damage to the quantity and quality of surface and ground water that supply the alluvial valley floors may be assessed. The surveys and data shall include:

(A) A map, at a scale determined by the regulatory authority, showing the location and configuration of the alluvial valley floor;

(B) Baseline data covering a full water year for each of the hydrologic functions identified in paragraph (j)(1) of this section.

(C) Plans showing how the operation will avoid, during mining and reclamation, interruption, discontinuance, or preclusion of farming on the alluvial valley floors and will not materially damage the quantity or quality of water in surface and ground water systems that supply such valley floors;

(D) Historic land use data for the proposed permit area and for farms to be affected; and

(E) Such other data as the regulatory authority may require.

(ii) Surface mining operations which qualify for the exceptions in paragraph (j)(2) of this section are not required to submit the plans prescribed in paragraph (j)(3)(i)(C) of this section.

(k) Permanent impoundments . The permittee may construct, if authorized by the regulatory agency pursuant to this paragraph and Section 177.104 permanent water impoundments on mining sites as a part of reclamation activities only when they are adequately demonstrated to be in compliance with Section 177.104 and Section 177.105 in addition to the following requirements:

(1) The size of the impoundment is adequate for its intended purposes.

(2) The impoundment dam construction is designed to achieve necessary stability with an adequate margin of safety compatible with that of structures constructed under Pub.L. 83-566 (16 U.S.C. 1006).

(3) The quality of the impounded water will be suitable on a permanent basis for its intended use and discharges from the impoundment will not degrade the quality of receiving waters below the water quality standards established pursuant to applicable Federal and Tribal law.

(4) The level of water will be reasonably stable.

(5) Final grading will comply with the provisions of Section 177.105 and will provide adequate safety and access for proposed water users.

(6) Water impoundments will not result in the diminution of the quality or quantity of water used by adjacent or surrounding landowners for agricultural, industrial, recreational, or domestic uses.

(1) Hydrologic impact of roads . -

(1) General . Access and haul roads and associated bridges, culverts, ditches, and road rights-of-way shall be constructed, maintained, and reclaimed to prevent additional contributions of suspended solids to streamflow, or to runoff outside the permit area to the extent possible, using the best technology currently available. In no event shall the contributions be in excess of requirements set by applicable Tribal or Federal law. All access and haul roads shall be removed and the land affected regarded and revegetated consistent with the requirements of Section 177.105 and Section 177.110 unless retention of a road is approved as part of a postmining land use under Section 177.104 as being necessary to support the postmining land use or necessary to adequately control erosion and the necessary maintenance is assured.

(2) Construction.

(i) All roads, insofar as possible, shall be located on ridges or on the available flatter and more stable slopes to minimize erosion. Stream fords are prohibited unless they are specifically approved by the regulatory authority as temporary routes across dry streams that will not adversely affect sedimentation and that will not be used for coal haulage. Other stream crossing shall be made using bridges, culverts or other structure designed and constructed to meet the requirements of this paragraph. Roads shall not be located in active stream channels nor shall they be constructed or maintained in a manner that increases erosion or causes significant sedimentation or flooding. However, nothing in this paragraph will be construed to prohibit relocation of stream channels in accordance with paragraph (d) of this section.

(ii) In order to minimize erosion and subsequent disturbances of the hydrologic balance, roads shall be constructed in compliance with the following grade restrictions or other grades determined by the regulatory authority to be necessary to control erosion:

(A) The overall sustained grade shall not exceed 1 v :10h (10 percent).

(B) The maximum grade greater than 10 percent shall not exceed 1v :6.5h (15 percent) for more than 300 feet.

(C) There shall not be more than 300 feet of grade exceeding 10 percent within each 1,000 feet.

(iii) All access and haul roads shall be adequately drained using structures such as, but not limited to, ditches, water barriers, cross drains, and ditch relief drains. For access and haul roads that are to be maintained for more than 1 year, water-control structures shall be designed with a discharge capacity capable of passing the peak runoff from a 10-year, 24-hour precipitation event. Drainage pipe and culverts shall be constructed to avoid plugging or collapse and erosion at inlets and outlets. Drainage ditches shall be provided at the toe of all cut slopes formed by construction of roads. Trash racks and debris basins shall be installed in the drainage ditches wherever debris from the drainage area could impair the functions of drainage and sediment control structures. Ditch relief and cross drains shall be spaced according to grade. Effluent limitations of paragraph (a) of this section shall not apply to drainage from access and haul roads located outside the disturbed area as defined in this section unless otherwise specified by the regulatory authority.

(iv) Access and haul roads shall be surfaced with durable material. Toxic or acid-forming substances shall not be used. Vegetation may be cleared only for the essential width necessary for road and associated ditch construction and to serve traffic needs.

(3) Maintenance. -

(i) Access and haul roads shall be routinely maintained by means such as, but not limited to, wetting, scraping or surfacing.

(ii) Ditches, culverts, drains, trash racks, debris basins and other structures serving to drain access and haul roads shall not be restricted or blocked in any manner that impedes drainage or adversely affects the intended purpose of the structure.

(m) Hydrologic impacts of other transport facilities . Railroad loops, spurs, sidings and other transport facilities shall be constructed, maintained and reclaimed to control diminution or degradation of water quality and quantity and to prevent additional contributions of suspended solids to streamflow, or run-off outside the permit area to the extent possible, using the best technology currently available.

In no event shall contributions be in excess of requirements set by applicable Tribal or Federal law.

(n) Discharge of waters into underground mines . Surface and ground waters shall not be discharged or diverted into underground mine workings.

Section 177.109 - Dams constructed of or impounding waste material.

(a) General . No waste material shall be used in or impounded by existing or new dams without the approval of the regulatory authority. The permittee shall design, locate, construct, operate, maintain, modify, and abandon or remove all dams (used either temporarily or permanently) constructed of waste materials, in accordance with the requirements of this section.

(b) Construction of dams.

(1) Waste shall not be used in the construction of dams unless demonstrated through appropriate engineering analysis, to have no adverse effect on stability.

(2) Plans for dams subject to this section and also including those dams that do not meet the size or other criteria of 30 CFR Section 77.216(a), shall be approved by the regulatory authority before construction and shall contain the minimum plan requirements established by the Mining Enforcement and Safety Administration pursuant to 30 CFR Section 77.216-2.

{63405} (3) Construction requirements are as follows:

(i) Design shall be based on the flood from the probable maximum precipitation event unless the permittee shows that the failure of the impounding structure would not cause loss of life or severely damage property or the environment, in which case, depending on site conditions, a design based on a precipitation event of no less than 100-year frequency may be approved by the regulatory authority.

(ii) The design freeboard distance between the lowest point on the embankment crest and the maximum water elevation shall be at least 3 feet to avoid overtopping by wind and wave action.

(iii) Dams shall have minimum safety factors as follows:

Case	Loading condition	Minimum safety
I	End of construction	1.3
II	Partial pool with steady seepage saturation.	1.5
III	Steady seepage from spillway or decant crest.	1.5
IV	Earthquake (cases II and III with seismic loading.)	1.0

(iv) The dam, foundation, and abutments shall be stable under all conditions of construction and operation of the impoundment. Sufficient foundation investigations and laboratory testing shall be performed to determine the factors of safety of the dam for all loading conditions in paragraph (b)(3)(iii) of this section and for all increments of construction.

(v) Seepage through the dam, foundation, and abutments shall be controlled to prevent excessive uplift pressures, internal erosion, sloughing, removal of material by solution, or erosion of material by loss into cracks, joints, and cavities. This may require the use of impervious blankets, previous drainage zones or blankets, toe drains, relief wells, or dental concreting of jointed rock surface in contact with embankment materials.

(vi) Allowances shall be made for settlement of the dams and the foundation so that the freeboard will be maintained.

(vii) Impoundments created by dams of waste materials shall be subject to a minimum drawdown criteria that allows the facility to be evacuated by spillways or decants of 90 percent of the volume of water stored during the design precipitation event within 10 days.

(viii) During construction of dams subject to this section, the structures shall be periodically inspected by a registered professional engineer to ensure construction according to the approved design. On completion of construction, the structure shall be certified by a registered professional engineer experienced in the field of dam construction as having been constructed in accordance with accepted professional practice and the approved design.

(ix) A permanent identification marker, at least 6 feet high that shows the dam number assigned pursuant to 30 CFR Section 77.216-1 and the name of the person operating or controlling the dam, shall be located on or immediately adjacent to each dam within 30 days of certification of design pursuant to this section.

(4) All dams, including those not meeting the size or other criteria of 30 CFR Section 77.216(a), shall be routinely inspected by a registered professional engineer, or someone under the supervision of a registered professional engineer, in accordance with Mining Enforcement and Safety Administration regulations pursuant to 30 CFR Section 77.216-3.

(5) All dams shall be routinely maintained. Vegetative growth shall be cut where necessary to facilitate inspection and repairs. Ditches and spillways shall be cleaned. Any combustible materials present on the surface, other than that used for surface stability such as mulch or dry vegetation, shall be removed and any other appropriate maintenance procedures followed.

(6) All dams subject to this section shall be certified annually as having been constructed and modified in accordance with current prudent engineering practices to minimize the possibility of failures. Any changes in the geometry of the impounding structure shall be highlighted and included in the annual certification report. These certifications shall include a report on existing and required monitoring procedures and instrumentation, the average and maximum depths and elevations of any impounded waters over the past year, existing storage capacity of impounding structures, any fires occurring in the material over the past year and any other aspects of the structures affecting their stability.

(7) Any enlargements, reductions in size, reconstruction or other modification of the dams shall be approved by the regulatory authority before construction begins.

(8) All dams shall be removed and the disturbed areas regraded, revegetated, and stabilized before the release of bond unless the regulatory authority approve retention of such dams as being compatible with an approved postmining land use (Section 177.104).

Section 177.110 - Revegetation.

(a) General.

(1) The permittee shall establish on all land that has been disturbed, a diverse, effective, and permanent vegetative cover of species native to the area of disturbed land or species that will support the planned postmining uses of the land approved according to Section 177.104.

(2) Revegetation shall be carried out in a manner that encourages a prompt vegetative cover and recovery of productivity levels compatible with approved land uses. The vegetative cover shall be capable of stabilizing the soil surface with respect to erosion. All disturbed lands, except water areas and surface areas of roads that are approved as a part of the postmining land use, shall be seeded or planted to achieve a vegetative cover of the same seasonal variety native to the area of disturbed land. If both the pre- and postmining land use is intensive agriculture, planting the crops normally grown will meet the requirement. Vegetative cover will be considered of the same seasonal variety when it consists of a mixture of species of equal or superior utility for the intended land use when compared with the utility of naturally occurring vegetation during each season of the year.

(b) Use of introduced species . Introduced species may be substituted for native species only if appropriate field trials have demonstrated that the introduced species are of equal or superior utility for the approved postmining land use, or are necessary to achieve a quick, temporary, and stabilizing cover. Such species substitution shall be

approved by the regulatory authority. Introduced species shall meet applicable Tribal and Federal seed or introduced species statutes, and shall not include poisonous or potentially toxic species.

(c) Timing of revegetation . Seeding and planting of disturbed areas shall be conducted during the first normal period for favorable planting conditions after final preparation. The normal period for favorable planting shall be that planting time generally accepted locally for the type of plant materials selected to meet specific site conditions and climate. Any disturbed areas, except water areas and surface areas of roads that are approved under Section 177.104 as part of the postmining land use, which have been graded shall be seeded with a temporary cover of small grains, grasses, or legumes to control erosion until an adequate permanent cover is established. When rills or gullies, that would preclude the successful establishment of vegetation or the achievement of the postmining land use, form in regraded topsoil and overburden materials as specified in Section 177.105, additional regrading or other stabilization practices will be required before seeding and planting.

(d) Mulching .Mulch shall be used on all regraded and topsoiled areas to control erosion, to promote germination of seeds, and to increase the moisture retention of the soil. Mulch shall be anchored to the soil surface where appropriate, to ensure effective protection of the soil and vegetation. Mulch means vegetation residues or other suitable materials that aid in soil stabilization and soil moisture conservation, thus providing micro-climatic conditions suitable for germination and growth, and do not interfere with the postmining use of the land. Annual grains such as oats, rye and wheat may be used instead of mulch when it is shown to the satisfaction of the regulatory authority that the substituted grains will provide adequate stability and that they will later be replaced by species approved for the postmining use.

(e) Methods of revegetation.

(1) The permittee shall use technical publications or the results of laboratory and field tests approved by the regulatory authority to determine the varieties, species, seeding rates, and soil amendment practices essential for establishment and self-regeneration of vegetation. The regulatory authority shall approve species selection and planting plans.

{63406} (2) Where hayland, pasture, or range is to be the postmining land use, the species of grasses, legumes, browse, trees, or forbes for seeding or planting and their pattern of distribution shall be selected by the permittee to provide a diverse, effective, and permanent vegetative cover with the seasonal variety, succession, distribution, and regenerative capabilities native to the area. Livestock grazing will not be allowed on reclaimed land until the seedlings are established and can sustain managed grazing. The regulatory authority, in consultation with the permittee and the landowner or in concurrence with the governmental land-managing agency having jurisdiction over the surface, shall determine when the revegetated area is ready for livestock grazing.

(3) Where forest is to be the postmining land use, the permittee shall plant trees adapted for local site conditions and climate. Trees shall be planted in combination with an herbaceous cover of grains, grasses, legumes, forbes, or woody plants to provide a diverse, effective, and permanent vegetation cover with the seasonal variety, succession, and regeneration capabilities native to the area.

(4) Where wildlife habitat is to be included in the postmining land use, the permittee shall consult with appropriate Tribal and Federal wildlife and land management agencies and shall select those species that will fulfill the needs of wildlife, including food, water, cover, and space. Plant groupings and water resources shall be spaced and distributed to fulfill the requirements of wildlife.

(f) Standards for measuring success of revegetation.

(1) Success of revegetation shall be measured on the basis of reference areas approved by the regulatory authority. Reference areas mean land units of varying size and shape identified and maintained under appropriate management for the purpose of measuring ground cover, productivity and species diversity that are produced naturally. The reference areas must be representative of geology, soils, slope, aspect, and vegetation in the permit area. Management of the reference area shall be comparable to that which will be required for the approved postmining land use of the area to be mined. The regulatory authority shall approve the estimating techniques that will be used to determine the degree of success in the revegetated area.

(2) The ground cover of living plants on the revegetated area shall be equal to the ground cover of living plants of the approved reference area for a minimum of two growing seasons. The ground cover shall not be considered equal if it is less than 90 percent of the ground cover of the reference area for any significant portion of

the mined area. Exceptions may be authorized by the regulatory authority for:

(i) Previously mined areas that were not reclaimed to the standards required by this part prior to the effective date of these regulations. The ground cover of living plants for such areas shall not be less than required to control erosion, and in no case less than that existing before redisturbance;

(ii) Areas to be developed immediately for industrial or residential use. The ground cover of living plants shall not be less than required to control erosion. As used in this paragraph, immediately means less than 2 years after regrading has been completed for the area to be used; and

(iii) Areas to be used for agricultural cropland purposes. Success in revegetation of crop land shall be determined on the basis of crop production from the mined area compared to the reference area. Crop production from the mined area shall be equal to that of the approved reference area for a minimum of two growing seasons. Production shall not be considered equal if it is less than 90 percent of the production of the reference area for any significant portion of the mined area.

(3) Species diversity, distribution, seasonal variety, and vigor shall be evaluated on the basis of the results which could reasonably be expected using the methods of revegetation approved under paragraph (e) of this section.

(g) Seeding of stockpiled topsoil. Topsoil stockpiled in compliance with Section 177.107 must be seeded or planted with an effective cover of nonnoxious, quick growing annual and perennial plants during the first normal period for favorable planting conditions or protected by other approved measures as specified in Section 177.107.

Section 177.111 - Steep-slope mining.

(a) The permittee conducting surface coal mining and reclamation operations on natural slopes that exceed 20 degrees, or on lesser slopes that require measures to protect the area from disturbance, as determined by the regulatory authority after consideration of soils, climate, the method of operation, geology, and other regional characteristics, shall meet the following performance standards. The standards of this section do not apply where mining is done on a flat or gently rolling terrain with an occasional steep slope through which the mining proceeds and leaves a plain or predominantly flat area; or where the mining removes entire coal seams running through the upper fraction of a mountain, ridge, or hill by removing all of the overburden and creating a level plateau or gently rolling contour.

(1) Spoil, waste materials or debris, including that from clearing and grubbing, and abandoned or disabled equipment, shall not be placed or allowed to remain on the downslope.

(2) The highwall shall be completely covered with spoil and the disturbed area graded to comply with the provisions of Section 177.105 of this part. Land above the highwall shall not be disturbed unless the regulatory authority finds that the disturbance will facilitate compliance with the requirements of this section.

(3) Material in excess of that required to meet the provisions of Section 177.105 of this part shall be disposed of in accordance with the requirements of Section 177.106 of this part.

(4) Woody materials may be buried in the backfilled area only when burial does not cause, or add to, instability of the backfill. Woody materials may be chipped and distributed through the backfill when approved by the regulatory authority.

Section 177.112 - Inspections.

(a) Extent. The authorized representatives of the Secretary shall conduct inspections of surface coal mining operations subject to regulations under the Act -

(1) On the basis of information provided by a Tribe or any person which gives rise to a reasonable belief that the provisions of the Act, regulations or permit condition required by the Act are being violated, or that a condition or practice exists which creates an imminent danger to the health or safety of the public, or is causing, or can reasonably be expected to cause significant, imminent environmental harm to land, air or water resources; and

(2) On a random basis of at least one complete inspection each 6 months. A complete inspection is an onsite review of the operator's compliance with all applicable standards in these regulations within the entire area disturbed or affected by mining.

(b) Right of Entry.

(1) Authorized representatives of the Secretary, without advance notice and upon presentation of appropriate credentials and without a search warrant, shall have the right of entry to, upon, or through any surface coal mining and reclamation operations or any premises in which any records required to be maintained are located.

(2) The authorized representatives may at reasonable times, and without delay, have access to and copy any records, and inspect any monitoring equipment or method of operation required under this act, the regulations or the permit.

(c) Inspection based on citizen requests.

(1) Citizen reports.

(i) Any person who believes that there is a violation of the Act, regulations or permit conditions required by the Act or that any imminent danger or harm exists may report this information to the Office of Surface Mining Reclamation and Enforcement. Written reports must be signed and include a phone number where the reporting party can be contacted. Oral reports will be accepted but must be followed by a written and signed statement including the information reported. The complaint or other information shall be considered as having a reasonable basis if it alleges facts which, if proven to be true, would be sufficient to show a violation of the Act, regulations or permit. Unless the Office has reason to believe that the information is incorrect, or determines that even if true it would not constitute a violation, the Office shall conduct an inspection within 15 days of receipt of the complaint. If the complaint alleges an imminent danger or harm, the inspection shall be conducted promptly.

{63407} (ii) The identity of any person supplying information to the Office relating to possible violations or imminent dangers or harms shall remain confidential with the Office, if requested by the person supplying the information, unless disclosure is required under the Freedom of Information Act (5 U.S.C. Section 552) or by other Federal law.

(2) Right to Accompany the Authorized Representative of the Secretary.

(i) If a Federal inspection is conducted as a result of information provided to the Office, the person who provided the information shall be notified when the inspection is to occur and the person will be allowed to accompany the authorized representative of the Secretary during the inspection.

(ii) Any person accompanying an authorized representative of the Secretary has a right of entry to, upon and through the mining and reclamation operations about which he supplied information, only if he is in the presence of and is under the control, direction and supervision of the authorized representative while on the mine property.

(3) Notification of Results of Investigation. Within 10 days of the inspection or, if no inspection, within 15 days of the complaint, the Office shall notify the person in writing of the following -

(i) The results of the investigation, including a description of any inspection which occurred and any enforcement action taken; copies of Federal inspection reports, notices of violation, and cessation orders may be forwarded to the person in satisfaction of this requirement.

(ii) If no inspection was conducted, an explanation of the reason for not inspecting.

(iii) A statement as to the person's right to informal review of the actions or inactions of the Office.

(iv) The permittee shall receive copies of all such reports which have not already been given to the permittee, except that the name of the complainant shall be removed.

(4) Review of Action of Local Offices. A person who does not agree with the action taken by the Office on their report may request the Regional Director to review the complaint and actions taken. The Regional Director shall advise the person in writing, within 30 days, of the results of the review. Informal review under this subsection shall not affect any rights to formal review or a citizen's suit.

(d) Failure to Give Notice and Lack of Reasonable Belief. No notice of violation or cessation order may be vacated by reason of failure to give notice required by the Act, or these regulations prior to the inspection; or by reason of a subsequent determination that prior to the inspection the Office did not have information sufficient to create a reasonable belief that a violation had occurred.

(e) Tribal involvement.

(1) Whenever an authorized representative of the Secretary decides to conduct an inspection of any coal mining operation or any premises in which any records to be maintained are located, the appropriate representative of

the local governing Indian Tribe shall be notified and invited to accompany the Secretary's representative on such an inspection.

(2) An Indian Tribe, or its authorized representatives, shall be entitled to all the protections of paragraph (c) of this section.

Section 177.113 - Enforcement procedures.

(a) Imminent Dangers and Harms.

(1) If an authorized representative of the Secretary finds conditions or practices, or violations of applicable performance standards, which create an imminent danger to the health or safety of the public, the authorized representative shall immediately order a cessation of surface coal mining and reclamation operations or that portion of the operation relevant to the condition, practice, or violation.

(2) If an authorized representative of the Secretary finds conditions or practices, or violations of applicable performance standards, which are causing or can reasonably be expected to cause significant, imminent environmental harm to land, air, or water resources, the authorized representative shall immediately order a cessation of surface coal mining and reclamation operations or that portion of the operation relevant to the condition, practice, or violation.

(3) An authorized representative of the Secretary shall impose affirmative obligations on an operator which the authorized representative deems necessary to abate the condition, practice, or violation if -

(i) A cessation order is issued under paragraph (a)(1) or (2) of this section; and

(ii) The cessation of mining or reclamation activities will not completely abate the imminent danger or harm or eliminate the practices or conditions that contributed to the imminent danger or harm.

(4) When imposing affirmative obligations under this section, the authorized representative of the Secretary shall require abatement of the imminent danger or harm in the most expeditious manner physically possible. The affirmative obligation shall include a time by which abatement shall be accomplished and may include, among other things, the use of existing or additional personnel and equipment.

(5) Reclamation operations not directly the subject of the order or affirmative obligation shall continue during any cessation order.

(6) An authorized representative of the Secretary shall terminate a cessation order issued under paragraph (a)(1) or (2) of this section by written notice when the authorized representative determines that the conditions or practices or violations that contributed to the imminent danger to life or the environment have been eliminated.

(b) Non-Imminent Danger or Harm.

(1) If an authorized representative of the Secretary finds a violation which is not covered by paragraph (a), the authorized representative shall issue a notice of violation fixing a reasonable time for abatement.

(2) An authorized representative of the Secretary may extend the time to abate a violation by written notice if the failure to abate within the time set was not caused by the permittee's lack of diligence.

(3) An authorized representative of the Secretary may establish interim steps in an abatement period. If the permittee fails to meet any interim step within the time set, the authorized representative may extend the time set for meeting the interim step, in accordance with this section, or may issue a cessation order pursuant to paragraph (c).

(4) The total time for abatement as originally fixed and subsequently extended shall not exceed 90 days.

(c) Failure to Abate. An authorized representative of the Secretary shall order cessation of surface coal mining and reclamation operations, or the portion relevant to the violation, when a notice of violation has been issued under paragraph (b) and the permittee fails to abate the violation within the time originally fixed or subsequently extended. In a cessation order issued under this subsection, the authorized representative shall impose affirmative obligations to abate the violation in the manner provided in Section 722.11 of this part. Reclamation operations not directly the subject of the order or affirmative obligation shall continue during any cessation order. A cessation order issued under this subsection shall be terminated as provided in paragraph (a).

(d) Service of Notice. Notices and orders issued under this part shall be given to the permittee or his designated agent. If no designated agent is found at the mine site, service will be made upon the person who, based on reasonable inquiry by the authorized representative of the Secretary, appears to be in charge of the mining or reclamation operation. The person receiving service shall be responsible for any immediate compliance actions

required by the notice or order. Service is complete on delivery at the mine. However, a copy of each notice or order shall be mailed to the permittee within 48 hours.

{63408} (e) Review at Minesite of Cessation Order.

(1) Within 30 days after the permittee has received any cessation order issued under this part, a representative of the Office may conduct an informal hearing at the minesite or within such reasonable proximity to the mine that it may be visited during the conduct of the hearing. No hearing will be required where the condition, practice, or violation in question has been abated or the permittee waives the hearing. If no hearing is held because of a waiver, the cessation order shall not expire.

(2) Any request made to the Office for a substantial modification or vacation of a cessation order shall be deemed a request for an informal hearing under this paragraph.

(3) Notice of the time, place and subject matter of the hearing shall be given to the permittee, any citizen who filed a report which led to the cessation order to be reviewed, and appropriate officials of the local governing Indian Tribe. Notice of the hearing also shall be posted at the appropriate district or field office and at the mine site and, to the extent possible, in a newspaper in the area of the mine.

(4) The requirements of Section 554 of Title 5 of the United States Code shall not govern the conduct of the hearings required by this paragraph. The representative of the Office may accept oral or written arguments and any other relevant information from any person attending.

(5) Within 15 days of the close of the informal hearing, the Office shall affirm, modify, or vacate the order. The decision shall be in writing and shall be sent to the permittee, any citizen who filed a report which led to the cessation order reviewed, and the appropriate agency of the local governing Indian Tribe.

(6) Informal review under this subsection shall not affect the rights of any person to request formal review under Section 525(a)(1) of the Act. A request for informal review under this section of the Act shall not affect the 30-day time period for filing a request for formal review.

(f) Pattern of Violations.

(1) The regulations of this paragraph set forth the procedures governing the suspension or revocation of permits and rights to mine under this Act based on a pattern of violations arising during Federal inspections during the initial regulatory program.

(2) Definitions. As used in this paragraph -

(i) "VIOLATIONS OF THE SAME OR RELATED REQUIREMENTS OF THE ACT, REGULATIONS OR PERMIT CONDITIONS" means noncompliance with any single section of this part.

(ii) "VIOLATIONS OF DIFFERENT REQUIREMENTS OF THE ACT, REGULATIONS, OR PERMIT CONDITIONS" means noncompliance with different sections of this part.

(iii) "UNWARRANTED FAILURE TO COMPLY" means the failure of a permittee to prevent the occurrence of any violation of his permit or any requirement of the Act or these regulations due to indifference, lack of diligence, lack of reasonable care; or the failure to abate any violation of such permit, the Act or regulations due to indifference, lack of diligence, or lack of reasonable care.

(iv) "WILLFUL VIOLATION" means an intentional action or omission which violates the Act, regulations or permit conditions required under the Act.

(v) "INSPECTION" as used in this paragraph means any visit to the mine.

(3) Order to show cause.

(i) If the Director determines that a pattern of violations of any requirements of the Act, the regulations, or a permit condition imposed under the Act or regulations exists, or has existed, and that such violations are caused by the unwarranted failure of the permittee or were willful violations, the Director shall issue an order to the permittee to show cause why the permit should not be suspended or revoked.

(ii) The Director may determine that a pattern of violations exists or has existed, after considering the circumstances, including -

(A) The number of willful violations or violations caused by unwarranted failure to comply with the same or related requirements of the Act, regulations, or permit conditions during two or more Federal inspections;

(B) The number of willful violations or violations caused by unwarranted failure to comply with different requirements of the Act, regulations, or permit conditions; and

(C) The extent to which the violations were isolated departures from lawful conduct.

(iii) Violations of the same or related requirements of the Act, regulations, or permit conditions required by the Act during three or more Federal inspections within any 12-month period which were either caused by the unwarranted failure of the permittee to comply with the Act, the regulations or permit conditions required by the Act, or were willful violations, shall constitute a pattern of violations. A show cause order shall issue unless the Director finds that it would not further enforcement of the performance standards of the Act.

(4) Suspension or revocation of permit.

(i) The order to show cause shall be issued and a public hearing, if requested, shall be conducted under the procedures of 43 CFR Part 4.

(ii) If the Secretary finds that a pattern of violations exists or has existed, the permit and right to mine under this Act shall be either suspended or revoked and the permittee directed to complete necessary corrective measures and reclamation operations.

(g) Inability to Comply.

(1) Neither a notice of violation nor a cessation order issued under this part may be vacated because of inability to comply.

(2) A permittee may not be deemed to have shown good cause for not suspending or revoking a permit by showing inability to comply.

(3) Unless caused by lack of diligence, inability to comply may be considered in mitigation of the amount of a civil penalty under Section 177.114 and of the duration of the suspension of the permit under paragraph (f) of this section.

(h) Other remedies preserved. No provision in this section shall be interpreted as replacing or superseding any other remedies of the Indian mineral owner as set forth in the contract or otherwise available at law.

(i) With respect to coal leases issued on Indian lands after August 3, 1977, the Secretary shall enforce terms and conditions in addition to those required by this subpart, as may be requested by the Indian Tribe in such leases.

Section 177.114 - Civil penalties.

(a) Scope. This section covers the assessment of civil penalties for violations of a permit condition, or any provision of the regulations in this subpart. This section governs when a civil penalty is assessed and how the amount is determined and sets forth applicable procedures. This section applies to cessation orders and notices of violation issued to permittees or operators under Section 177.113 during a Federal inspection.

(b) When assessment made.

(1) The Office will review each notice of violation and cessation order in accordance with the assessment procedures described in this section to determine whether a civil penalty will be assessed, the amount of the penalty and whether each day of a continuing violation will be deemed a separate violation for purposes of the total penalty assessed.

(2) The Office shall assess a civil penalty for each violation contained in a cessation order.

(3) In determining whether to assess a civil penalty for a violation not covered by paragraph (b)(2) above, the Office shall consider -

(i) The permittee's history of previous violations at the particular coal mining operation;

(ii) The seriousness of the violation;

(iii) Whether the permittee is negligent; and

(iv) The demonstrated good faith of the permittee in attempting to achieve rapid compliance after notification of the violation. The Office shall make this determination by use of a point system described in paragraph (c) of this section.

(c) Whether to assess after a notice of violation.

(1) General. The Office shall determine whether to assess a penalty following the issuance of a notice of violation by a point system that takes into account the four criteria in paragraph (b)(3) of this section. Points are

assigned based on each of the four criteria. If the total is more than 30 points, a penalty shall be assessed.

(2) History of previous violations. The Office shall assign one point for each past violation, and five points for each past cessation order issued as a result of a violation at the particular coal mining operation, up to a maximum of 30 points. Each violation which underlies a cessation order shall be counted separately from the cessation order itself. For purposes of history of previous violations, all violations and cessation orders issued within one year preceding the violation under consideration shall be counted unless -

(i) The violation or cessation order is the subject of pending administrative or judicial review or; {63409} (ii) The violation or cessation order has been vacated because of a determination that the violation did not occur. In the event that administrative or judicial review is sought, the period of time during which the contested notice or order was under review shall not be counted in computing the 1-year period preceding the notice or order. The Office shall count each violation without regard to whether it led to a civil penalty assessment.

(3) Seriousness. The Office shall assign up to 30 points based on the seriousness of the violation according to the following schedules:

(i) Probability of occurrence. The probability of the occurrence of the event which a violated standard is designed to prevent may account for a maximum of 15 penalty points. (An example of the concept of the phrase "the event which a violated standard is designed to prevent" is as follows: Mishandling of topsoil is a violation of the topsoil standard in Section 177.107 of this part; however, delay or failure in the revegetation and resulting environmental harm are the events which the topsoil standard in Section 177.107 of this part is designed to prevent.) The Office shall use the following definitions and schedules -

Probability of occurrence:	Points
None or insignificant	0-5
Unlikely	5-10
Likely	10-15
Occurred	15

(ii) Extent of potential or actual damage. The extent of the potential or actual damage in terms of area and impact on the public or environment may account for a maximum of 15 penalty points based on the following -

(A) If the damage or impact which the violated standard is designed to prevent would remain within the permit area (or in the case of a deep mine, the area of surface structures), the Office shall assign zero to seven points depending on the duration and extent of the damage or impact.

(B) If the damage or impact against which the violated standard is designed to prevent would extend outside the permit area (or in the case of a deep mine, the area of surface structures), the Office shall assign eight to fifteen points depending on the duration and extent of the damage or impact.

(iii) In the case of a violation of a requirement of the Act, the regulations, or a permit to keep records, give notice, or conduct any measuring or monitoring, the Office may, as an alternative to the use of paragraphs (c)(3)(i) and (3)(ii) above assign up to 15 points for seriousness based upon the extent to which enforcement is obstructed by the violation.

(4) Negligence.

(i) The Office shall assign up to 25 points based on the degree of fault of the permittee, either through act or omission, in causing or failing to correct the condition or practice which is a violation. A violation which occurs through no negligence shall not be assigned penalty points for negligence. A violation which is caused by negligence shall be assigned 12 points or less depending on the degree of negligence. A violation which occurs through a greater degree of fault than negligence shall be assigned 13 through 25 penalty points depending on the degree of fault.

(ii) In determining the degree of negligence involved in a violation and the number of penalty points to be assigned, the following definitions apply -

(A) No negligence means an inadvertent violation of the Act, regulations or permit conditions which was unavoidable by the exercise of reasonable care.

(B) Negligence means the failure of a permittee to prevent the occurrence of any violation of his permit or any requirement of the Act or the regulations due to indifference, lack of diligence, or lack

of reasonable care, or the failure to correct any violation of such permit or the Act or the regulations due to indifference, lack of diligence or lack of reasonable care.

(C) Examples of greater degree of fault than negligence are reckless, knowing or intentional conduct.

(iii) In calculating points to be assigned for negligence, the actions of all persons working on the mine site shall be attributed to the permittee or operator.

(5) Good faith in attempting to achieve compliance. (i) The Office shall subtract or add points based on the degree of good faith of the permittee in attempting to achieve rapid compliance after notification of the violation. The points shall be assigned according to the following schedule -

Degree of good faith:	Points
Rapid	-10
Normal	0
Lack of good faith	10

(ii) In determining the permittee's degree of good faith in attempting to achieve rapid compliance, the following definitions apply -

(A) Rapid compliance means that the permittee took extraordinary measures to abate the violation in the shortest possible time and that abatement was achieved before the time set for abatement.

(B) Normal compliance means the permittee abated the violation within the time given for abatement.

(C) Lack of good faith means the permittee did not show diligence in attempting to abate the violation and the violation was not timely abated.

(iii) If the consideration of this criteria is impractical because of the length of the abatement period, the assessment may be made without considering this criteria. Any such assessment may be reconsidered upon the permittee's request after abatement is completed.

(d) Determination of amount of penalty. The Office shall determine the amount of any civil penalty by converting the total number of points assigned under paragraph (c) of this section to a dollar amount according to the following schedule:

1 -	\$2 0	2 -	40
3 -	60	4 -	80
5 -	100	6 -	120
7 -	140	8 -	160
9 -	180	10 -	200
11 -	220	12 -	240
13 -	260	14 -	280
15 -	300	16 -	320
17 -	340	18 -	360
19 -	380	20 -	400
21 -	420	22 -	440
23 -	460	24 -	480
25 -	500	26 -	600
27 -	700	28 -	800
29 -	900	30 -	1,000
31 -	1,100	32 -	1,200
33 -	1,300	34 -	1,400
35 -	1,500	36 -	1,600
37 -	1,700	38 -	1,800
39 -	1,900	40 -	2,000

41 -	2,100	42 -	2,200
43 -	2,300	44 -	2,400
45 -	2,500	46 -	2,600
47 -	2,700	48 -	2,800
49 -	2,900	50 -	3,000
51 -	3,100	52 -	3,200
53 -	3,300	54 -	3,400
55 -	3,500	56 -	3,600
57 -	3,700	58 -	3,800
59 -	3,900	60 -	4,000
61 -	4,100	62 -	4,200
63 -	4,300	64 -	4,400
65 -	4,500	66 -	4,600
67 -	4,700	68 -	4,800
69 -	4,900	70 and above	5,000

(e) Assessment of separate violations for each day.

(1) If a cessation order is issued for failure to abate a violation within the time set in a prior notice of violation the Office shall assess separately each day the violation underlying the cessation order remains unabated following expiration of the abatement period in the notice of violation. The daily penalty shall be the amount assessed for the violation or \$7 50.00, whichever is greater. The daily assessment of a penalty shall not be made for any period that the obligation to abate is suspended.

(2) The Office may assess separately each day of any continuing violation. In making this determination, the Office may consider the factors listed in paragraph (b) of this section and any economic benefit to the permittee which resulted from a failure to comply.

(3) The Office shall separately assess a minimum of 2 days for any continuing violation which is assigned more than 70 points under paragraph (c) of this section.

(f) Waiver of use of formula to determine civil penalty. The Director, upon his own initiative or upon written request received within the time set in paragraph (g) of this section, may elect to waive in whole or in part the use of the formula contained in this part in determining the civil penalty for violation of the Act, if he determines that a waiver will further the abatement of violations of the Act. A grant or denial of a waiver may be reversed by the Office of Hearings and Appeals, if such grant or denial is determined to be an abuse of discretion.

{63410} (g) Procedures for assessment of civil penalties.

(1) Within 10 days of service of a notice or order, the permittee may submit information in writing pertaining to the violation involved to the Assessment Office and to the inspector who issued the notice or order. The Office shall consider any information so submitted in determining the facts surrounding the violation and the amount of the penalty.

(2) The Office shall serve the permittee by certified mail, return receipt requested with 30 days of the issuance of the notice or order, with a copy of the proposed assessment and of the worksheets showing the computation.

(h) Procedure for conference.

(1) If a written request from the permittee is received within 15 days from receipt of a proposed assessment, the Office shall arrange for a conference to review the assessment. The permittee may submit additional material for consideration during the conference. The Office may contact the permittee to discuss the assessment prior to the conference if necessary to expedite the review.

(2) The Office shall consider all relevant information on the violation in question presented by the permittee and may recalculate either up or down or vacate the proposed penalty. No information as to which the permittee claims confidentiality shall be considered as a basis for reduction of a proposed assessment. When new facts warrant the imposition of a higher penalty, it shall be proposed in the manner provided in paragraph (f) of this section. Every change in a proposed assessment shall be fully documented in the file including a written explanation of the reason the penalty has changed.

(3) Notice of the time and place of the conference shall be posted at the Office of Surface Mining Reclamation and Enforcement field office with jurisdiction over the mine at least 5 days prior to the conference. Any person shall have a right to attend the conference and participate.

(4) If the issues are resolved, the agreement shall be in writing and signed by the party assessed and the representative of the Office. If payment is not received within 30 days, the office may:

- (i) Enter the agreed upon amount as a final order of the Secretary; or
- (ii) Rescind the agreement and reinstate the original proposed assessment.

(5) A reduction of a proposed civil penalty assessment of more than 25 percent and more than \$5 00 agreed to during a conference shall be approved by the Director or his designee before it is final and binding on the Secretary.

(i) Request for hearing.

(1) Within 30 days from receipt of the proposed assessment, the permittee may request a hearing before the Office of Hearings and Appeals by filing a petition and tendering full payment of the proposed assessment to be held in escrow.

(2) The timely filing of a request for a conference under paragraph (h) of this section suspends the running of the 30-day period for requesting a hearing. The suspension shall continue until the completion of the conference, which shall be held within 60 days from the date of the request for the conference. The permittee shall have 15 days after completion of the conference or after any disapproval by the Director or his designee under subparagraph (5) of paragraph (h), whichever occurs later, to request a public hearing.

(3) The Office of Hearings and Appeals conducts the hearings and issues orders or otherwise terminates the petition pursuant to its procedures in 43 CFR Part 4. The Office of Hearings and Appeals may determine whether a violation occurred. When determining the amount of the penalty, the Office of Hearings and Appeals shall use the point system and conversion table contained in this Part, except in cases in which the Office has waived the use of the point system and conversion table pursuant to paragraph (f) of this section.

(j) Availability of records. All records and files created or used in the assessment process under this Part shall be available for public inspection.

(k) Notice to Tribe. Appropriate officials of the local governing Indian Tribe shall be notified of any hearings or conferences conducted pursuant to this section, and shall be invited to attend.

[FR Doc. 77-36058 Filed 12-13-77; 5:08 pm]