

APPENDIXES

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APPENDIX A

EXISTING 3809 REGULATIONS

PART 3800--MINING CLAIMS UNDER THE GENERAL MINING LAWS

Authority: 16 U.S.C. 351; 16 U.S.C. 460y-4; 30 U.S.C. 22; 31 U.S.C. 9701; 43 U.S.C. 154; 43 U.S.C. 299; 43 U.S.C. 1201; 43 U.S.C. 1740; 30 U.S.C. 28k.

* * * * *

Subpart 3809 -- Surface Management

Source: 45 FR 78909, Nov. 26, 1980, unless otherwise noted.

Note: The information collection requirements contained in this subpart have been approved by the Office of Management and Budget under 44 U.S.C. 3507 and assigned clearance number 1004 - 0104. This information is needed to permit the authorized officer to determine if a plan of operation is needed to protect the public lands and their resources and to determine if the plan of operations, if one is required, is adequate. The obligation to respond is required to obtain a benefit.

(See 48 FR 8816, Mar. 2, 1983.)

General

§ 3809.0 - 1 Purpose.

The purpose of this subpart is to establish procedures to prevent unnecessary or undue degradation of Federal lands which may result from operations authorized by the mining laws.

§ 3809.0 - 2 Objectives.

The objectives of this regulation are to:

(a) Provide for mineral entry, exploration, location, operations, and purchase pursuant to the mining laws in a manner that will not unduly hinder such activities but will assure that these activities are conducted in a manner that will prevent unnecessary or undue degradation and provide protection of nonmineral resources of the Federal lands;

(b) Provide for reclamation of disturbed areas; and

(c) Coordinate, to the greatest extent possible, with appropriate State agencies, procedures

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for prevention of unnecessary or undue degradation with respect to mineral operations.

§ 3809.0 - 3 Authority.

(a) Section 2319 of the Revised Statutes (30 U.S.C. 22 et seq.) provides that exploration, location and purchase of valuable mineral deposits, under the mining laws, on Federal lands shall be "under regulations prescribed by law," and section 2478 of the Revised Statutes, as amended (43 U.S.C. 1201), provides that those regulations shall be issued by the Secretary.

(b) Sections 302, 303, 601, and 603 of the Federal and Policy and Management Act of 1976 (43 U.S.C. 1701 et seq.) require the Secretary to take any action, by regulation or otherwise, to prevent unnecessary or undue degradation of the Federal lands, provide for enforcement of those regulations, and direct the Secretary to manage the California Desert Conservation Area under reasonable regulations which will protect the scenic, scientific, and environmental values against undue impairment, and to assure against pollution of streams and waters.

(c) The Act of July 23, 1955 (30 U.S.C. 612), provides that rights under mining claims located after July 23, 1955, shall prior to issuance of patent therefor, be subject to the right of the United States to manage and dispose of the vegetative surface resources and to manage other surface resources. The Act also provides that "Any mining claim hereafter located under the mining laws of the United States shall not be used, prior to issuance to patent therefor, for any purposes other than prospecting, mining or processing operations and uses reasonably incident thereto."

(d) Section 9 of the Wild and Scenic Rivers Act (16 U.S.C. 1280) provides that regulations issued shall, among other things, provide safeguards against pollution of the rivers involved and unnecessary impairment of the scenery within the area designated for potential addition to, or an actual component of the national wild and scenic rivers system.

(e) The Act of October 21, 1970 (16 U.S.C. 460y et seq.), as amended by Section 602 of the Federal Land Policy and Management Act of 1976 (16 U.S.C. 460y - 8), established the King Range Conservation Area in California. The Secretary is required under these Acts to manage activities in this conservation area under the General Mining Law of 1872 in such a manner as to protect the scenic, scientific, and environmental values against undue impairment, and ensure against pollution of streams and waters.

[45 FR 78909, Nov, 26, 1980, as amended at 59 FR 44856, Aug. 30, 1994]

§ 3809.0 - 5 Definitions.

As used in this subpart, the term:

(a) Authorized officer means any employee of the Bureau of Land Management to whom authority has been delegated to perform the duties described in this subpart.

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(b) Casual Use means activities ordinarily resulting in only negligible disturbance of the Federal lands and resources. For example, activities are generally considered casual use if they do not involve the use of mechanized earth moving equipment or explosives or do not involve the use of motorized vehicles in areas designated as closed to off-road vehicles as defined in subpart 8340 of this title.

(c) Federal lands means lands subject to the mining laws including, but not limited to, the certain public lands defined in section 103 of the Federal Land Policy and Management Act of 1976. Federal lands does not include lands in the National Park System, National Forest System, and the National Wildlife Refuge System, nor does it include acquired lands, Stockraising Homestead lands or lands where only the mineral interest is reserved to the United States or lands under Wilderness Review and administered by the Bureau of Land Management (these lands are subject to the 43 CFR part 3802 regulations).

(d) Mining claim means any unpatented mining claim, millsite, or tunnel site located under the mining laws and those patented mining claims and millsites located in the California Desert Conservation Area which have been patented subsequent to the enactment of the Federal Land Policy and Management Act of October 21, 1976.

(e) Mining laws means the Lode Law of July 26, 1866, as amended (14 Stat. 251); the Placer Law of July 9, 1870, as amended (16 Stat. 217); and the Mining Law of May 10, 1872, as amended (17 Stat. 91); and all laws supplementing and amending those laws, including among others the Building Stone Act of August 4, 1892, as amended (27 Stat. 348); and the Saline Placer Act of January 31, 1901 (31 Stat. 745).

(f) Operations means all functions, work, facilities, and activities in connection with prospecting, discovery and assessment work, development, extraction, and processing of mineral deposits locatable under the mining laws and all other uses reasonably incident thereto, whether on a mining claim or not, including but not limited to the construction of roads, transmission lines, pipelines, and other means of access for support facilities across Federal lands subject to these regulations.

(g) Operator means a person conducting or proposing to conduct operations.

(h) Person means any citizen of the United States or person who has declared the intention to become such and includes any individual, partnership, corporation, association, or other legal entity.

(i) Project area means a single tract of land upon which an operator is, or will be, conducting operations. It may include one mining claim or a group of mining claims under one ownership on which operations are or will be conducted, as well as Federal lands on which an operator is exploring or prospecting prior to locating a mining claim.

(j) Reclamation means taking such reasonable measures as will prevent unnecessary or undue

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degradation of the Federal lands, including reshaping land disturbed by operations to an appropriate contour and, where necessary, revegetating disturbed areas so as to provide a diverse vegetative cover. Reclamation may not be required where the retention of a stable highwall or other mine workings is needed to preserve evidence of mineralization.

(k) Unnecessary or undue degradation means surface disturbance greater than what would normally result when an activity is being accomplished by a prudent operator in usual, customary, and proficient operations of similar character and taking into consideration the effects of operations on other resources and land uses, including those resources and uses outside the area of operations. Failure to initiate and complete reasonable mitigation measures, including reclamation of disturbed areas or creation of a nuisance may constitute unnecessary or undue degradation. Failure to comply with applicable environmental protection statutes and regulations thereunder will constitute unnecessary or undue degradation. Where specific statutory authority requires the attainment of a stated level of protection or reclamation, such as in the California Desert Conservation Area, Wild and Scenic Rivers, areas designated as part of the National Wilderness System administered by the Bureau of Land Management and other such areas, that level of protection shall be met.

(l) King Range Conservation Area means the area designated pursuant to the Act of October 21, 1970 (16 U.S.C. 460y et seq.), as amended by Section 602 of the Federal Land Policy and Management Act of 1976 (16 U.S.C. 460y - 8).

[45 FR 78909, Nov. 26, 1980; 45 FR 82934, Dec. 17, 1980, as amended at 48 FR 8816, Mar. 2, 1983; 59 FR 44856, Aug. 30, 1994]

§ 3809.0 - 6 Policy.

Consistent with section 2 of the Mining and Mineral Policy Act of 1970 and section 102(a) (7), (8), and (12) of the Federal Land Policy and Management Act, it is the policy of the Department of the Interior to encourage the development of Federal mineral resources and reclamation of disturbed lands. Under the mining laws a person has a statutory right, consistent with Departmental regulations, to go upon the open (unappropriated and unreserved) Federal lands for the purpose of mineral prospecting, exploration, development, extraction and other uses reasonably incident thereto. This statutory right carries with it the responsibility to assure that operations include adequate and responsible measures to prevent unnecessary or undue degradation of the Federal lands and to provide for reasonable reclamation.

§ 3809.1 Operations.

§ 3809.1 - 1 Reclamation.

All operations, whether casual, under a notice, or by a plan of operations, shall be reclaimed as required in this title.

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§ 3809.1 - 2 Casual use: Negligible disturbance.

No notification to or approval by the authorized officer is required for casual use operations. However, casual use operations are subject to monitoring by the authorized officer to ensure that unnecessary or undue degradation of Federal lands will not occur.

§ 3809.1 - 3 Notice: Disturbance of 5 acres or less.

(a) All operators on project areas whose operations, including access across Federal lands to the project area, cause a cumulative surface disturbance of 5 acres or less during any calendar year shall notify the authorized officer in the District office of the Bureau of Land Management having jurisdiction over the land in which the claim(s) or project area is located. Prior to conducting additional operations under a subsequent notice covering substantially the same ground, the operator shall have completed reclamation of operations which were conducted under any previous notice. Notification of such activities, by the operator, shall be made at least 15 calendar days before commencing operations under this subpart by a written notice or letter.

(b) Approval of a notice, by the authorized officer, is not required. Consultation with the authorized officer may be required under paragraph (c)(3) of this section when the construction of access routes are involved. Notices properly filed under this section constitute authorization under part 8340 of this title (Off-Road Vehicles).

(c) The notice or letter shall include:

(1) Name and mailing address of the mining claimant and operator, if other than the claimant. Any change of operator or in the mailing address of the mining claimant or operator shall be reported promptly to the authorized officer;

(2) When applicable, the name of the mining claim(s), and serial number(s) assigned to the mining claim(s) recorded pursuant to subpart 3833 of this title on which disturbance will likely take place as a result of the operations;

(3) A statement describing the activities proposed and their location in sufficient detail to locate the activities on the ground, and giving the approximate date when operations will start. The statement shall include a description and location of access routes to be constructed and the type of equipment to be used in their construction. Access routes shall be planned for only the minimum width needed for operations and shall follow natural contours, where practicable, to minimize cut and fill. When the construction of access routes involves slopes which require cuts on the inside edge in excess of 3 feet, the operator may be required to consult with the authorized officer concerning the most appropriate location of the access route prior to commencing operations;

(4) A statement that reclamation of all areas disturbed will be completed to the standard described in § 3809.1 - 3(d) of this title and that reasonable measures will be taken to prevent

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unnecessary or undue degradation of the Federal lands during operations.

(d) The following standards govern activities conducted under a notice:

(1) Access routes shall be planned for only the minimum width needed for operations and shall follow natural contours, where practicable to minimize cut and fill.

(2) All tailings, dumps, deleterious materials or substances, and other waste produced by the operations shall be disposed of so as to prevent unnecessary or undue degradation and in accordance with applicable Federal and State Laws.

(3) At the earliest feasible time, the operator shall reclaim the area disturbed, except to the extent necessary to preserve evidence of mineralization, by taking reasonable measures to prevent or control on-site and off-site damage of the Federal lands.

(4) Reclamation shall include, but shall not be limited to:

(i) Saving of topsoil for final application after reshaping of disturbed areas have been completed;

(ii) Measures to control erosion, landslides, and water runoff;

(iii) Measures to isolate, remove, or control toxic materials;

(iv) Reshaping the area disturbed, application of the topsoil, and revegetation of disturbed areas, where reasonably practicable; and

(v) Rehabilitation of fisheries and wildlife habitat.

(5) When reclamation of the disturbed area has been completed, except to the extent necessary to preserve evidence of mineralization, the authorized officer shall be notified so that an inspection of the area can be made.

(e) Operations conducted pursuant to this subpart are subject to monitoring by the authorized officer to ensure that operators are conducting operations in a manner which will not cause unnecessary or undue degradation.

(f) Failure of the operator to prevent undue or unnecessary degradation or to complete reclamation to the standards described in this subpart may cause the operator to be subject to a notice of noncompliance as described in § 3809.3 - 2 of this title.

[45 FR 78909, Nov. 26, 1980; 45 FR 82934, Dec. 17, 1980, as amended at 48 FR 8816, Mar. 2, 1983]

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§ 3809.1 - 4 Plan of operations: When required.

An approved plan of operations is required prior to commencing:

(a) Operations which exceed the disturbance level (5 acres) described in § 3809.1 - 3 of this title.

(b) Any operation, except casual use, in the following designated areas:

(1) Lands in the California Desert Conservation Area designated as controlled or limited use areas by the California Desert Conservation Area plan;

(2) Areas designated for potential addition to, or an actual component of the national wild and scenic rivers system,

(3) Designated Areas of Critical Environmental Concern;

(4) Areas designated as part of the National Wilderness Preservation System and administered by the Bureau of Land Management;

(5) Areas designated as closed to off-road vehicle use as defined in subpart 8340 of this title.

(6) The area designated as the King Range Conservation Area pursuant to 16 U.S.C. 460y et seq., as amended by section 602 of the Federal Land Policy and Management Act of 1976.

(c) Plans properly filed and approved under this section constitute authorization under part 8340 of this title (Off-Road Vehicles).

[45 FR 78909, Nov. 26, 1980; 45 FR 82934, Dec. 17, 1980, as amended at 48 FR 8816, Mar. 2, 1983; 59 FR 44856, Aug. 30, 1994]

§ 3809.1 - 5 Filing and contents of plan of operations.

(a) A plan of operations must be filed in the District Office of the Bureau of Land Management having jurisdiction over the Federal lands in which the claim(s) or project area is located.

(b) No special form is required for filing a plan.

(c) The plan shall include:

(1) The name and mailing address of the operator (and claimant if not the operator). Any change of operator or change in the mailing address shall be promptly reported to the authorized officer;

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(2) A map, preferably a topographic map, or sketch showing existing and/or proposed routes of access, aircraft landing areas, or other means of access, and size of each area where surface disturbance will occur;

(3) When applicable, the name of the mining claim(s) and mining claim serial numbers assigned to the mining claim(s) recorded pursuant to subpart 3833 of this title.

(4) Information sufficient to describe or identify the type of operations proposed, how they will be conducted and the period during which the proposed activity will take place;

(5) Measures to be taken to prevent unnecessary or undue degradation and measures to reclaim disturbed areas resulting from the proposed operations, including the standards listed in § 3809.1 - 3(d) of this title. Where an operator advises the authorized officer that he/she does not have the necessary technical resources to develop such measures the authorized officer will assist the operator in developing such measures. If an operator submits reclamation measures, the authorized officer will ensure that the operator's plan is sufficient to prevent unnecessary or undue degradation. All reclamation measures developed by the operator, or by the authorized officer in conjunction with the operator, shall become a part of the plan of operations.

(6) Measures to be taken during extended periods of nonoperation to maintain the area in a safe and clean manner and to reclaim the land to avoid erosion and other adverse impacts. If not filed at the time of plan submittal, this information shall be filed with the authorized officer whenever the operator anticipates a period of nonoperation.

[45 FR 78909, Nov. 26, 1980; 45 FR 82934, Dec. 17, 1980]

§ 3809.1 - 6 Plan approval.

(a) A proposed plan of operations shall be submitted to the authorized officer, who shall promptly acknowledge receipt thereof to the operator. The authorized officer shall, within 30 days of such receipt, analyze the proposal in the context of the requirement to prevent unnecessary or undue degradation and provide for reasonable reclamation, and shall notify the operator:

(1) That the plan is approved; or

(2) Of any changes in or additions to the plan necessary to meet the requirements of these regulations; or

(3) That the plan is being reviewed, but that a specified amount of time, not to exceed an additional 60 days, is necessary to complete the review, setting forth the circumstances which justify additional time for review. However, days during which the area of operations is inaccessible for inspection shall not be counted when computing the 60 day period; or

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(4) That the plan cannot be approved until 30 days after a final environmental statement has been prepared and filed with the Environmental Protection Agency; or

(5) That the plan cannot be approved until the authorized officer has complied with section 106 of the National Historic Preservation Act or section 7 of the Endangered Species Act.

(b) The authorized officer shall consult with the appropriate official of the bureau or agency having surface management responsibilities where such responsibility is not exercised by the Bureau of Land Management. Prior to plan approval the authorized officer shall obtain the concurrence of such appropriate official to the terms and conditions that may be needed to prevent unnecessary or undue degradation.

(c) The authorized officer shall undertake an appropriate level of cultural resource inventory of the area to be disturbed. The inventory shall be completed within the time allowed by these regulations for approval of the plan (30 days). The operator is not required to do the inventory but may hire an archaeologist approved by the Bureau of Land Management in order to complete the inventory more expeditiously. The responsibility for and cost of salvage of cultural resources discovered during the inventory shall be the Federal Government's. The responsibility of avoiding adverse impacts on those cultural resources discovered during the inventory shall be the operator's.

(d) Pending final approval of the plan, the authorized officer shall approve any operations that may be necessary for timely compliance with requirements of Federal and State laws, subject to any terms and conditions that may be needed to prevent unnecessary or undue degradation.

(e) In the event of a change of operators involving an approved plan of operations, the new operator shall satisfy the requirements of § 3809.1 - 9 of this title as it relates to bonding.

[45 FR 78909, Nov. 26, 1980; 45 FR 82934, Dec. 17, 1980]

§ 3809.1 - 7 Modification of plan.

(a) At any time during operations under an approved plan, the operator on his/her own initiative may modify the plan or the authorized officer may request the operator to do so.

(b) A significant modification of an approved plan must be reviewed and approved by the authorized officer in the same manner as the initial plan.

(c)(1) If, when requested to do so by the authorized officer, the operator does not furnish a proposed modification within a reasonable time, usually 30 days, the authorized officer may recommend to the State Director that the operator be required to submit a proposed modification of the plan. The recommendation of the authorized officer shall be accompanied by a statement setting forth the facts and the reasons for the recommendations.

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(2) In acting upon such recommendations the State Director shall determine, within 30 days, whether:

(i) All reasonable measures were taken by the authorized officer at the time the plan was approved to ensure that the proposed operations would not cause unnecessary or undue degradation of the Federal land;

(ii) The disturbance from the operations of the plan as approved or from unforeseen circumstances is or may become of such significance that modification of the plan is essential in order to prevent unnecessary or undue degradation; and

(iii) The disturbance can be minimized using reasonable means.

(3) Once the matter has been sent to the State Director, an operator is not required to submit a proposed modification of an approved plan until a determination is made by the State Director. Where the State Director determines that a plan shall be modified, the operator shall timely submit a modified plan to the authorized officer for review and approval.

(4) Operations may continue in accordance with the approved plan until a modified plan is approved, unless the State Director determines that the operations are causing unnecessary or undue degradation to the land. The State Director shall advise the operator of those reasonable measures needed to avoid such degradation and the operator shall immediately take all necessary steps to implement those measures within a reasonable period established by the State Director.

§ 3809.1 - 8 Existing operations.

[following section was reinstated by court's May 1998 ruling]

(a) Persons conducting operations on the effective date of these regulations, who would be required to submit a notice under § 3809.1 - 3 or a plan of operations under § 3809.1 - 4 of this title may continue operations but shall, within:

(1) 30 days submit a notice with required information outlined in § 3809.1 - 3 of this title for operations where 5 acres or less will be disturbed during a calendar year; or

(2) 120 days submit a plan in those areas identified in § 3809.1 - 4 of this title. Upon a showing of good cause, the authorized officer may grant an extension of time, not to exceed an additional 180 days, to submit a plan.

(b) Operations may continue according to the submitted plan during its review. If the authorized officer determines that operations are causing unnecessary or undue degradation of the Federal lands involved, the authorized officer shall advise the operator of those reasonable measures needed to avoid such degradation, and the operator shall take all necessary steps to implement those measures within a reasonable time recommended by the authorized officer.

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During the period of an appeal, if any, operations may continue without change, subject to other applicable Federal and State laws.

(c) Upon approval of a plan by the authorized officer, operations shall be conducted in accordance with the approval plan.

[45 FR 78909, Nov. 26, 1980; 45 FR 82934, Dec. 17, 1980]

§ 3809.1 - 9 Bonding requirements.

[following section was reinstated by court's May 1998 ruling]

(a) No bond shall be required for operations that constitute casual use (§ 3809.1 - 2) or that are conducted under a notice (§ 3809.1 - 3 of this title).

(b) Any operator who conducts operations under an approved plan of operations as described in § 3809.1 - 5 of this title may, at the discretion of the authorized officer, be required to furnish a bond in an amount specified by the authorized officer. The authorized officer may determine not to require a bond in circumstances where operations would cause only minimal disturbance to the land. In determining the amount of the bond, the authorized officer shall consider the estimated cost of reasonable stabilization and reclamation of areas disturbed. In lieu of the submission of a separate bond, the authorized officer may accept evidence of an existing bond pursuant to State law or regulations for the same area covered by the plan of operations, upon a determination that the coverage would be equivalent to that provided in this section.

(c) In lieu of a bond, the operator may deposit and maintain in a Federal depository account of the United States Treasury, as directed by the authorized officer, cash in an amount equal to the required dollar amount of the bond or negotiable securities of the United States having a market value at the time of deposit of not less than the required dollar amount of the bond.

(d) In place of the individual bond on each separate operation, a blanket bond covering statewide or nationwide operations may be furnished at the option of the operator, if the terms and conditions, as determined by the authorized officer, are sufficient to comply with these regulations.

(e) In the event that an approved plan is modified in accordance with § 3809.1 - 7 of this title, the authorized officer shall review the initial bond for adequacy and, if necessary, adjust the amount of the bond to conform to the plan as modified.

(f) When all or any portion of the reclamation has been completed in accordance with the approved plan, the operator may notify the authorized officer that such reclamation has occurred and that she/he seeks a reduction in bond or Bureau approval of the adequacy of the reclamation, or both. Upon any such notification, the authorized officer shall promptly inspect the reclaimed area with the operator. The authorized officer shall then notify the operator, in writing, whether the reclamation is acceptable. When the authorized officer has accepted as completed any portion

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of the reclamation, the authorized officer shall authorize that the bond be reduced proportionally to cover the remaining reclamation to be accomplished.

(g) When a mining claim is patented, the authorized officer shall release the operator from that portion of the performance bond which applies to operations within the boundaries of the patented land. The authorized officer shall release the operator from the remainder of the performance bond, including the portion covering approved means of access outside the boundaries of the mining claim, when the operator has completed acceptable reclamation. However, existing access to patented mining claims, if across Federal lands shall continue to be regulated under the approved plan. The provisions of this subsection do not apply to patents issued on mining claims within the boundaries of the California Desert Conservation Area (see § 3809.6 of this title).

[45 FR 78909, Nov. 26, 1980; 45 FR 82934, Dec. 17, 1980]

§ 3809.2 Prevention of unnecessary or undue degradation.

§ 3809.2 - 1 Environmental assessment.

(a) When an operator files a plan of operations or a significant modification which encompasses land not previously covered by an approved plan, the authorized officer shall make an environmental assessment or a supplement thereto to identify the impacts of the proposed operations on the lands and to determine whether an environmental impact statement is required.

(b) In conjunction with the operator, the authorized officer shall use the environmental assessment to determine the adequacy of mitigating measures and reclamation procedures included in the plan to insure the prevention of unnecessary or undue degradation of the land. If an operator advises the authorized officer that he/she is unable to prepare mitigating measures, the authorized officer, in conjunction with the operator, shall use the environmental assessment as a basis for assisting the operator in developing such measures.

(c) If, as a result of the environmental assessment, the authorized officer determines that there is substantial public interest in the plan, the authorized officer shall notify the operator, in writing, that an additional period of time, not to exceed the additional 60 days provided for approval of a plan in § 3809.1 - 6 of this title, is required to consider public comments on the environmental assessment.

[45 FR 78909, Nov. 26, 1980; 45 FR 82934, Dec. 17, 1980, as amended at 48 FR 8816, Mar. 2, 1983]

§ 3809.2 - 2 Other requirements for environmental protection.

All operations, including casual use and operations under either a notice (§ 3809.1 - 3) or a plan of operations (§ 3809.1 - 4 of this title), shall be conducted to prevent unnecessary or undue

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degradation of the Federal lands and shall comply with all pertinent Federal and State laws, including but not limited to the following:

(a) Air quality. All operators shall comply with applicable Federal and State air quality standards, including the Clean Air Act (42 U.S.C. 1857 et seq.).

(b) Water quality. All operators shall comply with applicable Federal and State water quality standards, including the Federal Water Pollution Control Act, as amended (30 U.S.C. 1151 et seq.).

(c) Solid wastes. All operators shall comply with applicable Federal and State standards for the disposal and treatment of solid wastes, including regulations issued pursuant to the Solid Waste Disposal Act as amended by the Resource Conservation and Recovery Act (42 U.S.C. 6901 et seq.). All garbage, refuse or waste shall either be removed from the affected lands or disposed of or treated to minimize, so far as is practicable, its impact on the lands.

(d) Fisheries, wildlife and plant habitat. The operator shall take such action as may be needed to prevent adverse impacts to threatened or endangered species, and their habitat which may be affected by operations.

(e) Cultural and paleontological resources. (1) Operators shall not knowingly disturb, alter, injure, or destroy any scientifically important paleontological remains or any historical or archaeological site, structure, building or object on Federal lands.

(2) Operators shall immediately bring to the attention of the authorized officer any cultural and/or paleontological resources that might be altered or destroyed on Federal lands by his/her operations, and shall leave such discovery intact until told to proceed by the authorized officer. The authorized officer shall evaluate the discoveries brought to his/her attention, take action to protect or remove the resource, and allow operations to proceed within 10 working days after notification to the authorized officer of such discovery.

(3) The Federal Government shall have the responsibility and bear the cost of investigations and salvage of cultural and paleontology values discovered after a plan of operations has been approved, or where a plan is not involved.

(f) Protection of survey monuments. To the extent practicable, all operators shall protect all survey monuments, witness corners, reference monuments, bearing trees and line trees against unnecessary or undue destruction, obliteration or damage. If, in the course of operations, any monuments, corners, or accessories are destroyed, obliterated or damaged by such operations, the operator shall immediately report the matter to the authorized officer. The authorized officer shall prescribe, in writing, the requirements for the restoration or reestablishment of monuments, corners, bearing and line trees.

[45 FR 78909, Nov. 26, 1980; 45 FR 82934, Dec. 17, 1980, as amended at 48 FR 8816, Mar. 2,

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1983]

§ 3809.3 General provisions.

§ 3809.3 - 1 Applicability of State law.

(a) Nothing in this subpart shall be construed to effect a preemption of State laws and regulations relating to the conduct of operations or reclamation on Federal lands under the mining laws.

[[following section was reinstated by court's May 1998 ruling]

(b) After the publication date of these regulations the Director, Bureau of Land Management, shall conduct a review of State laws and regulations in effect or due to come into effect, relating to unnecessary or undue degradation of lands disturbed by exploration for, or mining of, minerals locatable under the mining laws.

(c) The Director may consult with appropriate representatives of each State to formulate and enter into agreements to provide for a joint Federal-State program for administration and enforcement. The purpose of such agreements is to prevent unnecessary or undue degradation of the Federal lands from operations which are conducted under the mining laws, to prevent unnecessary administrative delay and to avoid duplication of administration and enforcement of laws. Such agreements may, whenever possible, provide for State administration and enforcement of such programs.

[45 FR 78909, Nov. 26, 1980; 45 FR 82934, Dec. 17, 1980]

§ 3809.3 - 2 Noncompliance.

(a) Failure of an operator to file a notice under § 3809.1 - 3 of this title or a plan of operations under § 3809.1 - 4 of this title will subject the operator, at the discretion of the authorized officer, to being served a notice of non-compliance or enjoined from the continuation of such operations by a court order until such time as a notice or plan is filed with the authorized officer. The operator shall also be responsible to reclaim operations conducted without an approved plan of operations or prior to the filing of a required notice.

(b) Failure to reclaim areas disturbed by operations under § 3809.1 - 3 of this title is a violation of these regulations.

(1) Where an operator is conducting operations covered by 3809.1 - 3 (notice) of this title and fails to comply with the provisions of that section or properly conduct reclamation according to standards set forth in 3809.1 - 3(d) of this title, a notice of noncompliance shall be served by delivery in person to the operator or his/her authorized agent, or by certified mail addressed to his/her address of record.

(2) Operators conducting operations under an approved plan of operations who fails to

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follow the approved plan of operations may be subject to a notice of noncompliance. A notice of noncompliance shall be served in the same manner as described in § 3809.3 - 2(b)(1) of this section.

(c) All operators who conduct operations under a notice pursuant to § 3809.1 - 3 and a plan pursuant to § 3809.1 - 4 of this title on Federal lands without taking the actions specified in a notice of noncompliance within the time specified therein may be enjoined by an appropriate court order from continuing such operations and be liable for damages for such unlawful acts.

(d) A notice of noncompliance shall specify in what respects the operator is failing or has failed to comply with the requirements of applicable regulations, and shall specify the actions which are in violation of the regulations and the actions which shall be taken to correct the noncompliance and the time, not to exceed 30 days, within which corrective action shall be started.

[following section was reinstated by court's May 1998 ruling]

(e) Failure of an operator to take necessary actions on a notice of noncompliance, may constitute justification for requiring the submission of a plan of operations under § 3809.1 - 5 of this title, and mandatory bonding for subsequent operations which would otherwise be conducted pursuant to a notice under § 3809.1 - 3 of this title.

[45 FR 78909, Nov. 26, 1980; 45 FR 82934, Dec. 17, 1980]

§ 3809.3 - 3 Access.

(a) An operator is entitled to access to his operations consistent with provisions of the mining laws.

(b) Where a notice or a plan of operations is required, it shall specify the location of access routes for operations and other conditions necessary to prevent unnecessary or undue degradation. The authorized officer may require the operator to use existing roads to minimize the number of access routes, and, if practicable, to construct access roads within a designated transportation or utility corridor. When commercial hauling is involved and the use of an existing road is required, the authorized officer may require the operator to make appropriate arrangements for use and maintenance.

§ 3809.3 - 4 Fire prevention and control.

The operator shall comply with all applicable Federal and State fire laws and regulations, and shall take all reasonable measures to prevent and suppress fires in the area of operations.

§ 3809.3 - 5 Maintenance and public safety.

During all operations, the operator shall maintain his structures, equipment, and other

Appendix A: Existing 3809 Regulations

facilities in a safe and orderly manner. Hazardous sites or conditions resulting from operations shall be marked by signs, fenced, or otherwise identified to alert the public in accordance with applicable Federal and State laws and regulations.

§ 3809.3 - 6 Inspection.

The authorized officer may periodically inspect operations to determine if the operator is complying with these regulations. The operator shall permit the authorized officer access for this purpose.

§ 3809.3 - 7 Periods of non-operation.

All operators shall maintain the site, structures and other facilities of the operations in a safe and clean condition during any non-operating periods. All operators may be required, after an extended period of non-operation for other than seasonal operations, to remove all structures, equipment and other facilities and reclaim the site of operations, unless he/she receives permission, in writing, from the authorized officer to do otherwise.

§ 3809.4 Appeals.

(a) Any operator adversely affected by a decision of the authorized officer made pursuant to the provisions of this subpart shall have a right of appeal to the State Director, and thereafter to the Board of Land Appeals, Office of Hearings and Appeals, pursuant to part 4 of this title, if the State Director's decision is adverse to the appellant.

(b) No appeal shall be considered unless it is filed, in writing, in the office of the authorized officer who made the decision from which an appeal is being taken, within 30 days after the date of receipt of the decision. A decision of the authorized officer from which an appeal is taken to the State Director shall be effective during the pendency of an appeal. A request for a stay may accompany the appeal.

(c) The appeal to the State Director shall contain:

(1) The name and mailing address of the appellant.

(2) When applicable, the name of the mining claim(s) and serial number(s) assigned to the mining claims recorded pursuant to subpart 3833 of this title which are subject to the appeal.

(3) A statement of the reasons for the appeal and any arguments the appellant wishes to present which would justify reversal or modification of the decision.

(d) The State Director shall promptly render a decision on the appeal. The decision shall be in writing and shall set forth the reasons for the decision. The decision shall be sent to the appellant by certified mail, return receipt requested.

Appendix A: Existing 3809 Regulations

(e) The decision of the State Director, when adverse to the appellant, may be appealed to the Board of Land Appeals, Office of Hearings and Appeals, pursuant to part 4 of this title.

(f) Any party, other than the operator, aggrieved by a decision of the authorized officer shall utilize the appeals procedures in part 4 of this title. The filing of such an appeal shall not stop the authorized officer's decision from being effective.

(g) Neither the decision of the authorized officer nor the State Director shall be construed as final agency action for the purpose of judicial review of that decision.

[45 FR 78909, Nov. 26, 1980, as amended at 48 FR 8816, Mar. 2, 1983]

§ 3809.5 Public availability of information.

(a) Information and data submitted and specifically identified by the operator as containing trade secrets or confidential or privileged commercial or financial information shall not be available for public examination. Other information and data submitted by the operator shall be available for examination by the public at the office of the authorized officer in accordance with the provisions of the Freedom of Information Act.

(b) The determination concerning specific information which may be withheld from public examination shall be made in accordance with the rules in 43 CFR part 2.

§ 3809.6 Special provisions relating to mining claims patented within the boundaries of the California Desert Conservation Area.

In accordance with section 601(f) of the Federal Land Policy and Management Act of October 21, 1976, all patents issued on mining claims located within the boundaries of the California Desert Conservation Area after the enactment of the Federal Land Policy and Management Act shall be subject to the regulations in this part, including the continuation of a plan of operations and of bonding with respect to the land covered by the patent.

APPENDIX B

RECIPIENTS OF THE FINAL EIS

AGENCIES AND ORGANIZATIONS

3 R Minerals
3 R Assoc Env Consultants
Absentee Shawnee Tribe of Oklahoma
ADEQ
AEG
AES Engineering
Afognak Native Corporation
AGRA Earth & Environment
Agua Caliente Band of Cahuilla Indians
Ahtna, Inc.
Ak-Chin Indian Community
Akhiok-Kaguyak, Inc.
Akiachak, Limited
Akutan Corporation
Alabama and Coushatta Tribes
Alabama Quassarte Tribal Town
Alakanuk Native Corporation
Alamo Navajo Chapter
Alaska Miners Association, Inc.
Alaska Peninsula Corporation
Alaska State Governor's Office
Alaska State Legislature
Alaska Department of Natural Resources
Alaska Placer Development, Inc.
Alaska Remote Sensing & Cartographic
Aleknagik Natives Ltd.
Aleut Corporation
Alliance for the Wild Rockies
Alta Gold
Alturas Rancheria Federal Reservation
Amax Gold Inc. - Sleeper Mine
American Assay Labs, Inc.
American Canoe Association
American Colloid Company
American Whitewater
American International Group
American Lands Access Assn Inc
American Land Alliance
American Land Conservancy
American Fisheries Society, Oregon
Chapter
American Resource Corporation, Inc.
Amigos
Andalex
Anderson Resources Association Inc
Apache Tribe of Oklahoma
Apex Bulk Commodities
Apollo Gold
Applied Independent Technology
Applied Ecosystem Services, Inc.
Arapaho Tribe
Arco Alaska, Inc.
Arctic Slope Consulting Group
Arctic Village
Arctic Treks
Arizona Builders Alliance
Arizona Department of Commerce
Arizona Audubon Council
Arizona Mining Association
Arizona Department of Environmental
Quality
Arizona Department of Mines/Mineral
Resources
Arizona State Governor's Office
Arizona State Historic Preservation Office
Arizona Small Mine Operators Assn
Arizona Electric Power Cooperative, Inc.
Arizona Game & Fish Department
Arizona State Parks
Arctic Slope Regional Corporation
Arviq, Inc.
ASARCO Inc.
ASE Management - BHP Minerals,
International
Askinuk Corporation
Aspen Exploration
Atmauthluk, Limited
Atqasuk Corp.
Atxam Corporation
AUR Resources (USA) Inc.
Austin Powder Company
Avalon Development Corporation
Azachorok, Inc
Aztech Controls Corp
Baan-O-Yeel Kon Corporation
Bagdad Unified School District, AZ
Bagdad Fire Department, AZ
Bald Mountain Mine
Ballard Spahr Andrews & Ingersoll
Bamberg Associates
Barona Group of the Barona Reservation
Barretts Minerals, Inc.
Barrick Bullfrog Mine
Barrick Gold Exploration
Barrick Goldstrike Mines Inc
Barrick Gold Corporation
Battle Mountain Band Colony
Battle Mountain Gold
Bay View Inc.
Bean Ridge Corporation
Bear River Band of Rohnerville
Rancheria
Bear Creek Council
Beartooth Alliance
Beaver Kwit'Chin Corporation
Becharof Corporation
Behre Do'bear
Belkofski Corporation
Bells Flats Natives, Inc.
Benton County Commission, OR
Bentonite Corporation
Bentonite Perform Minerals
Bering Straits Native Corporation
Berry Creek Rancheria of Maidu Indians
Bethel Native Corporation
Beveridge & Diamond
BHP Copper
BHP - DC Office
BHP Nevada Mining Company
BHP Copper Robinson
BHP Minerals
BHP Non-Ferrous & Industrial Minerals
Big Valley Rancheria
Big Pine Band of Owens Valley
Paiute-Shoshone Indians
Big Lagoon Rancheria
Big Sandy Rancheria Of Mono Indians
Bjork, Lindley & Danielson, P.C.
Blackfeet Reservation
Blanchard Rock Shop
Blue Lake Business Council
BMOA/OIM
Boart Longyear Company
Bond Mining Trust
Breckenridge Minerals
Brevig Mission Native Corporation
Bridgeport Paiute Indian Colony
Bristol Bay Native Corporation
Brohm Mining Corporation
Brush Wellman, Inc.
BLM Resource Advisory Councils
Burns Paiute Tribe
Buttercup Mining Co
C.W. Rech & Company, Inc.
Cabazon Band of Mission Indians
Cable Mountain Mine
Cachil Dehe Band of Wintun Indian of
the Colusa Ind.
Caddo Tribe of Oklahoma
Cahto Indian Tribe
Cahuilla Band of Indians
W M Calhoun Inc
California Department of Fish & Game
California Department Of Conservation
California Wilderness Coalition
California Coastal Commission
California Department of Transportation
California Senate Committee on
Environmental Quality
California Department of Fish and Game
California State Governor's Office
California State Lands Commission
California Native American Tribes
California Mining Association
California Trade and Commerce Agency,
Office of Permit Assistance
Calista Corporation
Campo Band of Mission Indians
Camtec Industrial Sales
Cone Geochemical Inc
Canoncito Navajo Colony
Canyon Resources Corporation
Cape Fox Corporation
Carlotta Copper Company
Carson Colony Community Council
Carson Forest Watch
Cascade Metals Inc
Casper Star-Tribune
Castle Mountain Mine
Cedarville Rancheria of Northern Paiute
Indians
Celilo Village Portland Office
Center for Alternative Mining

Appendix B: Recipients of the Final EIS

Development Policy
 Center for Science in Public Participation
 Chalkyitsik Native Corporation
 Chaluka Corporation
 Chefarnmunte, Inc.
 Chehalis Business Council
 Chehalis, Chinook, and Quinault
 Chem Mining Consulting Ltd
 Chemehuevi Indian Tribe
 Chemical Lime Company
 Chenega Corporation
 Cherokee Nation Economic & Business
 Development
 Chevak Company Corporation
 Cheyenne-Arapaho Tribes
 Cheyenne River Sioux Tribe
 Chickaloon-Moose Native Assoc., Inc.
 Chignik River Limited
 Chignik Lagoon Native Corporation
 Chilkoot Indian Association
 Chino Mines Co
 Chinuruk Inc.
 Chippewa-Cree Tribe
 Chitina Native Corporation
 Choctaw Nation of Oklahoma
 Chogging Ltd
 Chugach Natives Inc.
 Chugach Alaska Corporation
 Churchill County Commission, NV
 Citizen Band of Potawatomi
 Citizen's Coal Council
 Citizens for the West
 Citizens Advisors Committee Federal
 Lands
 Citizens of Victor
 City of Carlin, NV
 City of Elko, NV
 City of Globe, AZ
 City of Safford, AZ
 CLC
 CLD Surveying
 Clear Creek & Gilpin Metal Mining
 Clean Sites
 Clean Age Minerals
 Climax Moly Company
 Coast Indian Community
 Coastal Chemicals, Inc.
 Cochise Co., AZ
 Cocopah Indian Tribe
 Coeur Alaska Inc
 Coeur d'Alene Tribal Council
 Coeur d'Alene Mines Corporation
 Coeur Rochester, Inc.
 Cold Springs Rancheria of Mono Indians
 Colorado Mining Association
 Colorado State Governor's Office
 Colorado Division of Minerals & Geology
 Colorado Representative Rodrigue's
 Office
 Colorado Indian Tribe
 Colville Reservation
 Comanche Tribe of Oklahoma
 Cominco American
 Compass Mining Inc
 Condor Earth Technologies, Inc.
 Confederated Salish and Kootenai Tribes
 Confederated Tribe of Coos, Lower
 Umpqua and Siuslaw Indians
 Confederated Tribes of the Umatilla
 Consumers Health Freedom Coalition
 Continental Minerals, Inc.
 Continental Lime, Inc.
 Control Industries, Inc.
 Cook Inlet Region, Inc.
 Cooksley Geophysics
 Coquille Indian Tribe Community
 Cordex Exploration Company
 Corporon Hoehn Svitavsky Eyer & Hill
 Cortez Gold Mines
 Cortina Indian Rancheria of Wintun
 Indians
 Cotter Corporation
 Council Native Corporation
 County of San Bernardino, CA
 Covelo Indian Community
 Cow Creek Band of Umpqua Tribe of
 Indians
 Coyote Valley Tribal Council
 CR Minerals
 CR Kendall
 CRC, Company
 Creek Nation of Oklahoma, Office of the
 Principal Chief
 Creole Corp
 Crosible Filtration, Inc.
 Crow Creek Sioux Reservation
 Crow Tribe
 Crowell & Moring Llp
 Crown Resources
 Crusher Service Company
 CSM
 Cully Corporation
 CURE
 Cuyapaipe Band of Mission Indians
 CWG
 Cyprus Amax Minerals
 Cyprus Bagdad Copper Corporation
 Cyprus Climax Metals Co
 Cyprus Sierrita Corporation
 Cyprus Miami Mining
 D.H. Blattner & Sons
 D&D Tire, Inc.
 Dakota Resource Council
 Danzhit Hanlani Corporation
 Davis, Graham & Stubbs
 Death Valley Timbi-Sha Shoshone Band
 Dee Gold Mining Company
 Defenders of Wildlife
 Delaware Tribe of Western Oklahoma
 Deloychee, Inc.
 Denton Rawhide Mine
 Denver Mining Finance Co
 Desert Gold Diggers
 Desert Protective Council
 Desert Survivors
 Devils Lake Sioux Tribe A.K.A. Mni
 Wakan Oyate Tribe
 Diamond Hill Mines
 Dicaperl Minerals
 Dickenson City Citizens Committee
 "Save Virginia's Baby"
 Dickstein Shapiro Morin & Oshinsky Llp
 Digmire Mine
 Dineega Corporation
 Dineya Corporation
 Diomedea Native Corporation
 Discovery Dynamics Inc
 DOC/OMR
 Dot Lake Native Corporation
 Downey Brand Seymour & Rohwer LLP
 Doyon, Ltd.
 Dresslerville Colony
 Duck Valley Reservation
 Duckwater Shoshone Tribe
 Dupont Specialty Chemicals
 Dupont
 E & S Mining
 Earthjustice Legal Defense Fund
 Earth Science Consulting Service, Inc.
 Eastern Shawnee Tribe of Oklahoma
 Eastern Arizona Counties Organization
 Eastern Shoshone Tribe
 Echo Bay McCoy Cove
 Echo Bay Mines
 Echo Bay Minerals Company
 Ecology Center of Southern California
 EEEE, Inc.
 Ekeok Natives Ltd.
 Eklund Drilling
 Eklutna, Inc.
 El Dorado Mines
 Eldorado Gene's Music
 Elem Indian Colony of Pomo Indians
 Elim Native Corporation
 Elk Valley Tolowa
 Elko Band Colony
 Elko Chamber of Commerce
 Elko Daily Free Press
 Ely Indian Colony
 Emery County, UT
 Emmonak Corporation
 Enchem Technology, Inc.
 Energy Lab, Inc.
 Energy West Mining
 English Bay Corporation
 Entrix, Inc.
 Environmental Chemistries, Inc.
 Environmental Management Assoc
 Environmental Protection Agency
 Environmental Protection Agency, Office
 of Solid Waste
 ERO Resources Corporation
 ESA Consultants
 Esmeralda County Board of
 Commissioners NV
 Eugene Sand & Gravel
 Eureka Development Company, Ltd.
 Eureka County Commissioners, NV
 Euro-Nevada Mining
 Evans Environmental Consultants
 Evansville, Inc.
 Eyak Corporation
 Fairbanks Industrial Development
 Corporation
 Fairmile Gold Corporation
 Fallon Colony
 Far West Inc.
 Federal Reservation Miwok
 Federal Reservation
 Federal Reservation Cahuilla Band of
 Indians
 Federal Reservation Pomo
 Federal Paiute Reservation
 Federal Reservation Eastern Pomo
 Federal Reservation Me-wuk
 Federal Summit Fluids
 Federal Reservation Rumsey Rancheria

Appendix B: Recipients of the Final EIS

Flagstaff City Council
 Flandreau Santee Sioux Tribe
 Fleischli Oil Company
 Florida Canyon Mining, Inc.
 Forest Hydrology Northwest
 Fort McDermitt Paiute and Shoshone Tribe
 Fort Belknap Tribes, Environmental Protection Agency
 Fort Bidwell Indian Community of Paiute Indians
 Fort Belknap Indian Community Gros Ventre & Assiniboine Tribes
 Fort McDowell Mohave-Apache Indian Community
 Fort Mohave Tribal Council
 Fort Mojave Reservation
 Fort Peck Assiniboine & Sioux Tribes
 Fort Sill Apache Tribe of Oklahoma
 Fortymile Mining District
 Franco-Nevada Mining Corporation, Inc.
 Friends of The Rocky Mountain Front
 Friends of Westwater
 Friends of Pebble Pinto Creek
 Gallagher & Kennedy
 Gallatin Wildlife Association
 Gana-A'Yoo, Ltd.
 Gen Minerals Corp
 Genwal
 Geo Spec Engineering & Consulting Service
 Geodesy Resources Exploration Inc
 George Mason University
 Geotemps, Inc.
 Getchell Gold Corporation
 Gila River Pima-Maricopa Indian Community
 Gildarstone Mining & Restoration Ventures
 GIS Land Services
 Givens, Funke & Work
 Glamis Gold, Inc.
 Glamis Imperial Corp
 Glamis Marigold Mining Co
 Glamis Rand Mining Co
 Glenbrook Nickel
 Globe-Miami Chamber of Commerce
 Gochour & Associates, Inc.
 Gold Bar Mine
 Gold Capital Corp
 Gold Country Miners Prospectors Org
 Gold Hill Mining Co
 Gold Hill Town Meeting, Inc
 Gold Prospectors Assn of America
 Gold Prospectors Assn of Tucson
 Gold Rush
 Golden Sunlight Mines
 Golden Eagle Group
 Golder Associates
 Golovin Native Corporation
 Goshute Paiute Tribe
 Goshute Reservation
 Gough, Shanahan, Johnson & Waterman Attorneys at Law
 Governor of Guam's Office
 Governor of Northern Mariana Islands Office
 Governor of American Samoa's Office
 GPAA, Ozarks Chapter
 Graham Chamber of Commerce, AZ
 Graham Co. Board of Supervisors, AZ
 Grande Ronde Tribal Council
 Grassroots Environmental Effective Network
 Graves & Assocs LTD
 Great Basin Agriculture Inc
 Great Basin Mine Watch
 Great Plains Rain Forest
 Greater Wyoming Valley Audubon Soc.
 Greater Fairbanks Chamber of Commerce, AK
 Greater Yellowstone Coalition
 Green Network
 Greenlee County, AZ
 Greenville Rancheria of Maidu Indians
 Grindstone Indian Rancheria of Wintun-Wailaki
 GSL Electric
 Guardians of the Rural Environment Inc.
 Gust Rosenfeld
 Gustin Corp
 Gwitchyaa Zhee Corporation
 Hadum Inc.
 Hagler Bailly
 Haida Corporation
 Harding Lawson Associates
 Harold Runnels Building
 Harris Exploration Drill & Assocs
 Hauntz & Assocs
 Havasu Gold Seekers
 Havasupai Tribe
 Hayfork Mining District
 Hecla Mining Company
 Hee-Yea-Lindge Corporation
 Heklet Association
 Heritage Land Bank
 High Country Citizens' Alliance
 Hoh Indian Tribe
 Homestake Mining Company
 Hoopa Valley Tribe
 Hopi Tribe
 Hopland Band of Pomo Indians
 Horizons West
 Hornet Enterprise Inc
 Hualapai Tribe
 Huekel Corporation
 Humboldt City Board of Commissioners, NV
 Humboldt County Commission, NV
 Huna Totem Corporation
 Hungwitschin Corporation
 Hycroft
 Hydrometrics, Inc.
 Idaho Conserve Lea
 Idaho Department of Lands
 Idaho Bureau of Minerals
 Idaho Farm Bureau Federation
 Idaho Gold Prospectors Assn
 Idaho Rural Council
 Idaho State Governor's Office
 Idaho Mining Association
 Idaho Rocky Mountain Ranch
 Igiugig Native Corporation
 Iliamna Natives, Limited
 Immanuel Congregational Church
 Independence Mining Co, Inc.
 Industrial Silica Sand Corp
 Ingalik, Inc.
 Inland Empire Public Land Council
 Institute of Environmental Solutions
 Institute for Policy Research
 Northwestern University
 International Uranium Corp
 Iowa Tribe of Oklahoma
 Iowa Tribe of Kansas and Nebraska
 Iqfijouaq Company
 Isanotski Corporation
 Island Mountain Protectors
 JD Welsh & Assocs Inc
 J.M. Beck & Associates
 J.R. Simplot Company, Smoky Canyon Mine
 Jackson Band of Mewuk Indians
 James Heimler Inc.
 Jamestown S'Klallam Tribe
 Jamul Indian Village
 JBR Environmental
 Jicarilla Apache Tribe
 Johnson Matthey
 Judith River Farm
 K'Oyit'Ots'Ina, Ltd.
 Kaibab-Paiute Tribe
 Kake Tribal Corporation
 Kaktovik Inupiat Corporation
 Kalispel Business Council
 Kalmiopsis Audubon
 Kansas State Governor's Office
 Karuk Tribe of California
 Kasigluk, Inc.
 Kavilco, Inc. Kaw Nation
 KD Eng.
 Keene Engineering Co
 Kennecott Minerals Company
 Kennecott Ridgeway Mining Company

Appendix B: Recipients of the Final EIS

Kennecott Exploration Company
 Kennecott Utah Copper Corporation
 Kennecott/Borax
 Kern County Planning Department
 Kickapoo Traditional Tribe of Texas
 Kickapoo Tribe of Kansas
 Kickapoo Tribe of Oklahoma
 Kijik Corporation
 Kikiktatruk Inupiat Corporation
 King Cove Corporation
 King Mineral Resources Inc.
 Kinross Gold
 Klama th General Council
 Klawock Henny Corporation
 Kleinfelder
 Kluckwan, Inc.
 Knight Piesold
 Knikatnu, Inc.
 Kokarmiut Corporation
 Koliganek Natives, Ltd.
 Kongnigkilmniuit Yuita Corp.
 Koniag, Inc.
 Kootenia Tribe of Idaho
 Kootznoowoo, Inc.
 Kotlik Yupik Corporation
 Koyuk Native Corporation
 Koyuk Mining District
 Kugkahtlik, Inc.
 Kuitsarak, Inc.
 Kuskokwim Corporation
 Kuukpik Corporation
 Kvaerner Envir
 Kwenthluk, Inc.
 Kwik Inc.
 La Posta Band of Indians
 Lake Superior Greens
 Land & Water Consulting, Inc.
 Land Management Consultants
 Land Management Services Inc
 Land & Water Fund of the Rockies
 Lander County Commission, NV
 Landinfo Services
 Lang Exploratory Drilling
 Las Vegas Paiute Tribe
 Laser, Inc.
 Lassen County, CA
 Law Offices of R. Vrooman
 Le Tourneau Sales & Service Company
 Lovelock Natives, Ltd.
 Lewis & Clark Water Quality Protection
 District, MT
 Lewis & Clark County, MT
 Lewistown District Resource Advisory Council
 Lexam Explorations Inc
 Li Treasure Hunters Club
 Liberty Hill Mine
 Lilburn Corporation
 Lime Village Company
 Lincoln County Public Lands Commission, NV
 Little River Band of Pomo Indians
 Los Coyotes Band of Mission Indians
 Lovelock Paiute Tribe
 Lower Elwha Reservation
 Lower Brule Sioux Tribal Council
 Lower Snake River Resource Advisory Council
 Lucky Seven, Inc.
 Lummi Indian Nation
 Luzenac America Technical Center
 Luzenac America Yellowstone Mine
 Luzenac America, Inc.
 Lyle Campbell Trust
 Lyon County Public Lands Comm., NV
 M-L LLC
 Makah Tribal Council
 Malin Lewis Distributing Company
 Manakotak Natives, Ltd.
 Manzanita Band of Mission Indians
 Mar-Industrial Falk Renew
 Maricopa Audubon Society
 Marigold Mining Company
 Marion County Board of Commissioners, MT
 Mariposa Dredge Committee
 Marshall Hill Cassas & De Lipkau
 Mary's Igloo Native Corporation
 Maserculiq, Inc.
 Maxim Technologies
 Mayer Equipment, Inc.
 McClelland Laboratories, Inc.
 McCoy/Cove Mine
 McKenzie Flyfishers
 MCZ
 Mec & Echo Bay Mines
 Meca Env Consultant
 MEIC
 Mendas Chaag Native Corporation
 Meridian Gold Company
 Mesa Grande Band of Mission Indians
 Mescalero Apache Reservation
 Metlakatla Indian Community
 MGA Communications
 Miami Tribe of Oklahoma
 Middletown Rancheria of Pomo Indians
 Miller Mountain Corporation
 Mine Regulation Reporter
 Mine Systems Design Inc
 Mineral Policy Center
 Mineral Policy Center Affiliation
 Minerals Exploration Coalition
 Miners Alliance
 Mining & Environmental Services
 Mining & Metall Society of Am
 Mining Journal Ltd.
 Minnesota Department of Natural Resources,
 Division of Minerals
 Moapa Band of Paiute Indians
 Modoc Tribe of Oklahoma
 Mohave County Public Land Use, CA
 Mojave Southern Great Basin RAC
 Mono County Mining Committee
 Montana River Action Network
 Montana Department of State Lands
 Montana Department of Environmental Quality
 Montana Bureau Of Minerals & Geology
 Montana State Governor's Office
 Montana Environmental Information Center
 Montana Trout Unlimited
 Montana Mining Association
 Montana Wildlife Federation
 Moran & Associates
 Morenci Unified School District, AZ
 Morongo Band of Mission Indians
 Mother Lode Goldhounds
 Motten & Associates
 Mountain Pass Wind Company
 Mountain Messenger
 Mountain States Legal Foundation
 MPH Consulting
 MT Environmental Information Center
 MT Tunnels Mine
 Mtnt, Ltd.
 Muckleshoot Indian Tribe
 Nambe Pueblo
 Nana Regional Corporation
 Napaskiak Corporation
 National Wildlife Federation
 National Outdoor Leadership School
 National Regional Environmental
 National Citizens' Coal Law Project
 National Mining Association
 National Research Council
 National Association of Mining Districts
 National Parks and Conservation Assoc.
 Native Village of Tetlin
 Native Village of Venetie
 Natural Resources Defense Council
 Navajo Nation
 Nebraska State Governor's Office
 Nelson Lagoon Corporation
 Nevada Assn of Counties
 Nevada Colca Gold Inc
 Nevada Wildlife Federation's Endangered
 Species Alliance
 Nevada Division of Minerals
 Nevada Wildlife Federation
 Nevada State Governor's Office
 Nevada Department of Administration
 Nevada Department of Business &
 Industry
 Nevada Department of Conservation &
 Natural Resources
 Nevada Landmen's Association
 Nevada Division of Wildlife
 Nevada Mining Association
 Nevada Boulder Opal
 Nevada Cement
 Nevada Legislature, Committee on Public
 Lands
 Nevada State Clearinghouse
 Nevada Division of Environmental
 Protection
 Nevada Bureau of Mines & Geology
 Nevada Miners and Prospectors Assoc.
 Nevada Wild Horse Commission
 New Gold
 New Mexico Mining/Minerals Division
 New Mexico Energy, Minerals & Natural
 Res
 New Mexico Environment Department
 New Mexico Office of Lieutenant
 Governor
 New Mexico Mining Association
 New Mexico State Governor's Office
 Newberry Springs/Harvard Owners Assn
 Newcrest Resources, Inc.
 Newmont Gold Company
 Newtok Corporation
 Nez Perce Tribe of Idaho
 Nima Corporation
 Niniichik Native Association, Inc.
 Nisqually Indian Tribe
 Nooksack Indian Tribe
 North Star Borough Assembly, AK
 North Santiam Watershed Council, OR
 North Fork Rancheria of Mono Indians
 North Dakota State Governor's Office
 Northern Plains Resource Council
 Northern Sierra Mining Council

Appendix B: Recipients of the Final EIS

Northern Cheyenne Tribe
 Northern Alaska Environmental Center
 Northern Stone Supply Inc
 Northern State Supply Inc
 Northern Utah Prospectors Assn
 Northway Natives, Inc.
 Northwest Cancer Center
 Northwest Pipe
 Northwest Mining Association
 Northwest Montana Gold Prospectors
 Northwestern Mutual Life
 Novagold Resources Inc
 NPRC
 Nuna kauia k Yu p'ik
 Nunamiut Corporation
 Nuna pitchuk, Limited
 Oceanside Corporation
 Office of the Governor-Jemez Pueblo
 Oglala Sioux Tribal Office
 OHM Remediation Services
 Oil DRI Corp of America
 Okanogan Highlands Alliance
 Okeefe Drilling Company
 Old Harbor Native Corporation
 Olgoonik Corporation
 Omaha Tribe
 Omya CA Inc
 ONDA
 Orange County 49ers Inc
 Oregon Department of Geology & Mining Industries
 Oregon Natural Desert Association
 Oregon Independent Miners
 Oregon State Governor's Office
 Oro Nevada
 Orrick, Herrington & Sutcliffe
 Orvana Resources Corp
 Osage Tribe
 Oscarville Native Corporation
 Otoe-Missouria Tribe of Indians
 Ottawa Tribe
 Ounalashka Corporation
 Ouray County Alliance
 Ouzinkie Native Corporation
 P&H Mining Equip
 Pacific Green Party
 Pacific Sulfides
 Paimuit Corporation
 Paiute Shoshone Indians
 Paiute Indian Tribe of Utah
 Pala Band of Mission Indians
 Parker Mining Co
 Parsons Behle & Latimer
 Pascua Yaqui Tribe
 Paskenpa Band of Nomiecki Indians
 Pathfinder Mines Corp
 Paug-Vik Inc., Ltd.
 Pauma Band of Mission Indians
 Pawnee Tribe of Oklahoma
 Pechanga Band of Luiseno Indians
 Pedro Bay Native Corporation
 Pegasus Gold Corporation
 Pen Mar Historical Recovery Assn
 People for the West
 People for USA, Arizona
 People for USA, Nevada
 People for USA, Treasure Valley
 Peoria Tribe of Oklahoma
 Pete Lien & Sons
 Phelps Dodge Corp
 Phelps Dodge Tyrone
 Phelps Dodge Mining Company
 Phelps Dodge Exploration Corporation
 Phelps Dodge Morenci, Inc.
 Picuris Pueblo
 Pilot Point Native Corporation
 Pilot Station, Inc.
 Pinoleville Rancheria of Pomo Indians
 Pinson Mining Co
 Pit River Tribe
 Pitka's Point Native Corporation
 Pittston Nevada Gold Company
 Pittston Mineral Ventures
 Placer Dome Inc.
 Placer Dome, Cortez Gold Mine
 Planning Information Corporation
 Pleuss-Stauffer (California) Inc.
 Pojoaque Pueblo
 Polar Mining Inc
 Ponca Tribe of Nebraska
 Ponca Tribe of Oklahoma
 Port Graham Corporation
 Port Gamble S'kallam
 Poudre Environmental Consultants, Inc.
 Powder River Basin Resource Council
 Power Resources, Inc.
 Prairie Band Potawatomi Tribe of Kansas
 Precious Metals Producers
 Preston Gates & Ellis
 Process Equipment Co
 Prochnau-Sutherland Company
 Progressive Leadership Alliance of Nevada
 Project on Government Oversight
 Project Underground
 Prospector Shop
 Protect Our Resources Coalition
 Pruitt, Gushee & Bachtell
 PTI Environmental Services Public Lands Foundation
 Public Employees for Environmental Responsibility
 Public Lands Foundation
 Public Lands for the People Inc
 Pueblo of San Juan Governors Office
 Pueblo of Cochiti
 Pueblo of Sandia
 Pueblo of Acoma
 Pueblo of Santo Domingo
 Pueblo of Zia
 Pueblo of San Felipe
 Pueblo of Zuni
 Pueblo of Isleta
 Pueblo of Laguna
 Puyallup Tribe
 Pyramid Lake Paiute Tribe
 Qanirtuuq, Inc.
 Quadrangle Resources Inc
 Quapaw Tribe of Oklahoma
 Quartz Valley Indian Community
 Quechan Federal Reservation
 Quechan Tribe
 Quest International Management Services, Inc.
 Quileute Nation
 Quinault Business Committee
 R.A.M. Enterprise, Inc.
 Radiation Oncology Services
 Ramah Navajo Chapter
 Rand Mining Company
 Randal International
 Rayrock Mines Inc
 Redding Rancheria
 Redi Insulation, Inc.
 Redwood Valley Little River Band of Pomo Indians
 Reno-Sparks Colony
 Resource Development Council for Alaska Inc
 Resource Design Technology Inc
 Restoration Minerals Company
 Rheox, Inc.
 Rimrock Explosives
 Rincon San Luiseno Band of Mission Indians
 Rio Algom Mining Corp
 Riverside Cement Company
 Roadrunner Prospectors
 Rocky Mountain Air & Lubrication, Inc.
 Rocky Mountain Assoc Mineral Landmen
 Rocky Mountain Ch. of the Sierra Club
 Rocky Mountain Scout
 Romarco Minerals
 Root & Schindler, P.C.
 Rosebud Sioux Tribe
 Rough Country Drilling, Inc.
 Round Mountain Gold Corporation
 Royal Gold, Inc.
 Royalstar Resources LTD
 Rubber Engineering
 Russian Mission Native Corporation
 S.F. Phosphates
 Sac and Fox Nation of Missouri
 Sac and Fox Nation
 Sagebrush Exploration
 Saguyak Inc.
 Saint Cloud Mining Co
 Salamatof Native Association, Inc.
 San Ildefonso Pueblo
 San Pasqual Band of Mission Indians
 San Carlos Apache Tribe, Tribal Planning Office
 San Manuel Band of Mission Indians
 San Miguel County Commissioners
 San Juan Southern Paiute Council
 Sanak Corporation
 Santa Ynez Band of Mission Indians
 Santa Rosa Indian Community
 Santa Rosa Band of Mission Indians
 Santa Ana Pueblo
 Santa Ysabel Band of Mission Indians
 Santa Clara Pueblo
 Sauk-suiattle Indian Tribe
 Savoonga Native Corporation
 Sealaska Corporation
 Seldovia Native Association, Inc.
 Seminole Nation of Oklahoma
 Seneca-Cayuga Tribe
 Sepa Resources
 Seph-De-Ye-Ah Corporation
 Seven Up Pete Joint Venture
 Seven Oaks Ranch
 Shaan Seet Inc.
 Shaktoolik Native Corporation
 Shea & Gardner
 Shee Atika, Inc.
 Shepherd Miller, Inc.
 Sheppard Mullin Richter & Hampton LLP
 Sherwood Valley Rancheria of Pomo

Appendix B: Recipients of the Final EIS

Indians
 Shingle Springs Rancheria
 Shishmaref Native Corporation
 Shoshone-Bannock Tribes
 Shumagin Corporation
 Sierra Club, Grand Canyon Chapter
 Sierra Club, Montana Chapter
 Sierra Club, Toiyabe Chapter
 Sierra Club, San Diego Chapter
 Sierra Club, High Desert Committee
 Sierra Club, Pajarito Group
 Sierra Club, Rincon Group
 Sierra Club, Santa Fe Group
 Sierra Club California/Nevada R/C Mining Committee
 Sierra Chemical Company
 Sierra Nevada Mineral & Industry Council
 Siletz Indians of Oregon
 Silver Valley, Peoples Action Coalition
 Singer Brown & Barringer
 Siskiyou Audubon Society
 Siskiyou Project
 Sisseton-Wahpeton Sioux Tribe
 Sitnasuk Native Corporation
 Sivuaq Inc.
 Skokomish Tribal Council
 Skull Valley Band of Goshute Indians
 Small Mine Operators Association
 Small Business Administration
 Soboba Band of Mission Indians
 Society for Environmental Truth
 Solomon Native Corporation
 Solutia
 Sorptive Minerals Institute
 South Fork Band Colony
 South West Corporation
 South Dakota State Governor's Office
 South Dakota Office of School & Public Lands
 Southern California Gem Industries
 Southern Gila County Economic Development Corp
 Southern Utah Wilderness Alliance
 Southern Ute Tribe
 Southern California Border Miners Assoc
 Southwest Center for Biological Diversity
 Southwest Stone
 Southwestern Minerals Exploration Assoc.
 Spearfish Canyon Preservation Trust Inc.
 SPJV
 Spokane Tribe of Indians
 Sprungers Minerals
 Squaxin Island Tribe
 SRK
 St. George Tanaq Corporation
 St. Michael Native Corporation
 Standard Industrial Minerals Inc
 Standing Rock Sioux Tribal Council
 State of Utah-DCED
 State of Nevada, Human Resources
 State of Arizona
 State of New Mexico, Environmental Department
 State of New Mexico, Department of Fish & Game
 State of Wisconsin
 Stebbins Native Corporation
 Steffen Robertson & Kirsten, Inc.
 Stewart Colony
 Stillaquamish Board of Directors
 Stillwater Computer Assistance
 Stillwater News
 Stillwater Protective Association
 Stoel Rives LLP
 Stuyahok, Ltd.
 Summit Valley Engineering
 Summit Valley Equipment
 Summit Lake Paiute Tribe
 Summitville-San Luis Valley
 Summo USA Corporation
 Sundance Ventures
 Sunshine Mining & Refining Co
 Sunwest Materials
 Superstition Mountain Treasure Hunters
 Suquamish Tribal Council
 Susanville Indian Rancheria
 Swan Lake Corporation
 Swinomish Indian Tribal Community
 SWOMA
 Sycamore Valley Environmental Awareness Group
 Sycuan Band of Mission Indians
 Table Mountain Rancheria Federal Reservation
 Taiga Mining Co
 Tanacross Inc.
 Tanadgusix Corporation
 Taos Pueblo
 Tatitlek Inc.
 Te-Moak Tribe of Western Shoshone Indians
 Technical Writer's Ink
 Teck Resources
 Teller Native Corporation
 Tellurian Exploration Inc
 Tesuque Pueblo
 Tetra Tech
 Thatcher Building Supply
 The Gold Institute
 The Surveyor's Exchange
 The University of Chicago
 The Conservation Fund
 The Tulalip Tribes
 The Chickasaw Nation
 The Nature Conservancy
 Thlopthlocco Tribal Town
 Thomas Olsen, Associates, Inc.
 Thompson Creek Mine
 Three Affiliated Tribes
 Tigara Corporation
 Tihtee't All, Inc.
 Toghothle Corporation
 Togiak Natives Limited
 Tohono O'odham
 Tonkawa Tribe of Oklahoma
 Tonto Apache Tribe
 Torres Martinez Band of Mission Indians
 Tovitna Limited
 Tri-Star Design & Manufacturing
 Tri-Con Mining AI, Inc.
 Tri-State Truck & Equipment, Inc.
 Tri Valley Corp
 Tricon Metals & Services, Incorporated
 Trimac Transportation, Inc.
 Trinidad Rancheria
 Trout Unlimited
 Tule River Indian Tribe
 Tulkisarmute Inc.
 Tuntunmiut Rinip Corporation
 Tuntuliak Land Limited
 Tuolumne Band of Me-Wuk Indians
 Tuolumne County Alliance
 Turtle Mountain Band of Chippewa
 Twenty-nine Palms Reservation
 Twin Hills Native Corporation
 TXI Riverside Cement
 Tyonek Native Corporation
 U.S. Representative Cannon's Office
 U.S. Representative Schaeffer's Office
 U.S. Representative Hayworth's Office
 U.S. Representative Shadegg's Office
 U.S. Representative Stump's Office
 U.S. Representative Herger's Office
 U.S. Senate Reid's Office
 U.S. Army Corps of Engineers
 U.S. House of Representatives, Committee on Resources
 U.S. EPA, Region VIII
 U.S. EPA, OFC Environmental Assmnt
 U.S. EPA, Snake River Basin Field Office
 U.S. Forest Service
 U.S. Office of Surface Mining
 U.S. Fish & Wildlife Service
 U.S. Borax, Inc
 US Pirg
 Umatilla Reservation
 Unalakleet Native Corporation
 Unga Corporation
 United Keetowah Band of Indians in Oklahoma
 United Auburn Community of Indians
 University of Alaska, Fairbanks
 University of Arizona, Mining & Geological Engineering
 University of Arizona, Planetary Sciences
 University of Nevada-Reno, Department of Mining
 University of Utah
 University of Montana
 Upper Skagit Indian Tribe
 Upper Lake Band of Pomo Indians
 Upper Snake River Resource Advisory Council
 Upper Columbia-Salmon Clearwater Resource Advisory Council
 Uranerz USA
 Utah School Trust
 Utah Mining Association
 Utah Dept. of Environmental Quality
 Utah Oil, Gas & Mining
 Utah State Governor's Office
 Utah Geological Survey
 Utah Gold Prospecting Club
 Utah Rivers Council
 Ute Indian Tribe
 Ute Mountain Indian Tribe
 Ute Indian Tribe Business Committee
 Utu Utu Gwa'itu Paiute
 Valentine Mining Company
 Vector Engineering, Inc.
 Veex Company
 Viceroy Resources
 Viceroy International Exploration
 Viejas Band of Mission Indians
 Village of Andrafsky
 Vista Gold, U.S. Inc.
 VKO Mine Development Weaver District
 W.R. Ryan Company
 Wales Native Corporation
 Walker River Paiute Tribe

Appendix B: Recipients of the Final EIS

Warm Springs Reservation
Washington Department of Ecology
Washington State Governor's Office
Washoe Tribe of Nevada and
California Wells Band Council
West States Public Lands Coalition
Westech
Western Shoshone Defense Project
Western Mining Action Project
Western Mining Corporation
Western Arizona College
Western Governor's Association
Western Regional Council
Western Environmental Law Center
Western Organization of Resource Councils
Western States Minerals
Wharf Resources Partnership
Wharf Resources
Wheeler Machinery Co
White Knight Gold
White Mountain Native Corporation
White Mountain Apache Tribe
White Pine County Public Lands Commission,
NV
Whitman & Company
Wichita and Affiliated Tribes
Wildlife Management Institute
Wind River Originals
Winnebago Tribe of Nebraska
Winnemucca Indian Colony
Women in Mining Education Foundation
Women's Mining Coalition
Woodfor ds Community Council
Woodward Clyde
World Rockhound Assn
Worthington, Lennart & Carpenter
Wragg Research Council
WP CO Land Users Advisory Committee, NV
Wyandotte Nation
Wyo-Ben, Inc.
Wyoming Chapter of the Sierra Club
Wyoming Office of Federal Land Policy
Wyoming State Governor's Office
Wyoming Mining Association
Wyoming Game & Fish Department
Wyoming State Historic Preservation Officer
WZI
Yak-tat Kwaan, Inc.
Yakama Nation
Yankton Sioux Tribal Business and Claims
Committee
Yavapai-Apache Tribe
Yavapai-Prescott Indian Tribe
Yerington Paiute Tribe
Yomba Shoshone Tribe
Young & Kester Attorneys at Law
Ysleta Del Sur Pueblo
Yuma County Board of Supervisors, AZ
Yurok Council
Zho-tse, Inc.
Zortman Mining, Inc.

Appendix B: Recipients of the Final EIS

INDIVIDUALS

Bent Aquist
R.L. Abbott
Rick Achermann
Patricia Acker
Claude Ackerman
Teresa Adams
Norman Adams
Ron Adamson
Michael Aderhold
Butch Adkins
H. Adler
Joan Agamenoni
Edgardo Agosto
Joyce Ahern
Susan Ahern
Mike Ahrens
Don Ainsworth
Audrey Akhavan
Kathryn Alba
Sidney Aldeman
James Alexander
Russell Allen
Duane Allen
N. Allen
Sylvia Allen
Stephen Allen
Gary Allen
Don Allen
Jennifer Allen
John Allen
Richard Allison
Richard Allison, Jr.
John Alonge
Tim Alpers
Stanley Alsing
John Ames
Adolph Amster
Robert Amidon
Betty Anderson
Darin Andersen
Dennis Anderson
Charles Anderson
Carl Anderson
Carol Anderson
Gary Anderson
Scott Anderson
Larry Anderson
Mark Anderson
Wade Anderson
Warren Anderson
Jeff Anderson
Linda Anderson
Jay Anderson
Kenneth Anderson
A.C. Anderson
Randall Anderson
Don Andrews
Jill Andrews
Cynthia Andrews
Dwayne Andrews
D G Angelos
Albert Anglin
June Anna-fey
Fred Antinora
Steve Antoniolli
Peter Apostolakis

Alan Ardrey
Phil Arins
Steven Arita
Holly Arklin
J. Armbrust
David Armstrong
Timothy Arnold
Thomas Arnold
Robert Arnold
Clay Arnold
Earl Arnold
Phillip Ashcroft
Carole Ashworth
Ronald Askin
Cory Atiyeh
Marlene Atiyeh
David Atkins
Alfred Austin
Barbara Ayala
Donald Babat
Peter Babin
Jim Baca
George Baca
Cindy Bachman
William Bachman
Tom Bachtell
David Bacon
John Badovinac
Charles Bagley, Jr.
Sandy Bahr
Rod Baier
R. Bailey
Joan Bailey
Brent Bailey
Robert Baillie
Laurie Bair
Jerry Baird
Kenneth Baker
Daniel Baker
Eugene Baker
Gary Baker
John Baker
Ralph Baker
Oscar Balaguer
Anne Baldrige
John Balia
Sherman Ball
John Balla
Geoff Ballantyne
Sam Bamberg
Fred Banta
John Barber
James Barbour
Cathy Barcomb
Matt Bard
Bill Barger
Frank Barkanyi
Charles Barnard
Cheralyn & Randy Barnes
Phil Barnes
George Barnes
Robert Barnes
Mary Barraco
Dan Barrett
Steve Barrett
George Barrier

Steven Barringer
James Barron
Bob Bartholomew
Ralph Bartholomew
Richard Bartholomew
Michael Bartkoski
Dennis Bartlett
Joan Barton
Nathan Barton
Robert & Lesa Barton
Hank Bartos
Paul Bartos
Fred Bartow
Daniel Basketfield
Jim Bates
Stephen Bates
Karri Bath
Diana Batte
Edwin Battermann
Richard Baty
Paul Bauer
Dana Bauer
Jerry Baughman
Dale Baxter
Frank Baxter
Louise Bayard-De-Volo
Robert Bayer
Frank Bayhman
Mary Beager
Cassie Beals
John Bean
Edward Beard
Betty Beaver
T. Beaver
Jim Beck
Alison Beck-Hass
Jim Becker
Tim Becker
Brian Beckstead
Fred Bedall
Thomas Bedell
Richard Bedell
Richard Bedell, Jr.
Larry Beebe
Anne Beierle
Lilani Belad
James Belcher
Pam Bell
John Bella
Mark Belles
John Bellmon
James Belshe
Sharon Belton
Les Bender
Kathleen Benedetto
Stu Bengson
Julia Bengston
Robert Bennett, Jr.
John Bentley
Chuck Bentzer
Trish Berg
Larry Berg
Laura Bergener
Jim Bergener
Robert Berghaier, Jr.
Jeffrey Beman

John Bernardy
John Bernt
James Berry
Hal Berry
Charles Bertelsen
Charles Bertollette
Bret Bessac
Frank Bessac
Ted Bethel
Avo Bethel
Richard Bettis
Fred Beuler
Howard Beuler
Steve Bicknell
Sam Bida
Tom Biggs
C. Bilbrey
Bill & Nancy Billingsley
Jack Billingsley
Dave Billingsley
Thomas Bingham
Gilbert Binns
Marion Birch
John Bishoff
Merrill Bitter
E. Bittner
William Bixby
Harvey Bjornlie
Frances Blacet
Phil Blacet
Ernie Black
D H Blackman
Christina Blade
Don Blade
Lee Blain
Russell Blalack
Tom Blanchard
Doug Bland
Blankenship
Debra Blanton
Dennie Blasingame
Greg Blaylock
Linda Bliss
Johnny Blizzard
Steve Blomeke
Jordon Bluestien
Carol Blumenthal
Ken Blunt
Darrell Blyths
James Boatman
Hal Boehm
William Boehme
Gibert Boeza
William Bodell
Robert Bogart
David Bogese
Douglas Boggan
Sam Boggs
Marcus Bohannon
Ralph Bohannon
E B Bohme
John Bonson
Steven Boone
Vera Boone
Robert Boor
Richard Booth

Appendix B: Recipients of the Final EIS

Chuck Borchard	Angelita Bullets	Ruth Carraher	Jack Clark
Steve Borell	Gina Bullock	Frank Carrico	William Clark
Benny Bossingham	Shannon Bump	Fernando Carrillo	Dana & Larry Clark
Aimee Bou langer	Mike Bunch	Lynn Carrington	Dave Clark
Tony Bovee	Burton Bundy	Robert Carrington	Don Clark
Michael Bowen	Denton Bungarz	John Carrol	Everett Clark
Mark Bowling	Jon Bunning	John Carroll	Gregg Clark
Craig Bowman	Cherie Mae Buoy	Haila & Miles Carroll	George Clark, Jr.
Michael Bowman	Lois Burbridge	Al Carsell	Shea Clark-Smith
Dr. James Bowns	David Burch	Max Carter	James Clarke
Arleen Boyd	Olive Burch	N T Carter	Bill Clarno
Alan Boyer	Robert Burdett	Roy Carter	Chip Clawson
Dennis Boyle	Burggraf	James Carver	Thomas Clayton
Bob Bazzuto	George Burghard	Jeff Cary	Noel Clinton
Fred Brackebusch	Peter Burk	C. Casburn	Nancy Clopton
Susan Brackett	Joyce Burk	James Case	Rich Clough
Bert Brackett	Glynn Burkhardt	Lawrence Casebolt	Wendell Coats
Brett Brackett III	K Burkhardt	Larry Cassidy	Mike Cochran
Daniel Bradley	Mike Burl	James & Evelyn Caswell	Doug Coe
James Brady	Raymond Burleson	Samuel Cateirano	Scott & Diane Coe
Agnes Brailsford	Arthur Burley	Barbara Catlin	Stefanie Coeler
Robert Brammer	Dale & Gloria Burnell	Joseph Cavanaugh	Willi Coeler
Rick Branch	H H (Hap) Burnett	Benjamin Cayetano	Greg Coffin
Dennis Brandt	Robert Burnham	Abeyta Cecilia	H. Coggin
Oliver Brangham	Isabella Burns	Norm Cegelnok	William Cohrt
N L Brenger	John Burrows	Bill Center	Constance Cole
J H Bright	Glen Burton	Beverly Chadwick	George Cole
Ray Brill	John Burton	Lyle Chadwick	Jason Cole
David Brinkley	Phyllis Burwell	John Chamberlin	David Cole
Bob Brister	Bill Bussman	Sonia & Estelle	M Cole
Jim Britell	Clyde Butler	Chamberlain	Thomas Cole
Robert Brockman	Ray Butler	John Chamberlin	William Cole
Brent Bronson	Jim Butler	Robert Chamberlin	Donald Coleman
Therold Brook	Sharon Byram	David Chambers	Timothy Coleman
Gerald Brookman	Timothy Byron	Dennis Chambers	Jim Collard
Alexandra Brooks	Paul Cadruvi	Richard Chance	Will Collette
David Brooks	Denise Cadry-Smith	Robert Chance	William Collins
Jo Ann & Robert Brooks	Greg Caffrey	Sue Chance	Thomas Collins
Lois Brooks	Denise Calder	Danny Charlie	Shan Collins
Fred Brossy	Nolan Caldwell	Jeffery Chase	Clark Collins
E E Broughton	Kevin Call	Larry Chase	Glendon Collins
Yvette Broussal	John Callahan	Rocky Chase	Rick Collins
Judy Browning	Brent Callen	Leon Chavet	R. Collins
Mike Brown	Edwin Calloway, Jr.	Victor Chayet	R. Collins, Jr.
Mark Brown	Lisa Calloway	Roberta Cheney	Leta Collord
Chris Brown	Brad Campbell	D Chenworth	Robert Combs, Sr.
Brett Brown	L. Campbell	Tonya Chenworth	Bill Condit
Albert Brown	Mike Campbell	Tom Chermin	Robert Cone
James Brown	Douglas Campbell	Jim Chester	David Coney
Nancy Brown	Casey Campbell	Vic Chevillon	George Conger
David Brown	Jeff Campbell	Roger Child	Jan Conley
Kim Brown	Christine Canaly	J. Chisum	James Conley
Richard Brown	Roald Cann	Frank Choate	Donald Conner
Quentin Browne	Linda Cannell	Elton Chorney	Henry Conner
Jim Browning	Irene Cannon-Geary	Mike Christansen	Teresa Conner
Lee Brubaker	Lreene Capote	Kent Christensen	Robert Connor
Joseph Brunner	Mario Capote	Larry Christensen	Margaret Conradsen
Dennis Bryan	Kevin Cardin	Mike & Todd Christensen	Dick Conti
Kent Bryant	Joseph Cardoza	Ron Christensen	Jose Contrems
William Bryant	Ron Carey	Pam Christensen	Adena Cook
Karen Buckingham	Barry Carlson	Jerry Christie	Lin Cook
Mark Buckles	Bertha Carlson	John Christianson	Michael Cook
Paul Buckley	Cathy Carlson	Diane Christman	Rick Cook
Tricia Buler	Garry Carlson	Lynn Christofferson	James Cooksley
Fred Buescher	Alan Carlton	Ken Churchill	Wendy Cooksley
John Buffer	Greg Carmichael	Richard Cimino	Merril Coomes
Alan Buffo	Ann Carpenter	Donna Clancy	Ed & Kathy Cope
Debbie Bulger	Steven Carpenter	Robert Clancy	Kathryn Corbett
Shelley Bull	Jay Carr	James Clark	Kartina Cord

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Rudy Cordova	Wilma Darnell	B J Donnelly	Robin Eiseman
Rob Corkran	Fred Darrill	Dan Dorfschmidt	David Ekins
Russell Corn	Fernanda Dau-Fisher	Andre Douchane	Greg Ekins
James Cornelius	Mike Davenport	William Doughty	Lance Eklund
Frank Cornett	Ian Davidson	Neil Douglas	Charles Eldodt
Jack Cornia	Jennifer Davis	Raymond Dover	Bo Elgby
Elaine Cornish	Charles Davis	Luana Dowling	Jim Elkins
Randy Cornish	Clint Davis	William Downey	Sherry Ellebracht
Shawn & Dale Cosper	Randy Davis	Harold Downey	Catherine Ellefson
Kevin Costello	Richard Davis	Pat Downey	Jo Ellis
Tony Cotner	Robert Davis	Michael Doyle	Mark Ellis
Ray Coulinke	Larry Davis	Roy Drake	Bruce Eloff
Emily Cousins	Lorraine Davis	Vivian Drake	James Elsbernd
Luis Covarubias	James Davis	Charles Dral	Larry Ely
Bruce Cox	Jeremiah Davis	William Drennan	Marion Ely
William Cox	Denise Davis	Terry Drever-Gee	Bruce Emerson
Bill Crabtree	Don Davis	Larry Drew	Karen Emerson
Delwin Craigh	Curt Dayton	Michael Drinkard	Robert Emerson
Kim Craig	Gary Dayton	Scott Driscoll	David Emery
Leroy Cramer	Andrew De Garmo	Kim Drossulis	Kevin Emmerich
Susan Crampton	David DeLazzer	Pat Droll	Florence Emminger
Gary Crauberger	Elizabeth & James De Niro	Leo Drozdoff	Scott Endicott
Bruce Crawford	Franklin Deaver	Steve Drummond	Claire Englander
J W Crawford	Paul Deboo	Roger Duba	Stephen Engle
Carlyle Crecelius	Ray Decker	Genevieve Dubois	Thomas Engstrom
Fred Crisp	Jackie Deer	Frank Dubois	George Enneking
Dennis Criswell	Nan Degelman	Carolyn Duckworth	Peter Enticknap
Buford Crites	David Deheer	Julie Dudley	Donald Equeberger
Donald Crites	Donald Deines	Doren Dudley	Rolin Erickson
David Crocker	Bradley Delaney	Susan Dudley	Teresa Erickson
Phyllis Crolius	Bruce Delaney	Don Dule	David Erley
Elizabeth Crosby	Megan Delany	Marianne Dugan	Lyle Ernst
Ray Cross	Mark Delaplaine	Sara Duhamel	Nick Ervin
Eddie Cross	David Delasanta	Dan Dumont	Alan Erwin
Thomas Crosslin	Nickie Dellacioppa	Kenneth Duncan	John Eslick
Trent Crotteau	Duane Delphy	Lloyd Duncan	Brian Esser
Bob Croucher	David Delsordo	Susan Duncan	Heather Estes
Richard Crowley	Stanley Dempsey	Joan Dunn	Antoinette Estrada
Thomas Crowley	Lynn Demuth	Larry Dunn	Glenn Eurick
Deana Cruabling	William Deneef	Max Dunn	Neil Eurick
Edmund & Joanna	Thomas Deneef	Richard Dunsterville	Willis Evans
Crummey	James Denison	Gale Dupree	M. Evans
Forrest & Elsa Crumpley	Scott Denney	Doug Duran	Patricia Evans
David Cruise	Marty Dennis	Don & Linda Durand	J. Evans
Falma Cullinane	Ernest Dernberg	Bill Durbin	Frank Evans
Dean Culwell	Brenda Despain	Harry Durham	John Evans
Gary Cummings	Domenico Detorres	Carlos Durosa	Karen Everitt
E. Craig Cunningham	Carl Detweiler	Myron Durtsche	Deborah Evison
Curt Cunningham	Tom Deutsch	Sally Dwyer	Rita Ewing
Kirk Cunningham	Carl Dewitt	Darrell Dyer	Ivan Ewing
Vesta Curry	Pedro DeLoFley	John Eagan	D. Exline
Alan Curtis	James Diamond	Bob & Karen Ealy	Ted Eyde
Terry Curtiss	William Dibble	Walter Eason	Tom Faddies
Ellen Cypher	Gordon Dick	Ellyn Eberlein	Damian Fagan
Stephen D'Esposito	Eddie Dickerson	Robert Eck	Charlie Fahlgren
Jaak Daemen	James Dickson	Dave Eckersley	Jerome Fair
Don Dahlgren	Ed Diekman	Constantina Economou	Linda Fanning
Paul Dahlgren	Mike Digiordano	Richard Eddins	Lynda Fanning
Rick Dale	Suzanne Dilks	Wendy Eder	Richard Farkas
Tad Dale	Larry Dillard, Jr.	Joy Edgar	Bruce Farling
Paul Dale	M. Dillon	Mary Edgin	R L Farnsworth
Dan Dalgarno	John Dippold	Roger Edwards	Dave Farnworth
Stuart Dalheim	Phillip Dirks	Alan Edwards	Donald Farquhar
Mary Dalmer	Mike Distefano	Skip Edwards	Michael Farrell
Leland Dammmerich	Mabel Dobbs	Stacy Edwards	Mike Farrow
Guy Dahms	David Dolder	Kelly Edwards	Gary Farso, Sr.
William Danley	David Domgaard	Paul Edwards	Sarah Faulconer
Judy Danner	Jim Donnelly	Donald Egenberger	Tom Faulkner
John Darke	Mary Beth Donnelly	John Eggleston	Lynell Fay

Appendix B: Recipients of the Final EIS

James Fellin	Bob Frisbee	Donald Glen	Robert Guerin
Donna Fenner	Bob Fulkerson	Robert Glick	Herman Guerrero
Cheryl Fenwick	R. Fullenwider	Glidden	Rick Guillemin
Wait Fenwick	Stuart Fuller	Cindy Glock	Tracy Guinand
Harold Ferguson	David Funk	R. Glynn	Kenny Guinn
Michael Ferman	Duane Furman	Maxine Goad	Edward Gulley
Jami Fernette	Monique Furnish	Lee Godnour	Richard Gumm
Russ Field	Brian Furno	Jonathan Goddard	Kathleen Gundy
Anne Fieler	Robert Furtek	David Godlewski	William Gunter
Keith Fieler	Al Gabaig	Wayne Godwin	B. Gurley
Terry Fieseler	Charles Gabaig	Thomas Godzicki	Gary Gustafson
Wade Fifield	Joan Gabelman	Henry Goetz	Lewis Gustafson
Phil Fikkan	Celestino Gachupin	Pete Goicoechea	Joseph Gutkoski
Roger Filieo	Della Gajus	Michael Goiden	Carl Gutierrez
Greg Firebaugh	Robert Gajus	Sarah Goldfine	Terri Haag
Jay Fischer	Ernest Galbraith	Walter Goldstein	Jake Haas
Jerry Fish	Tom Galloway	Manuel Gomez	M. Haase
Sara Fishkin	Stephanie Gannon	Margaret Gomez	Donald Hacker
Cindy Fisk	Robert Garcia	Josie Gonzales	James Hadley
David Fitch	Vince Garcia	Julio Gonzales	Bea Hageman
Tom Fitzgerald	Stan Gardner	Olga Gonzales	Jim Hagen
John Fitzpatrick	Mike Garfield	Pablo Gonzalez	Jerry Haggard
Mary Flaigel	Kathleen Garland	Rodolfo Gonzalez	Peter Hahn
William Flanigan	Howard Garr	Shawn Goodrich	Greg Hahn
Michael Flannigan	Patrick Garretson	Donna Goodale	Thomas Hansen
Jeff Flaxton	Tim Garrod	Gary Goodrich	Lyn Hairy
Gus Fleischli	Shirly Garthwait	Bill Goodsell	James Hale
Ernest Fleming	Bob Gartner	Peter Gordon	Boies Hall
F. Fletcher	Michael Garverich	Arnold Gore	Denis Hall
Paula Fletcher	Lydia Garvey	Helen Gormley	John Hall
Thurton & Carolyn Fletcher	Dave Gaskin	Mark Gornick	Lois Hall
Jo Ann Flynn	Joe Gassaway	Bob Gosik	C. Hall-Cottrill
Larry Flynn	Cindy Gaydos	Charles Gould	Sue Hallett
Roger Flynn	Michael Geary	Jay Graf	David Halligan
Valerie Flynn-Wallace	John Gebhardt	Ted Graf	Catherine Haluei
Mark Folks	Al Gedicks	Estella Graf	William Halver
Charlie Foose	Cindy Gee	Sam Graham	Daniel Hamilton
Joshua Footer	Del Gehrett	Mel Graham	Stanley Hamilton
Brian Ford	Dean Gehring	John Graham	Julie Hamilton
Bruce & Kathy Ford	Robert Gelsky	Reba Grandrud	Norma & Patrick Hamilton
Lindsay Ford	Joseph Gembha	Bruce Grange	Geri Hamlet
Michael Ford	William George	Christie Granquist	Ralph Hamm
Jack Foreman	Ronald Gerdes	Michael Grant	Richard Hamm
Tracy Forman	Ronnie Gerdes	Bill Gray	Dick Hammond
Jeff Fornear	Jim Geringer	Gary Gray	Doug Hammond
Erin Forrest	Jean Gerth	Robert Green	Ruben Hancock
John Forrey	Tom Gesick	Russell Green	Robert Handelsman
Keith Fougitt	Michael Giannotto	James Green	Christina Hanis
Fred Fox	Mark Giese	Ed Green	Jerry Hanley
Kenneth Frailey	Ron Ghiley	Gregory Green	Karl Hanneman
Tom France	Sally Gilbert	Dave Greenan	Doug Hansen
Dale Francisco	Terry Gibson	Kenneth Greenwell	Jay Hansen
Glen Franklin	Stanley Gigson	Alan Gregory	John Hanson
Tom Fransway	Steve Gilbert	Joe Gregory	Michael Hanson
Stan Frasier	Alan Gilda	Kristin Gregory	E. Harraughty
Julie Frazie	Wesley Gildart	Franceen Gregovich	Ellwyn Harbeck
Krista Frazier	Robert Gilder	Melanie Gretch	Dwight Harbaugh
David Frederick	Robert Gile	Joseph Grieger	Byron Hardie
Harvey Frederickson	Dori Gilels	Jeffrey Griffin	Adella Harding
Sam Frederickson	Jerry Gill	Mike Griffith	Russell Hardisty
Richard Frederking	Eddy Gillespie	Ruben Griffith	Jess & Jan Harckness
Rick Frederking	John Gilmore	Karen Gross	Anna Harlowe
W. Frederking	Michelle Gilmore	Thomas Gross, Jr.	B. Harms
Curtis Freeman	Mike Gilmore	F M Grove	Howard Harms-ton
Rick Freis	Dan Givens	Timothy Grover	Archie Harper
Jim French	Jeff Glass	Bill Grover	Diane Harrigan
Raymond French	Steve Glass	William Grow	Jerry Harrington
Mert Freyholtz	Mike Glasson	Mike Gryvnak	Susie Harrington
H. Friesema	Paul G lavinovich	Benjamin Guenther	Tom Harris

Appendix B: Recipients of the Final EIS

Dave Harris	Marvin Hiatt	Nancy Huffman	Thomas Jensen
Chris Harris	Ron Hibbert	Jon Hughes	Bart Jenson
Cheryl Harris	Tim Hibbs	Glenda Hughes	Shane Jimerfield
Jeffrey Harris	Harold & Wilma Hicks	Richard Hughes	William Jobe
Samlee Harrison	Steve Hicks	Daniel Huisentruit	Tom John
Steve Hartman	Jimmie Higgins	Patricia HuIce	Alan Johns
Mary Hartung	Mike Higgins	Jane Hull	Cindy Johnson
Gary Harvey	Sandy Higgins	Jeanne Hum	Martin Johnson
Douglas Harwood	Elayne Higley	William Hunkaby	Mike Johnson
Richard Hasler	Nancy Hilding	J. Hunnicutt	Clive Johnson
Bill Hatch	Charles & Alva Hill	Glen Hunsacker	Gary Johnson
Steve Hatfield	John Hillenbrand	Buster Hunsaker	George Johnson
Jim Hatt	Cloyce Hilsinger	Richard Hunt	Tammy Johnson
Charles Hattendorf	Conrad Hinshaw, Jr.	Norlan Hunt	Curt Johnson
E. Haub	Bob Hirsch	Doug Hunt	Erin Johnson
Jim Havlena	John Hirsch	Blake Huntley	Bradley Johnson
Kerry Hawkins	Anne Hite	Patrick Hurley	Bruce Johnson
Tom Hawkins	Ron Hoagland	Rick Hurst	Donald Johnson
Denny Hawley	Phil Hocker	Tahir Husain	Henry Johnson
Stan Haye	Cathy Hocker	Brian Huse	David Johnson
Chris Hayes	Mike & Eileen Hodges	Bonnie Hutchings	Brian Johnson
Michael Hayward	Harold Hoesberg	John Hutchins	Robert Johnson
Hal Hazan	Rich Hoffman	Joseph Hutchins	Raleigh Johnson
Elsa Head	Stephen Hoffman	Linn Hutchins	Tim Johnson
Derek Heafey	Mark Hogan	Mark Hutchinson	Tom Johnson
Craig Hebbert	John Hohstadt	Lorena Hyde	Britt Johnson
Amy & Jack Heck	Victor Holanda	John Hyde	Steve Johnson
Kenneth Hecker	Sue Holbert	Christopher Hyle	Jim Johnson
Vincent Hecker	Edward Holcomb	Alan Ice	JM Johnson
William Hedglin	George Holcomb	Hugh Ingle, Jr.	Val Johnson
Kevin Hegerle	J. Holfit	Shirley Inman	Xa Dwight Johnson IV
Spence Hegstad	Dee Holladay	Heath Inskip	Lahsha Johnston
Carl Helmke	John Holleman	Manford Insley	Dennis Johnston
Bonnie Heidel	Hollestelle	Mark Ioli	JC Jones
James Heimler	Kay Holmes	Wayne Ion	Norman Jones
Dan Heinz	George Holton	Marianne Isbister	Laurie Jones
Fred Heivilin	John Holzheimer	Nellie Israel	Lucy Jones
Harold Helgeson	Raena Honan	Brian Iverson	Nathan Jones
Kenneth Hell	Justin Hopkins	Robert Ives	Harry Jones
Steve Hellem	Lee Hopkins	Twila Ives	Denise Jones
Gary Hellier	Norman Hopland	Tedd Ivers	Decron Jones
Ame Hellman	Harry Horak	J. Jacks	Paul Jones
Patricia Helvey	Edward Horgan	Lisa Jackson	Martin Jones
Dwight Henderson	Tanya Horn	Stewart Jackson	Clifford Jones
Gerald Henderson	Paul Horton	Edward Jackson	Cedron Jones
John Hendricks	Pat Hosemann	Abe Jacobson	Harold Jones
John Hengen	Kazuhiko Hotani	M. Jagoe	R. Jones
Randy Henkle	Alicia Hough	Laurence Jahn	Dave Jones
Michael Henkoski	John Housholder	John Jakobowski	Gayland Jones
Scott Hennessy	Van Housman	Norman & Wilma James	Stuart Jones
Quinton Hennigh	Bill Houston	Patricia James	Dave Jonson
Gary Henning	Ellis Howard	Eric Jameson	Rick Jordan
Mae Henning	Phyllenore Howard	Norman Jangen	Lynn Jorgensen
Donald Henrick	Dan Howard	Henricus Jansen	Darryl Jozwik
Joan Henroid	Bruce Howard	Peter Janss	Beth Judy
Ryan Henson	Mike Howard	Norman Janzen	Russell Judy
John Hensyel	Ralph & Wilma Howarth	Michael Jasper	Kent Just
Christopher Herald	Lynn Howe	Stephen Jarvis	Michelle Kaelke
John Herberg	Kay Howe	Gerald Jayne	Mike Kahoe
Charles Heringer	Harold Howell	Chuck Jeannes	Raymond Kamps, Clu
Jason Herrin	David Howell	David Jenkins	Edward Kane
Jim Herring	Charles Howler	Dave Jenkins	Jeffrey Kane
Steve Herron	Foster Howland	Don Jennings	Terrence Kardong
Ivan & Betty Hess	Randy Hubbard	Terry Jennings	W. Kari
Ron Hess	Rod Hubbard	Walter Jennings	Carol Kasza
Mary Hess	Carolyn Hubble	James Jensen	Tracy Katelman
Randi Hetrick	Jeff Huff	Jeff Jensen	Paul Kath
Pat Hettinger	William Huff	Lyle Jensen	Jim Katzke
Bernard Hiatt	Eleanor Huffines	Bill Jensen	Erol Kaya

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Joe Keeley	John Klick	Stewart Lange	Herman Lindemann
Raymond Keenan	Edwin Kliegman	Duan e Langley	Michael Lindholm
Robert Kegley	Dan Kline	David Larkin	Laura Lindley
Bill Keiry	Nick Kloeping	Clifford Larsen	Doug Lindsay
Tom Kell	Charles Knepper	Richard Larsen	Henry Lischer, Jr.
Linda Keller	Paul Kniffel	Douglas Larson	Thomas Lisek
P R Kellogg	Laura Knight	Gregory Larson	Kay Little
J H Kellu	Matt Knight	Bural Lanue	Chet Littleddyke
Jim Kelly	Ted Knight	Pat Lanue	Carl Littlefield
Bruce Kelvin	Loretta & Edward Knittel	Charles Lassiter	David Litvin
William Kemp	Keith Knoblock	Patrick Lassiter	Merle Litzsinger
Dirk Kempthorne	Arlo Knoll	Thomas Laszlo	Robert Livingston
Houston Kempton	William Knovicka	Laura Lauber	Sid Lloyd
Kenneth Kempton	Tony Knowles	Rick Lau denslager	Ben Locatelli
Lillian Kendall	Paul Knox	Jean Lauren	Gary Locke
Paul Kendall	Raymond Lee Kobler	Tracy Lavarnway	Mike Logan
Roxana & Heston Kendall	Thomas Koch	Jeffrey Lavender	S A Lohrke
Sara Kendall	Janissa Koelsch	N. Law	Walter Lombardo
Colin Kendall	W B Kohlm oos	A L Lawrence	Sheila Longnecker
Anna Kendrick	Ralph Kolbu sh	Eric Lawrence	Tom Loomis
Terry Kendrick	Mike Konen	Brad Lawrence	Marion Loomis
Brian Kennedy	Larry Kornze	Lynn & Arlie Lawrence	Maxine Lopez
Bruce Kennedy	Mary Korpi	Richard Lawson	Dan Lopez
Glenda Kennedy	Terri Koscinski	Scott Lawson	Gregg Lptien
William Kennedy	Debbie Kovar	Mel Lawson	Chris Lord
Lawrence Kennedy	William Kraemer	Kerry Lawson	James Lounsbury
Peter Keppler	Kenneth Krahu lec	Jason Laya	J Louthan
Dan Kerback	Larry K rals	Sam Layne	Darrell Loveland
Steven Kerns	Caroline Krater	Tom Lazelle	Jerold Lovich
Nancy Kersey	Kevin Krauklis	Bernard Lea	Richard Lower
Carolyn & Arnold Keskulla	Joseph Kraus	Douglas Lear	Dirk Lowther
Jerry Kidd	Marilyn Krause	Grant & Sandra Leavell	Jerry & Sheri Lozinski
Carol Kienenberger	Ray Krauss	Marcy Leavitt	Patricia Lucas
Carl Kilefner	Loren Kreck	Duane Leavitt	Eric Lucas
Enda Mills Kiley	Jon Kreckner	Jim Leavitt	Dan Lucas
Dana Kilgore	Ray Kreig	Michael Leavitt	William Lucas
Samantha Kilgore	Judy Kreps	Phillip Lebednik	Dave & Cathy Lueders
Philip Kilgour	Franklin & Doris Krugen	James Lebret	Walter Lukowski
Don Killgore	Mark Kuhn	Steven Lechner	Douglas Lupo
David Kimball	Gene Kulessa	Ellyn Lee	Sonda Bates Lupo
Shepard Kimbrell	Dan Kump	Francis Lee	Ralph Luther
Linn Kincannon	Russell Kunick	Bryan Lees	John Lutley
Stanley Kinder	Gary Kuroski	Robert Lefavivre	Gordon & Nancy Lyford
Elden Kinderknecht	James Laage	Diana Lefler	Bill Lyle
Warren King	William LaBouff	Rebecca Leingang	John Lyle
Jean King	Milton LaDue	Albert Leniz	Jack Lyman
Jeanne King	Doug LaFollette	Hank Lesinski	John Lyman
Lyle King	Gayle LaPointe	James Lessard	Willy Lynch
Tracey King	Rene Laberge	Jack & Nancy Lester	Gary Lynch
M. King, Jr.	Kimberly Lacey	Jack Leuf	R. Lyngby
Kevin Kingma	Dave LaCey	Lainie Levick	Gillian Lyons
John Kinkelaar	Lacy	Mark Levin	David Lytle
Kevin Kinsall	Harold Ladd	Mary Levoir	Anita Macfarlane
Spencer Kircher	Denise Laes	James Lewis	Craig Mach
Kevin Kirkeby	Brian Laflamme	Lane Lewis	Suzanne & Ron
John Kirkham	Larry Lafrentz	Ethel Lewis	Mackelprang
William Kirkpatrick	Joseph Lambert	Flo Lewis	John Mackinney
Edward Kirwan	Rick Lambert	Fred Lewis	Dianna Macleod
Karl Kiser	Venita Lambert	Todd Lewis	Rod Macleod
Tom Kitchar	Laurie & Michelle Lamont	Malin Lewis	Frank Macmurray
John Kitzhaber	Dick Lance	Frank Lewis	Edward Madsen
Joseph Kizis	Stephen Lance	Patricia Lewis	Bernice Maertz
Trish Klahr	Rod Landblom	Kim Lexa	Janette Magee
Gene & Rose Klefman	Andy Lande	Mike Leyva	Doug Magee
Richard Klein	John Landreth	Gaul Lichfield	Rick Magstadt
Eric Klein	Raymond Landry	Suzanne Licht	Joe Maher
James Klein	Guy Lane	Ole Lievestad	Edward Mainland
Mike Klein	Joe Lane	Jack Liggett	Lyle Majeska
Rose & Paul Klemenok	Sandra & David Lane	Bill Lind	Clifford Maki

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Janice Makiney	O. McCook	Alan Meyer	Janet Morton
Jeff Malmen	Phyllis McCormack	Stanley Meyer	Miriam Moyas
Julie & Ken Maloney	Harold McCormick	David Meyers	Harry Mosby
Jessi Maloney	Dan McCoy	April Michaski	Stephen Moser
Lucky & Mary Mancini	Gordon McCoy	Robert Michalski	Donald Motley
J. Maneth	Steve McCoy	Stephen Micklas	Roger Motten
V. Mangus	Tim McCrum	Marcus Middleton	Mike Moutray
Scott Manske	Betty McCue	Maureen Miemi	Michael Mower
Joni Manuel	Carroll McCulloch	Richard Milanovich	Jim Muck
Christopher Mapes	Thomas McCully	April & Brent Miller	John Mudge
Lori Maranto	Richard McCutchen	Joe Miller	Joyce Muir
Thomas Marconi	Larry McDaniel	Barbara Miller	Tom Mulgren
Steve Marrell	James McDermand	Mark Miller	Jim Mulhall
James Margason	Charles McDonnell	Neil & Jennifer Miller	Sean Mullen
Alex Marinello	Brad McFadden	Sheldon Miller	Earle Mullen
Jim Marks	Glenn McFall	David Miller	Guadalupe Munoz
Steve Marks	Annette McFarland	Richard Miller	Terry Munson
Kelly Maroti	Michael McFarland	Eillard Miller	Mary Munson
Jason Marsden	Curtis McGann	Jim Milligan	Donald Murphy
Timothy March	Joyce McGarry	Ernest Milligan	Loren Murphy
John Marchese	Kenneth McGarva	David Milliken	Susan Murphy
Gwen Marshall	Michael McGath	Star Mills	Floyd Murray
Kathleen Marshall	Sam McGeorge	Dewayne Mills	Jason Murray
Dennis Marsing	Doug McGibbon	Lonnie Mills	Sharon Murray
Dallas Martin	Timothy McGowan	Clark Milne	Shirley Muser
Douglas Martin	Robert McGowan	Bill Milton	David Muser
Anne Martin	Dan McGrane	Mark Minter	Brian Musser
Walt Martin	Mike McGrath	Reymundo Mineles	Jim Mustra
Claire Martineau	Madelen McGregor	Greg Mirich	Bob Myers
R. Martineau	Steve McGuire	Hank Miser	Tom Myers
Georgia & John Marx	Joseph McGurrin	Michael Miskowski	Jim Nagel
Susie Mason	Michael & Joann McKay	Mike Misner	Richard Nanna
Herbert Mason	Andrew McKean	T. Mitchell	Rachel Nava
John Mason	Jeromy McKinnon	Jim Mitchell	Chuck Neal
Bob Mason	Bob & Karen McKowen	Miles Mitchell	Melva Neal
Rex Massey	Wayne McLain	Dal Moellenberg	John Neal
Tom Massie	David McLean	Cherlynn Moses	Wayne Neff
Tony Massih	Gary McLearn	Richard Mohr	Brian Neilson
Jason Mastrine	Sally McLeod	Jean Mold	Glenn Neilson
Ardell Mathews	Don McLeod	Mike Mold	Anton Nelson
Bryce Mathews	Vance McMahan	Christina Moncibez	Duane Nelson
Michael Mathews	Annie McManus	Tom Monforton	Mark Nelson
Erin Mathews	Don McMillan	Kelly Monier	Eloise Nelson
Kay Mathews	Gordon McMillian	Melissa Monk	Charles Nelson
Harold Mathews	Page McNeill	John Monroe	Tom Nelson
Ernest Matson	Bill McNulty	Sam Monteleone	Robert Nelson
Kevin Matthes	Teresa McPherson	Mel Montgomery	Larry Nelson
Robert Mattox	Keith McPhilimy	Jeff Moore	Laura Nessl
Terry Mattson	Keith McRobert	Russell Moore	A W Neustedt
Dean Matzat	Douglas Mead	Haynes Moore	Bruce Newbery
Steve Mauney	Dan Mead	Scott Moore	Don Newhouse
Pamela Mausner	Stanley Meager	Loren Moos	Earl Newland
Charles Maxwell	Robert Meckley	Denny Moosman	Gail Newton
Jacqueline May	Jodi Medlar	Freddie Moraga	Norman Nicholls
Darrell Mayberry	John Meeks	Robert Moran	Dave Nichols
Jim Mayers	Brad Meiklejohn	Steve Morehouse	Harold Nichols
Jay Mayhew	James Melchior	Authur Morgan	Larry Nichols
Lillian Maynard	Karen Melfi	Jim Morgan	Kent Nicholson
Lisa Mayo	Jay Melnyk	Roy Morgan	Tom & Julie Nicholson
Bill Maze	Vivian Menaker	Huel Morphis	Tom Nickles
C. McArthur	Mary Menetrey	Steve Morrell	Jim Niebaum
Hya McCall	Dean Menge	Delks Morrill	Patricia Niebaum
Jim McCarthy	Joanna Meninick	Janet & Paul Morrison	Dianne Nielson
Daniel McCarty	Scott Mernitz	Lee Morrison	Preston Nieson
William McCarrill	John Merz	Elvin Morse	Rob Nigg
Gene McClelland	Robert Messinger	Robert Morse	Daniel Nixon
Allen McClintick	Susan Messler	Mark Morse	Mike & Ralph Nolen
Dave McC lure	Terry Metz	Charles Mortensen	Scott Norby
Donald McCmillan	Catherine Mueller	Richard Mortenson	Mary Nordale

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Bob Nordstrum	Jeff Parshley	William Platts	Jane Ray
A. Norris	Perry Parsons	Harold Plum, Jr.	Larry Raymond
Brian Norris	John Parterfield	Darla Poag	Malcolm Rea
Dottie Norton	Will Patric	Don Poggi	Carolyn Rebolz
Ruth & John Norton	Thomas Patrick	Alan Politte	Chuck Reech
Dick Notmeyer	Cora Patterson	Robert Pollock	Charles "Hardy" Redd
Lee Nugent	Allen Pauer	Robert Popp	Jim Reddy
Marshall Nunn	Chris Paulsen	Genna Porter	Jill Reed
Burl Nunn	Marilyn Paxton	Mary & William Porter	Leroy Reed
David O'Connell	Val Payne	Bev & Bill Post	Lynn Reed
Peter O'Conner	Jim Peaco	Donald Potts	Linda Reed-Jerofke
David O'Donnell	Gordon Peake	Shiloh Poulter	Don Reeder
Janet O'Crowley	Jimmie Peal	Dan Powell	Elaine Rees
Danny O'Neill	Jeffrey Peace	Randy Powell	Richard Reeve
Martha Oaklander	Lewis Pearce	Randy Powelson	Leatha Reeves
Tim Obole	Shayne Pearce	R R Poyorena	Michael Regan
Ochoa	Carl Pearson	Sharon Prager	John Reginato
Oscar Ochoa	Pat Pearson	Roy Preator	Linda Regnier
Robert Odell	Donald Peay	Mel Preckel	Woody R ehanek
Al Odermann	Connie Peck	Michael Pressman	Doug Reichenbarn
Dimetri Oganessian	Henry Peck	Anthony Price	Richard Reid
Laura Ohanian	James Peck	Jack Price	Christine Reilly
Steve Olafson	Gerald Peebler	James Price	Bernard Reilly
Bob Oliver	Scott Peebler	Jim Price	Kenneth Reim
Sara Oliver	James Peek	Robert Price	Scott Remington
Timothy Oliver	Craig Peer	S M Price	Fritz Rennebaum
Larry Olsen	John Pekrul	Linda Priest	Bob Ressler
Thomas Olsen	Raymond Pendergast	Bob Primbs	Fred Retzlaff
Luann Olson	William Pennant, Jr.	June Primbs	John Reynolds
R. Olson	David Penney	Richard Prior	Norma Reynolds
Frank & Lorraine Ondricek	R. Pennington	Victor Pritchard	Omdeir Reynolds
William Orchow	Larry & Laveta Pennock	Carole Probert	Jerry Reynoldson
Juan Ornelas	W. Penny	Todd Process	Greg Rheam
Robert Orser	Curtis Pepper	Louis Profit	Richard Rhoads
Marcus Osborn	Ina Perce	Steven Proscia	Freddy Rhodes
Jeanne Osborn	Bradley Perkins	Harold Provonsha	James Rhyne
Tad Osmun	Terry Perkins	Leo Pruitt	James Rice
Edmond Osteen	Janet Parrigo	Richard Pruitt	Scott Rice
Phil Ott	Melvin Perry	Robert Pruitt, Jr.	Eldon Rice
Goldie Otters	Vern Personett	Shali Puls	Jeremy Richan
David & Kathryn Owen	Carl Pescio	Dan Purvance	Leo & Donale Richan
David Owens	Janet Pescio	Douglas Putman	Mayfield Richard
O. Owens	Joe Pescio	Ken Pyles	Ronald & Helen Richards
Bill Owens	Robert Peter	John Pyper	Bill Richardson
Eladio Pacheco, Jr.	Gene Peters	Steven Quarles	Gary Richardson
Walt Pachucki	Mike Petersen	Ella Quay	Donali Richau
Julia Page	Kent Petersen	Lorraine Quinn	Scott Richey
Steve Page	Ellis Peterson	Joseph Quintana	Theona Richie
Jerry Palmer	Mike Peterson	Eyesebio Quintero	Merle Richmond
Susan Pancare	Ron Peterson	Brett Rabe	Kathy Richmond
Bernadette Pangersis	Daniel Pettengill	Peter Rabin	Virginia Ricketts
Frank Pangersis	George Pettyjohn	Marc Racicot	Ron Ricketts
Dave Paquin	Jack Phillips	Denyse Racine	John Rico
Bruce Parke	William Phillips	Larry Raddon	Dave Riddle
David Parker	Charles Phillips	Bruce Raden	Cynthia Riddles
Robert Parker	Robert Phipps	Mike Raffath	Laura Riensche
Doug Parker	Charles Picard	Mike Rains	Theron Riley
Gary Parkin	Lewis & Joanna Picher	Rudolph Raman	Anna Rinaldo
Craig Parkinson	Gary Pickler	Doug Rand	Frank Rinaldo
Suzanne Parkinson	Art Pierce	William Raner	Kevin Ringdal
Richard Parks	Jennifer & Linda Pierce	Michael Ranager	June Ringer
Bruce Parks	Edward Pike	Wayne Ranney	David Ringquist
John Parks	Larry Pilster	Ronald Raper	Lonny Ripplinger
Rick Parlett	Douglas Pineo	Derek Rapier	John Rishel
Delbert Parr	Ralph Pingrossi	Mark Rapkoch	John Ritchey
Ronald Parratt	David Piquet	Ronny Rardin	Bobbie Ritchie
Conrad Parrish	T Piquet	Richard Rasmussen	Scott Ritchie
Johana Parrish	Tom Pitney	Sarath Ratnayake	Troy Rittgers
Mathew Parrish	Carmen Pitt	Geoff Rauch	Dan Ritzman

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Robert Rivera	Castulo Sanchez	Richard Sence	Ronald Singer
Walter Rivers	Michael Sanders	Billie Senik	Jerry Sisk
Daniel Rix	Richard Sanderson	Michelle Senne	Paul Sisson
Julie Rizzo	Stuart Sanderson	Lance Senter	Daniel Sivertson
Authur Robbins	Alice Sandoval	Gene Sentz	Laura Skaer
David Robbins	Andrew Sandoval	Suzanne Sessine	Larry Skaggs
John Roberts	Robert Sanregret	George Seuffert	Waine Skidmore
Kathy Roberts	Jay Santos	Lesa Sevin	Robert Skinner
Craig Roberts	Richard Sargent	Mary Sexton	Michael Skowera
David Robertson	Sili Sataua	Pete Shabeshari	Walter Slack
Ernie Robinson	L M Saterfield	Judy Shackford	Jeff & Susan Sloss
Roger Robinson	John Savarete	James Shannon	Donald Slater
Helen Robinson	Gultekin Savci	James Shannon Jr.	Dennis Slates
Otis Robinson	Stephen Saway	Richard Shannon, Jr.	Steve Slaven
Raymond Robinson	Wayne Sayer	James Sharp	Kermit & Karen Smal
George Robinson	Judy Saylor	Sam Sharp	Jerry Smalling
Kevin Robinson	Ronald Sbrighia	Chris Shaw	William Smart
Gordon Rodda	Tom Scartaccini	Buddy Shaw	Steve Smerud
Terri Rodefer	Robert Schaale	M S Shay	David Smith
Howard Rodgers	Edward Schafer	Katy Sheehan	Duane Smith
A. Rogers	T. Schaffer	Marcie Sheehan-Kerner	Sally Smith
Clayton Rogers	Ron Schanf	Wesley Shelberg	Sharon Smith
Joseph Rogi	Darrell Scharf	Ken Shelley	Steve Smith
Emil Romagadi	Jack Scheall	Thomas Shelley	Susan Smith
Joe Romero	Ed & Bonnie Schein	Richard Shepard	Judith Smith
Christa Romppanen	Sanford Schemnitz	Austin Shepherd	Willis Smith
James Roots	Marina Schenk	Holland Shepherd	George Smith
Donna Rosborough	Robert Schenk	Byron Sher	Gregory Smith
Olga Rosche	Mike Schern	William Sheriff	Vance Smith
Patti Rose	Joseph Scheuering	Lew Sheman	Edgar Smith
Barry Rose	Craig Schiffrics	Paul Sherrell	Craig Smith
Elyssa Rosen	L A Schildberg	Pat Sherrick	Dorothy Smith
Helene Rosenberg	Ron Schindler	Charles Sherry	Jeff Smith
Gerett Rosenthal	Wayne Schlegel	Roger Sherwood	Joan & Tim Smith
Nathalie Rosin	Charles Schlicht	Chuck Shipley	Kelly Smith
G. Ross	Craig Schlittler	Glen Shipp	Michael Smith
Carl Rouch	George Schmidt	Lucy Shipp	Nathan Smith
Keith Rousch	Paul Schmidt	Thor Shirley	Dan Smith
A. Rovig	Ron Schmiermund	Daniel Shively	Dona Id Smith
Terry Rubin	Daniel Schneider	Jerry Shodall	E. Smith
James Ruddock	David Schneider	Frank Sholey	Billy Smith
I. Rudy	Robert Schneniger	Kon Shonk	Troy Smith
Hugh Rubush	Herman Schob	Robert Shook	Laura Smith
Hector Ruedas	Ben Schole	Ann Shores	Connie Smith
Joseph Rueter	Steve Schombel	Richard Shores	Charlie & Tanya Smith
David Ruiz	Roger Schorg	Shane Shradley	Geoffrey Smith
Richard Rukavina	Elaine Schrader	Richard Shreves	William & Sandra Smith
Walter Rule, Jr.	Franklin Schroeter	Leonard Shrewsbury	Wlford Smith
Joseph Rumberg	Steven Schubert	Duane Shroufe	Jim Smithson
Robert Rumir	Robbie Schuitzen	Chuck Shultz	E J Sneed
William Rundquist	Reid Schuller	Susie Siedentop	Timothy Snider
Samuel Rushforth	Michele Schummer	Florence Signaless	Bill Snoddy
Luke Russell	Lenard Schwab	Jack Sikorski	Charles Snow
Don Russell	Alan Schwartz	G. Siliman	Scott Soderstrom
George Rutter	William Schwarzkoph	Arnold Silverman	Brenda Sohm
Kevin Ryan	A. Schweizer	Alan Silverstein	Victor Soltan
Pat Rylance	Ruth Ann Scola	Edward Simi	N G Somma
Jennifer Salisbury	Michael Scott	Gloria Simms	Thomas Sonandres
David Salisbury	Warren Scott	Richard Simon	Aubert Sonheim
Diana Salisbury	William Scott	Grant Simonds	Glen Sonnabend
Robin Salthouse	Verna Scratch	Gregg Simonds	Jerry Sorensen
Doug Salvesen	Tim Scullen	Roxane & Paul Simonian	Ford Sorenson
Robert Sammons	Thom & Jette Seal	Clifford Simonsen	Sam Sorch
Otis Sampson	Kurtis Sears	Herva Simpson	James Southworth
Terry Sampson	Paul Seccomb	Tom Simpson	Vance Spalding
Walter Sampson	Darryl Seeley	Dave Simpson	Hal Spander
Susan Samuelson	Bjorn Selinder	Laura Sims	Bob Speaker
Amy Sanchez	Chris Sellstone	L. Sims	Jay Spehar
Adella Sanchez	John Semone	Patricia Sims	Peter Spencer

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Roger Spencer	Sean Sullivan	Chris Tollefson	Joanne Vinton
Susan Spencer	Jeanne Sullivan	Selma Tomich	Dennis Visser
David Sperling	Giri Sumen	Tom Tomlinson	Andrew Visocan
Andrew Speth	Steve Sutherland	Alfred Tomlinson	Craig Visser
Tim Speyer	Russell Swan	Noel Tomlinson III	Richard Voit
John Spezia	Joseph Swaner	Thomas Toole	George Volker
Richard Spotts	Trudy Swaner	Robert Toporowski	Greg Von Savyoe
Nancy Spraggins	John Swanson	Harm Toren	Linda Vonflatern
Henrietta Squirewell	Gregory Sweeney	Phyllis Torson	Robert Vrooman
Jeff Stabnow	Tim Swendseid	Istvan Toth	Allen Waggoner
Dennis Stacey	Raymond Swenson	Patrick Traphagen	Darrell Wagner
Donald Stacey	Larry Swett	Richard Travis	Lew Wagoner
George Stack	Gregor Swinderski	Joan Travostino	Donald Wagstaff
Stacy	Harry Switzer, Sr.	Arthur Trenholme	Nancy Wainwright
Dennis Stacy	Mary Sykes	Richard Trenholme	Robert Walsh
Alan Stahler	Fife Symington	Larry Trent	Robert Walk
Colleen Staley	Bill Szymanski	Everett Tribbett	David Walker
Mykie Stanford	Ed Szyhowski	Marc Trimmer	JR Walker
Ronald Stanford	Marilyn Taber	Larie Trippet	Jana Walker
R. Stanley	Ken Tabon	Ruth Troetschler	John Walker
John Stansberry	Steve Tabor	Tom Troutman	Michael Walker
Dee Stapp	Van Talley	Ross Trujillo	Randall Walker
Gordon Steele	Paul Tallman	Bob Tucker	Leonard Wall
Robert Steele	Mary Tamplin	Crystal Tune	Stephen Wallace
Todd Steele	John Tanaka	Hugo Tureck	Rob Walline
Mark Steen	Dale Tash	Larry Turk	Stewart Wallis
David Steimle	Susan & Russell Tasker	Charles Turner	Stuart Wallis
Donald Stein	John Taulé	Jay Tutchtou	A. Walsh
Roger Steininger	Kenneth Taylor	William Tweedell	Gary Walter
Mary Stellerini	R. Taylor	Margaret Tweedy	Donald Walter
Don Steuten	Jane Taylor	Carl Twissleman	Marnie Walters
Don Steuter	Jack Taylor	Toby Tyler	Jim Walton
Bob Stevens	Paul Tedesco	Robin Tynner	Phillip Waner
Tammy Stevens	Derrick Teel	Duan Tyree	Larry Wanger
Bud Stevenson	James Teeter	Francesca Tyrnauer	Sylvia Ward
John Stewart	James Tenny	Charle Ucker	H. Ware, III
Donald Stewart	Daniel Terrazas	Chris Udall	Joseph Wargo
Bruce Stewart	Bill Terry	Stewart Udall	Priscilla Warner
Faye Stewart	Bob & Phyllis Terry	Barbara Ulliam	Scott Warner
Walter Stewart	Wolfe Terry	Brian Ulm	Kenneth Warren
Roy Stienmier	Wanda Theos	John Unger	Chuck Washburn
Don Stillwell	Candace Thomas	Steve Upton	Rebecca Watson
Eric Stimson	Frances Thomas	Robert Uram	Kent Watson
Jim Stinnett	Frank Thomas	Allan Vail	Vicki Watson
Allen Stinson	Richard Thomas	Trudy Valles	David Watson
Patricia Stockdill	Scott Thomas	James Van Arsdale	Frances Watson-Werner
Rob Stokes	Robert Thomason	Robert Van Camp	Gary Watt
Will Stokes	Clifford Thompson	Nancy Van De Linde	George Watt
Leslie Stoltz	Jan & Donald Thompson	David Van Den Berg	Mack Watts
Ava Stone	Robert Thompson	Rob Van Kirk	Marvin Watts
Barton Stone	Allene Thompson	Thomas Van Norman	Edgar Wayburn
Jon Stone	Ronald Thompson	Mary Lois Van Sooy	Michael Wearne
S W Stone	T Thompson	Mel Van Zeban	Lewis Weaver
Ray Storey	Don Thompson	Hohn Vamum	M. Weaver
James Straight	Doug Thompson	Michael Varvis	Dan Weaver
Steve Stratton	Tommy Thompson	Wallace Vaux	W. Weber
Emilie Strauss	Leslie Thompson	Lisa Vehman	Rebecca Wechsler
George Strauss	James Thompson	Albert Velasco	George Weeks
Dan Streeter	Amy Thompson	Gil Venable	Hal Weeks
Edmund Strickland	Jack Thornborrow	Jack Venezia	Bill Wehde
Jack Strubel	DG Thurman	John Venus	Donald & Debbie Wehrs
Eric Struhsacker	Stephanie Tidwell	Stefan Verchinski	Don Wilmunster
Debra Struhsacker	Charles Tiernan	Charleen Verkaik	Randy Weimer
Mary Anne Struyk	William Tilden	John Vezina	Bonita Weimer
John Struyk	Jules Tileston	Terry Viehrberg	Warren Weinel
Mark Stuart	Peg & Julie Tileston	Joel Vignere	M. Weiskopf
Scott Stumbaugh	Lorraine Timberlake	Peter Vikre	Steven Weiss
Mark Sturek	Kerri Timmer	Robert Villalobos	Corinne Mae Welch
Tim Sullen	Ed Tobin	Joseph Villescas	Leigh Wellig

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Reba Wells-Grandrud	D. Wilmarth	Bill Yoder
Bill Welsh	Cy Wilsey	Robert Yohe
Frank Welsh	Nicole Wilsey	Russell Yonkers
John Welsh	Howard Wilshire	Naim Younan
Scott Wentz	H. Wilshire	Allen Young
John Werden	R. Wilson	
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Chris West	Jim Wilson	
Dan West	William Wilson	
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Lyle Wheelwright	W R Witt	
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Rohm Whittaker	Clark Wockner	
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Dick White	Eric Wollard	
Virgil White	Nora Wolthers	
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Kathy Whitman	John Wood	
James Whittaker	Joel Wood	
Loren Whittermore	Lisa Wood	
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Barbara Wiggins	George Wooten	
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Mike Wignot	Jill Workman	
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Bill Wilans	Chris & Jenny Worth	
John Wild	Nancy Wotruba	
Ruth Wiley	William Wray	
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Ford Wilkinson	Lisa Wright	
Fred Wilkinson	Andrew Wright	
John Wilkus	Brett Wright	
Ron Willden	Carroll Wright	
Ann Willerton	Jeff Wright	
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Eric Williams	M L Wright	
Steve Williams	Robert Wright	
Terry Williams	William Wright	
Kirk Williams	Bryan Wyberg	
Dan Williams	Craig Wycoff	
Rick Williams	Glen Wyman	
Maurice Williamson	John Wynn	
Jeff Williamson	Philip Yadanza	
Clyde Williamson	Lih-An Yang	
Mike Williford	Duane Yantorno	
Frederick Willis	Douglas Yates	
Dennis Willis	Lawrence Ycarsley	
Robert Willis	Michael Yochim	

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Roland Young
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Carl & Curt Youngberg
Tom Youngren
Jim Younker
Berta Youtie
Diane Yupe
Cathy Zabloudil
Danielle Zabloudil
Hal Zabriskie
Kiley Zacharias
Peter Zagar
Jim Zahradnicek
John Zamar
Frank Zarate
Donald Zastrow
Janice Zilko
Bob Zimmerman
Janet Zimmerman
John Zimmermann
James Zink
Ruth Zirkle
Fred Zoerner
Shane & Deborah Zufelt
Fred Zumwalt
Jose Zuniga

APPENDIX C OTHER APPLICABLE REQUIREMENTS

The following is a list and brief description of major laws, regulations, executive orders, permits, licenses, and reviews that could apply to mineral projects on public lands. This is not intended to be an exhaustive list, and other requirements may apply at the local, county, or state level. Some of the procedural requirements depend upon whether there is an underlying federal action or decision and may not apply under some alternatives, such as Alternative 2, where there is not a BLM decision on specific exploration or mining projects.

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GENERAL REQUIREMENTS

The following acts and executive order establish general review requirements or management objectives that apply to mineral projects on public lands.

Federal Land Policy and Management Act of 1976 (FLPMA), P.L. 94-579. Section 302(b) states that “In managing the public lands the Secretary shall, by regulation or otherwise, take any action necessary to prevent unnecessary or undue degradation of the lands.”

Executive Order 12088 - Federal Compliance with Pollution Control Standards, October 13, 1978. Executive Order 12088 directs executive agencies to take all necessary actions to prevent, control, and abate environmental pollution from activities and facilities under their control. This order further directs those agencies to comply, to the same extent as any other person is required to do so, with both the procedural and substantive requirements of pollution control standards, including the Resource Conservation and Recovery Act; Comprehensive Environmental Response, Compensation, and Liability Act; Clean Water Act; Safe Drinking Water Act; and state and local laws and rules.

National Environmental Policy Act of 1969 (NEPA), P.L. 91-190. The National Environmental Policy Act directs federal agencies to consider the environmental impact of their decisions. NEPA requires BLM to prepare environmental assessments or environmental impact statements for the approval of Plans of Operations. Some states, such as Montana and California, have state laws similar to NEPA.

The 1970 Mining and Mineral Policy Act and The 1980 Natural Materials and Minerals Policy, Research, and Development Act. Both of these acts direct that the public lands be managed in a manner that recognizes the Nation’s need for a domestic source of mineral production.

AIR QUALITY

The federal statutes pertaining to air quality protection are contained in the following acts.

Clean Air Act (CAA), P.L. 84-159 (Air Pollution Control Act; July 14, 1955), 42 USC 7401 et seq., as amended numerous times.

The objectives of the Clean Air Act are (1) to protect and enhance the quality of the Nation’s air resources so as to promote the public health, welfare, and productive capacity of its people, (2) to initiate and accelerate a national research and development program to prevent and control air pollution, (3) to provide technical and financial assistance to state and local governments for developing and executing air pollution prevention and control programs, and (4) to encourage and assist the development and operation of regional air pollution prevention and control programs.

The U.S. Environmental Protection Agency (EPA) is responsible for developing standards, rules,

Appendix C: Other Applicable Requirements

guidance, and program oversight. The states have the primary responsibility for enforcing air quality regulations and standards as defined in an EPA-approved “state implementation plan,” and may establish more stringent regulations and standards. These responsibilities may be further delegated to local authorities. Tribal governments are responsible for enforcing standards on their lands, based on EPA-approved “tribal implementation plans.” BLM is responsible for assuring that all of its activities (either directly or through use authorizations) comply with all local, state, tribal, and federal air quality laws, regulations, and standards.

Specifically, under Section 118 of the Clean Air Act, BLM “(1) having jurisdiction over any property or facility, or (2) engaged in any activity ... which may result in the discharge of air pollutants,” and each employee “shall be subject to, and comply with, all Federal, State, interstate, and local [air quality] requirements.” These regulations apply to any action (whether substantive or procedural), to requirements to pay fees, to the exercise of any administrative authority, and to any process or sanction. In addition, these requirements apply “notwithstanding any immunity of such agencies, officers, agents, or employees under any rule of law.”

In addition, under Section 176, BLM “shall not engage in, support in any way or provide financial assistance for, license or permit, or approve, any activity which does not conform to an implementation plan...” Further, “The assurance of conformity to such an implementation plan shall be the affirmative responsibility of the head of such department, agency, or instrumentality.” In essence, BLM must demonstrate that every decision or action it takes will comply with air quality requirements.

Federal Land Policy and Management Act of 1976 (FLPMA), P.L. 94-579 (October 21, 1976), 43 USC 1701 et seq., as amended.

An Act; “to establish public land policy; to establish guidelines for its administration; to provide for the management, protection, development, and enhancement of the public land; and for other purposes.”

Through the Secretary of the Interior, BLM is responsible for implementing FLPMA. As an “organic” act, FLPMA defines BLM’s organization and provides the basic policy guidance for management of the Public Lands. Therefore, FLPMA is the primary law guiding all BLM activities; BLM should implement other legislation in a manner that conforms to FLPMA and its overall intent.

As stated in Section 102: “The Congress declares that it is the policy of the United States that ... the public lands be managed in a manner that will protect the quality of scientific, scenic, historical, ecological, environmental, air and atmospheric, water resource, and archeological values; that, where appropriate, will preserve and protect certain public lands in their natural condition; that will provide food and habitat for fish and wildlife and domestic animals; and that will provide for outdoor recreation and human occupancy and use ...”

Land use plans (Section 202), which describe how the BLM will manage the public lands, must

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“... provide for compliance with applicable pollution control laws, including State and Federal air, water, noise, or other pollution standards or implementation plans ...”

A provision for revoking or suspending land use, occupancy, or development authorizations upon “a finding of a violation of ... applicable State or Federal air or water quality standard or implementation plan ...” is required under Section 302.

Finally, under Section 505, “each right-of-way [provision] shall ... require compliance with applicable air and water quality standards established by ... Federal or State law ...”

HAZARDOUS MATERIALS AND WASTE MANAGEMENT

Resource Conservation and Recovery Act (RCRA), P.L. 94-580, as amended by the Solid Waste Disposal Act Amendments of 1980, P.L. 96-482, USC 6901 et seq. The Resource Conservation and Recovery Act (RCRA) is the federal law governing management of solid and hazardous waste. RCRA divides wastes on two regulatory tracks: Subtitle D (solid waste) and Subtitle C (hazardous waste). In October 1980 Congress amended RCRA by adding Section 3001(b)(3)(A)(iii) (known as the Bevill exclusion or amendment) for solid waste from the extraction, beneficiation, and processing of ores and minerals. The Bevill amendment excluded such mining waste from regulation as hazardous waste under Subtitle C of RCRA, pending completion of a study and report to Congress. All extraction and beneficiation wastes and 20 special mineral processing wastes are excluded from RCRA Subtitle C regulation by virtue of the Bevill amendment (see 40 CFR 261.4(b)(7)).

RCRA emphasizes the primary role of the states in managing both conventional solid wastes and hazardous wastes. The legislation provided a federal support role with minimal enforcement and regulatory process for conventional solid wastes. Actual regulation and enforcement of solid-nonhazardous wastes was left to the states, which were to follow broad guidelines established at the federal level.

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) 42 USC 9601 et seq.; as amended by Superfund Amendments and Reauthorization Act (SARA), P. L. 99-499, October 17, 1986. The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and the amendment of the Superfund Amendments and Reauthorization Act (SARA) authorized response to releases or threatened releases of hazardous substances that may endanger public health, welfare, or the environment. The law outlines the procedures for reporting any environmental releases of a hazardous substance that exceeds a reportable quantity and also includes provisions for permanent cleanups, known as remedial actions, and other cleanups referred to as removals. SARA created the Emergency Planning and Community Right-to-Know Act (EPCRA), a statute designed to improve community access to information about chemical hazards and to facilitate the development of chemical emergency response plans by state and local governments.

Uranium Mill Tailings Remediation and Control Act of 1978 (UMTRCA), P.L. 95-604,

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Nov. 8, 1978; 92 stat. 3021; as amended by P.L. 95-106 , Nov. 9, 1979, 93 stat. 799; and P.L. 97-415, January 4, 1983, 96 stat. 2078. The Uranium Mill Tailings Radiation Control Act (UMTRCA) regulates mill tailings at active and inactive uranium mills that present a hazard to public health. The act provides that efforts must be made to stabilize, control, and dispose of uranium mill tailings in an environmentally sound and safe manner. UMTRCA provides (1) a program of assessment and remedial action at abandoned mill sites and (2) a program regulating mill tailings during processing at active processing mills.

Toxic Release Inventory. The Toxic Release Inventory (TRI), is mandated by a provision of the Emergency Planning and Community Right to Know Act (EPCRA), which requires specified industries to report releases of more than 650 chemicals and chemical categories to air, land, and water. The TRI's purpose is to give citizens information about chemicals being used, processed, manufactured or released from facilities in their communities. As of 1999, mining was added to the groups of industries that need to report under TRI.

If a mining company has a certain number of employees and chemicals, it must report any releases. The process is a paperwork exercise to determine the amount of certain chemicals that are placed on the land, air, and water. For example, a mining operator must determine how much arsenic is in waste rock and state how much the release is. But the report does not state how much of the material is available to the environment. A chemical plant that spills 200 gallons of arsenic has a problem, whereas a mine that produces 200 tons of waste rock with arsenic may not have a problem unless the arsenic is mobilized.

WATER RESOURCES

Clean Water Act (CWA), P.L. 92-500, as amended by P.L. 95-217, P.L. 95-576, P.L. 96-483, and P.L. 97-117; 33 USC 125. et seq. The objectives of the Clean Water Act are to restore and maintain the chemical, physical, and biological integrity of the Nation's waters. The act protects surface "navigable" water through federally enforceable regulations, with emphasis on discharge of pollutants to surface waters.

Regulations for protecting ground water are not specifically included in the Clean Water Act. Authority to protect ground water is vested in the states. But the Clean Water Act clearly delineates the federal role in protecting ground water quality. Section 313 requires federal compliance with valid state and local government requirements to the same extent as any nongovernmental entity. Sections 208 and 106 provide the federal financial assistance and guidance to state and local governments for planning and managing ground water resources. Section 208b.2 requires that individual states develop processes to identify and control the following:

Surface mining and underground mining-associated pollution of surface water and ground water.

Appendix C: Other Applicable Requirements

Intrusion of salt water into fresh ground water aquifers.

The disposition of residual wastes that could degrade the quality of surface or ground water.

The disposal of pollutants on land or in excavations wherein adjacent surface water or ground water quality degradation could ultimately result.

The Clean Water Act also regulates dredge and fill placement in waters of the United States. A permit under Section 404 of the act is required for mining that would disturb wetlands or other waters of the United States. This permitting program is administered by the U.S. Army Corps of Engineers and the U.S. Environmental Protection Agency.

Safe Drinking Water Act (SDWA), P.L. 93-523, as amended by P.L. 95-190, 42 USC 300 et seq. In 1974 Congress passed the Safe Drinking Water Act, part C of which directed the Environmental Protection Agency to establish minimum requirements for effective state programs to prevent underground injection that endangers ground water resources of public supply systems. This program became known as the Underground Injection Control Program (UIC).

Under the Underground Injection Control Program injection wells are divided into five well classes for the purpose of regulations. Class III wells are used to inject fluids for the recovery of minerals such as solution mining of salts and sulfur and in-situ leaching of uranium, copper, or (experimentally so far) gold. Class V wells and for a while some class I wells have mining application for the disposal of hazardous or nonhazardous waste, including the use of mine wastes to backfill underground mines.

The purpose of the Safe Drinking Water Act is to protect the public health and welfare by assuring that the quality of drinking water provided by public water systems is adequate for human use. To meet this goal, the act provides for the following:

Establishing primary national drinking water regulations setting forth mandatory maximum contaminant levels in drinking water supplied by public water systems.

Establishing secondary national drinking water regulations for public water systems. These regulations are not mandatory, but they are recommended standards to protect public health.

Protecting the quality of aquifers that serve as the main source of drinking water for an area and that, if contaminated, would create a significant public health hazard.

Protecting underground sources of drinking water from injection of pollutants.

The Safe Drinking Water Act provides for and encourages delegation of its authorities to the states, which assume primary responsibility for enforcing its provisions. Only if a state fails to assume the responsibility would EPA assume enforcement responsibility.

Under the provisions of Section 1447(a) of the act, BLM is required to comply with both the

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substantive and procedural requirements of the act. Specifically, Section 1447 directs that

(a) Each federal agency (1) having jurisdiction over any federally owned or maintained public water system or (2) engaged in any activity that results in or may result in underground injection that endangers drinking water (within the meaning of Section 1421(d)(2)) is subject to and must comply with all federal, state, and local requirements; administrative authorities; and processes and sanctions respecting the provision of safe drinking water and respecting any underground injection program in the same manner, and to the same extent, as any nongovernmental entity.

Under the provisions of the act, BLM therefore is not responsible for primary enforcement of the act's requirements but rather is regulated by those provisions. BLM's role is to help the states in their efforts to protect the quality of ground water that has present or potential use as an underground source of drinking water.

Wild and Scenic Rivers Act, P.L. 90-548, Oct. 2, 1968, 82 stat. 906 and as amended.

Portions of this act provide for control of activities that are on land next to rivers and could cause or contribute to pollution of waters, or could degrade water quality through erosion and siltation of riverbank lands, and contamination of ground water sources feeding the river.

Executive Order 11990, Protection of Wetlands, May 24, 1977, 44 FR 1955. Executive Order 11990 directs all agencies to provide leadership and take action to minimize the destruction, loss, or degradation of wetlands according to the National Environmental Policy Act. The order covers aspects of federal activities affecting wetlands, including land management, facilities development, and licensing regulations. Agencies are asked to minimize the impacts of federal actions on wetlands and their related beneficial effects, such as ground water recharge. In carrying out any activities affecting wetlands, federal agencies must consider such factors as public health, safety, and, welfare, including such things as water supply and quality, recharge, and discharge areas for ground water, pollution, etc.

CULTURAL RESOURCES

Antiquities Act of 1906 (P.L. 59-209): The Antiquities Act provides for the protection of archaeological resources on Federal lands through criminal sanctions against excavation, injury, or destruction of archaeological sites without permission. This legislation has been declared unconstitutional in the Ninth Circuit and is no longer enforced. Enforcement problems with The Antiquities Act led to the other Federal historic preservation laws.

National Historic Preservation Act of 1966 (P.L. 89-665 as amended by P.L. 94-422, P.L. 94-458, and P.L. 96-515): The National Historic Preservation Act is the basic federal mandate for managing and protecting historic properties, Section 106 requires federal agencies to account for the effects of their actions on historic properties on public and private lands. It allows the public, the State Historic Preservation Officer and the President's Advisory Council on Historic

Appendix C: Other Applicable Requirements

Preservation to comment on federal undertakings before authorization. Section 110 requires agencies to systematically inventory all lands for historic properties and protect them through active management. Section 106 compliance has dominated the program whereas Section 110 has largely been ignored. Amendments enacted in 1992 direct agencies to account for the effects of proposed activities on traditional cultural properties associated with Native Americans, ranching communities, and other traditional lifeways. This law is implemented at 36 Code of Federal Regulations 800 which has been revised in response to the 1992 amendment. The revision, completed in July of 1999, more directly involves Tribal Historic Preservation Officers in the determination of significant Traditional Cultural Places and the affects that Federal actions may have upon them.

The National Register aspects of the National Historic Preservation Act are implemented at 36 Code of Federal Regulations 60, 63, and 68. BLM Manuals 8111 - *Cultural Resources Inventory and Evaluation (Upland)*, 8141 - *Physical and Administrative Protection Measures*, and 8143 - *Procedures for the Avoidance or Mitigation of Effects on Cultural Resources* further implement the National Historic Preservation Act. The new regulations have not been incorporated into manual sections to date.

American Indian Religious Freedom Act of 1978 (P.L. 95-341): The American Indian Religious Freedom Act requires federal agencies to consider the effect of their policies on Native American traditional beliefs. Although the American Indian Religious Freedom Act has no implementing regulations and has not been enforced, it is of great political and cultural significance to Native Americans. The Federal Government's failure to enforce American Indian Religious Freedom Act has resulted in more stringent Native American legislation. Bureau of Land Management Manual 8161 - *Native American Consultation* addresses the intent of American Indian Religious Freedom Act.

Native American Graves Protection and Repatriation Act (P.L. 101-106) The Native American Graves Protection and Repatriation Act pertains to Native American human remains, funerary items, sacred objects, and items of cultural patrimony removed from public lands. This law has two major provisions. The first vests ownership of Native American Graves Protection and Repatriation Act items with Native Americans and requires agencies to consult with Native Americans to repatriate them. The second requires ongoing consultation and coordination with Native Americans about discoveries of Native American Graves Protection and Repatriation Act items during activities on public lands. We are consulting with Native Americans on a project-specific basis and are working with tribal governments to draft memoranda of understanding dealing programmatically with discoveries. Native American Graves Protection and Repatriation Act regulations are being written. BLM Manual 8161 and its consultation handbook provide guidance for BLM consultation.

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Archaeological Resources Protection Act of 1979 (P.L. 96-96): The Archaeological Resources Protection Act requires a permit for any excavation or removal of archaeological resources from public lands and provides civil and criminal penalties for violation of permit requirements. Given these penalties, ARPA is the basis for most prosecutions and suits involving archaeological resources. It also provides the mandate for the Cultural Resources Use Permit System, as well as archaeological resource interpretive and education programs. ARPA also requires the systematic inventory of all federal lands to find and protect archaeological resources. ARPA is implemented at 36 Code of Federal Regulations 296: 43 Code of Federal Regulations 3 and 7 and in Bureau of Land Management Manual 8151 - *Cultural Resource Use Permits*.

National Environmental Policy Act of 1969 (P.L. 91-190): The National Environmental Policy Act directs federal agencies to consider cultural resources in fostering environmental quality and preservation of important historic, cultural and natural aspects of our national resources. National Environmental Policy Act documentation routinely considers impacts to cultural and paleontological resources. BLM Manual 8130 - *Cultural Resources Planning* further clarifies and implements the cultural resources aspects of National Environmental Policy Act.

Federal Land Policy and Management Act of 1976 (P.L. 94-579): The Federal Land Policy and Management Act directs BLM to inventory cultural resources and to protect scientific, historic, and archaeological resources within the framework of multiple use management. This law is the basis for the paleontological resources management program. The act also requires coordination of BLM land use programs “of and for” Indian tribes by considering the policies of approved state and federally recognized tribal land resource management programs in land use planning. BLM Manual 8100 - *Cultural Resources Management* implements the cultural resources aspects of FLPMA.

Executive Order 11593: This order supplements the National Historic Preservation Act and Archaeological Resources Protection Act by directing federal agencies to locate and inventory all cultural resources under their jurisdiction and to ensure that actions do not affect significant cultural resources. It also directs agencies to consider the effects of their actions on nonfederal lands. No direct implementing regulations or policies have been developed for this order.

Executive Order 94-3175: This order directs federal agencies to deal with Native American tribal governments on a government-to-government basis and to pay special attention to federal Indian trust responsibilities. Since this is a new order, no specific implementing policies are in place, and its implications for land management are being worked out in the field.

Additional Regulations: Requirements for managing archaeological collections and other museum property are at 36 Code of Federal Regulations 79. These regulations require a significant new workload to inventory and properly curate museum property and collections. Other than minimal training, BLM Nevada does not have the staff expertise to comply with this regulation.

AMERICAN INDIAN CONSULTATION AND COORDINATION

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Executive Order 13084: Executive Order 13084, signed May 14, 1998, requires “regular and meaningful consultation and collaboration with Indian tribal governments in developing regulatory practices on federal matters that significantly or uniquely affect their communities; to reduce the imposition of unfunded mandates upon Indian tribal governments; and to streamline the application process for and increase the availability of waivers to Indian tribal governments”.

The American Indian Religious Freedom Act of 1978 and Executive Order 13007: This act and order require federal agencies to evaluate their policies and procedures to protect the religious freedom of Native Americans. In American Indian religious practice, any geographic area can contain specific places that are significant for sacred practices or purposes. Those sacred places embodying spiritual values may contain specific land forms, indigenous rock art, medicine wheels, rock cairns and effigy figures, spirit trails and spirit gates, caves, springs or lakes., Indian graves, or contemporary use areas.

CAVE RESOURCES

The Federal Cave Resources Protection Act of 1988 (FCRPA) provides for the designation of significance by six criteria: biota, cultural, geologic/mineralogic/paleontologic, hydrologic, recreational, and educational or scientific values. Upon discovery, the cave is evaluated to determine its significance. If a cave is determined to be significant, its entire extent, including passages not mapped or discovered at the time of determination, is deemed significant.

FISH AND WILDLIFE RESOURCES

Although a variety of laws, regulations, policies, and programs relate to wildlife, the following have a major affect on the protection of wildlife resources in relation to mining.

The Endangered Species Act, P.L. 93-205 (1973), P.L. 94-359 (1974), P.L. 95-212 (1977), P.L. 95-632 (1978), P.L. 96-159 (1979), P.L. 97-304 (1982), P.L. 100-653 (1988). The purpose of this act is to identify and conserve species that are threatened or endangered with extinction. The act prohibits the taking of species listed as threatened or endangered, either directly or indirectly through habitat loss or modification. This prohibition applies to all activities regardless of land ownership.

Migratory Bird Treaty Act, P.L. 86-732 (1960). This act is an international treaty that prohibits the taking of any migratory bird without permit or authorization. This prohibition applies to situations where, for example, migratory waterfowl land on a tailings pond or process solution pond that contains toxic levels of contaminants. Any resulting wildlife deaths would be

Appendix C: Other Applicable Requirements

(and have been) violations of the Migratory Bird Treaty Act. This prohibition applies to all activities regardless of land ownership.

Fish and Wildlife Coordination Act, 16 U.S.C. 661-667e, March 10, 1934, as amended 1946, 1958, 1978 and 1995. This act's purposes are to recognize the vital contribution of our wildlife resources to the Nation, and their increasing public interest and significance, and to provide that wildlife conservation receive equal consideration and be coordinated with other features of water-resource development programs through planning, development, maintenance, and coordination of wildlife conservation and rehabilitation. In furtherance of the stated purposes, the Secretary of the Interior is authorized to provide assistance to, and cooperate with, federal, state, and public or private agencies and organizations in developing, protecting, rearing, and stocking all species of wildlife, resources thereof, and their habitat; controlling losses from disease or other causes; minimizing damages from overabundant species; providing public shooting and fishing areas, including easements across public lands; carrying out other necessary measures. The Secretary is also authorized to make surveys and investigations of the wildlife of the public domain, including lands and waters or interest acquired or controlled by an agency of the United States and to accept donations of land and contributions of funds in furtherance of the purposes of this act.

Executive Order 13112, Invasive Species, February 3, 1999. Executive Order 13112 directs all agencies to take action to prevent the introduction of invasive species, detect and control invasive species populations, monitor invasive species, provide for restoration of native species, conduct research on invasive species and develop technologies to prevent the introduction of invasive species, and promote public education.

Bald Eagle Act of 1940, as amended by P.L. 92-535 (1972). This act protects the bald eagle and golden eagle by prohibiting except under certain specified conditions the taking, possession, and commerce of such birds.

Sustainable Fisheries Act (Public Law 104-297) (1996). Among other things, this act amended the habitat provisions of the Magnuson Act. The renamed Magnuson-Stevens Act calls for direct action to stop or reverse the continued loss of fish habitats. Toward this end, Congress mandated (1) the identification of habitats essential to managed species (essential fish habitat) and (2) measures to conserve and enhance this habitat. The act requires federal agencies to consult with the Secretary of Commerce on any activity or proposed activity authorized, funded, or undertaken by the agency that may adversely affect essential fish habitat. On BLM managed public lands, essential fish habitat refers to those waters and substrate necessary to salmon for spawning, breeding, feeding, or growth to maturity (Magnuson-Stevens Act, 16 U.S.C. 1801 et seq). The following definitions (EFH Interim Final Rule, 62 FR 66531) interpret the meaning of essential fish habitat:

Waters include aquatic areas and their associated physical, chemical, and biological properties that are used by salmon and may include aquatic areas historically used by salmon where appropriate.

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Substrate includes sediment, hard bottom, structures underlying the waters, and associated biological communities.

Necessary means the habitat required to support a sustainable fishery and the managed species' contribution to a healthy ecosystem; and spawning, breeding, feeding, or growth to maturity covers a species' full life cycle.

WILD HORSES AND BURROS

Wild Free-Roaming Horses and Burros Act of 1971, P.L. 92-195, as amended by P.L. 94-579 (1976) and P.L. 95-514 (1978). This act protects wild free-roaming horses and burros, directing BLM and the Forest Service to manage such animals on public lands under their jurisdiction.

PLANTS

Executive Order 13148, Greening the Government Through Leadership in Environmental Management, April 22, 2000. This Executive Order directs agencies to incorporate regionally native plants in site design and implementation where cost-effective and to the maximum extent practicable on all Federal projects or federally-funded projects.

SPECIAL STATUS AREAS

Wilderness Act (16 U.S.C. 1131-1136) § 1133. Use of wilderness areas 43 CFR Ch. II Subpart 8560-(b) ... wilderness areas shall be devoted to the public purposes of recreational, scenic, scientific, educational, conservation, and historical use. The objective of these regulations is to manage the public lands designated as part of the National Wilderness Preservation System to preserve and protect their wilderness character, provide for their use and enjoyment by the American people in a manner that will leave them unimpaired for future use and enjoyment as wilderness, and allow for recreational, scenic, scientific, educational, conservation, and historical use. Subpart 8560.4-6 describes mining law administration in wilderness areas. These regulations require that mineral operations be conducted to maintain the wilderness character unimpaired consistent with the use of the land for mineral activities and that all facilities must be removed within 1 year after operations cease. This section also requires that validity examinations be conducted before allowing mining operations in wilderness areas to determine if valid existing rights were present as of the date of withdrawal.

Research Natural Areas, 43 CFR Subpart 8223. No person shall use, occupy, construct, or maintain facilities in a research natural area except as permitted by law, other federal regulations, or authorized under provisions of this subpart 8223.

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(b) No person shall use, occupy, construct, or maintain facilities in a manner inconsistent with the purpose of the research natural area.

(c) Scientists and educators shall use the area in a manner that is nondestructive and consistent with the purpose of the research natural area.

APPENDIX D

MINING REGULATORY PROGRAMS IN THE WESTERN UNITED STATES

Appendix D of the draft EIS provided a discussion of the state mining regulation programs. The appendix was presented as a summary of the programs. We did not present a more detailed discussion because the state regulatory programs would exist under all alternatives. We felt that such a detailed discussion of the state regulatory provisions would not measurably change the analysis of the programmatic differences between the alternatives

But we received extensive comments on the inadequacies of our presentation due to a lack of a comprehensive review of the state programs. As part of their comments on the draft EIS, the Precious Metals Producers submitted a detailed review of state regulatory programs. In addition, the review correlated the existing state requirements with the February 9, 1999 proposed provisions. This document was an update of a 1994 survey conducted by the Precious Metals Producers of the western state mining regulations, including the regulatory requirements for Alaska, Arizona, California, Idaho, Montana, Nevada, New Mexico, Oregon, South Dakota, Utah, Washington, and Wyoming. Because we found the Precious Metal Producers document to be both comprehensive and accurate, we feel it is suitable to include their complete review in its entirety as submitted in their February 23, 2000 comment letter in the final EIS.

Our review of the Precious Metal Producers document found at least one point needing clarification. *The Arizona Mined Land Reclamation Act applies only to metalliferous mines, or mines providing feed to metalliferous mines, on private land. Absent an Memorandum of Understanding or some form of agreement between the BLM and the State of Arizona, the Arizona Mining Land Reclamation Act has no authority on BLM managed lands.*

Appendix D: Mining Regulatory Programs in the Western United States

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**Mining Regulatory Programs in the Western
United States
A Survey of State Laws and Regulations**

February 23, 2000

prepared for
the Precious Metals Producers

by
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Introduction

Purpose of the Survey

The Precious Metals Producers¹ (PMP) first conducted a survey of state mining regulatory programs in 1994, as Congress was deliberating proposals to rewrite the Mining Law of 1872. Some critics of the 1872 Mining Law have charged that the environmental impacts of mining are virtually unregulated in the United States, and urged Congress to adopt sweeping new environmental requirements as part of the Mining Law legislation. These critics also maintain that states do not regulate mining, or that state regulatory programs have significant gaps that threaten the environment and that must be remedied by the federal government.

The purpose the original survey was to determine whether and to what extent Western states containing lands open to location under the 1872 Mining Law regulate the mining industry. The 1994 Survey showed that all western states except two – New Mexico and Arizona – required mined lands to be reclaimed. The Survey also showed that all states were at that time extensively regulating environmental impacts to soils, surface water, ground water and air.

Since 1994, Arizona and New Mexico have enacted statutes requiring reclamation, and have been developing implementing regulations. Most other states have made changes and improvements in their laws, and so PMP determined to update the State Law Survey to account for changes and to determine the status of state mining regulatory programs. The scope and adequacy of state regulatory programs remains an important policy issue at the federal level. Congress continues to consider changes to the 1872 Mining Law, and the Department of Interior announced its intention in 1997 to rewrite its own rules governing mining on public lands. State laws and jurisdiction are relevant to both of the efforts, and other federal regulatory initiatives.

Method

We took the same approach to the update as to the original survey. Originally, the categories we surveyed came from 1994 legislative proposals to rewrite the Mining Law, particularly bills introduced in Congress by Rep. Nick Rahall and former Senator Bennett Johnston. This version of the Survey organizes state regulatory authorities using the proposed environmental and operational performance standards found in the BLM's Proposed Rule amending the surface management regulations at 43 C.F.R. § 3809. 64 Fed. Reg. 6421 (February 9, 1999).

We prepared draft surveys by conducting legal research and reviewing state statutes, rules, policy statements and guidance. We conducted numerous conversations with state regulators to learn as much as possible about state regulatory programs, the sources of authority, the responsibilities of each state agency, their coordination with each other and their coordination with federal agencies. We revised the draft surveys to make them as accurate as possible, and then provided them to state regulators for their comments. We incorporated these comments wherever they were offered, and finalized the surveys.

The result, while not perfect, is a fair and objective representation of the state laws that apply to mining operations in the Western United States. While the PMP companies obviously approach regulatory debates from an industry viewpoint, they offer the State Law Survey as a service, hopefully to clarify the status of state programs and to advance a constructive discussion about the role of states in environmental regulation and reclamation, on federal, state-owned and private lands. The State Law Survey makes it unnecessary to rely on broad generalizations or speculation about how states regulate the mining industry.

¹ The Precious Metals Producers are: Barrick Goldstrike Mines, Inc., Battle Mountain Gold Company, Echo Bay Mines, and Independence Mining Co.

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Observations

There have been many changes and improvements in states' programs since the first PMP State Law Survey. The State of Nevada already had adopted controls on operations using cyanide and other chemical reagents; many states followed this lead since 1994. All states have focused on the environmental threats posed by acid generation, adopting combinations of statutes, rules and policies intended to prevent or control pollution from this phenomenon. Many states have added new or stricter bonding requirements.

States also have responded or are responding to issues that concern them uniquely. As already mentioned, states where precious metals mining is prevalent have regulated the handling, use and control of cyanide (Nevada, Oregon, South Dakota, Washington and Utah). Coastal states are integrating mining regulatory requirements with efforts to protect and manage coastal zone environments and ecosystems.

There certainly are differences in approach, and some states' programs are more advanced than others. However, there are no glaring "gaps" in state programs that demand a federal legislative or regulatory intervention to avoid harm to the environment. States are acting on their own to address environmental threats.

Acknowledgements

To the various representatives of the Western states who gave us comments and guidance and corrected our work, we are very appreciative. It is those contributions that make this Survey useful for everyone interested in the regulation of mining activities on federal lands. Messrs. David Kimball, David Armstrong and Dalva Mollenberg of the firm Gallagher and Kennedy in Phoenix, contributed heavily to the Arizona and New Mexico Surveys. Denise Jones, Jim Good of the firm Gresham, Savage, Nolan & Tilden, and members of the California Mining Association provided invaluable information in updating the California Survey.

Steven G. Barringer
February 23, 2000

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ALASKA

Mining operations, including reclamation activities, are regulated primarily by the Division of Mining Land and Water, in the Alaska Department of Natural Resources (DNR), the Department of Environmental Conservation and the Department of Fish and Game. DNR administers the Alaska reclamation statute, Alaska Stat. §§ 27.19.010 - 100, and implementing regulations, Alaska Admin. Code tit. 11, § 97.100-990. Mining operations without a reclamation plan approved by DNR are prohibited. Alaska Stat. § 27.19.030(a), Alaska Admin. Code tit. 11, § 97.310. Before commencing mining operations, a performance bond must be posted with DNR in an amount sufficient to ensure “the faithful performance of the approved reclamation plan.” Alaska Stat. § 27.19.040(a). A mining operation must be conducted in a manner that “prevents unnecessary and undue degradation of land and water resources” and include contemporaneous reclamation. Alaska Stat. § 27.19.020. Mining operations also must comply with the Alaska Environmental Conservation Law, a comprehensive environmental statute that regulates surface and ground water quality, air quality, and solid and hazardous wastes, administered by the Alaska Department of Environmental Conservation (DEC). Alaska Stat. Tit. 46, ch. 3, 14.

AIR QUALITY [Proposed 43 CFR 3809.420(b)(1)]

Mining operations must comply with the air quality control provisions of the Alaska Environmental Conservation Act. Alaska Stat. § 46.14.010 - 990, Alaska Admin. Code tit. 18, ch. 50. DEC issues construction and operating permits for mining operations, including processing facilities that emit air pollutants, including fugitive dust. Alaska Admin. Code tit. 18, § 50.300. Air quality requirements are part of Alaska’s State Implementation Plan (SIP) required by the federal Clean Air Act. 42 U.S.C. § 7410.

WATER [Proposed 43 CFR 3809.420(b)(2)]

A mining operation must be conducted in a manner that “prevents unnecessary and undue degradation” of surface and ground water. Alaska Stat. § 27.19.020. Mining operations must comply with Alaska’s antidegradation policy and surface and ground water quality standards. Alaska Admin. Code tit. 18, § 70.010(b).).

SURFACE WATER [Proposed 43 CFR 3809.420(b)(2)(i)]

Point source discharges to surface waters from mining operations must have a National Pollution Discharge Elimination System (NPDES) permit issued by the U.S. Environmental Protection Agency. 42 U.S.C. § 1342. Mining operations must comply with Alaska’s antidegradation policy and surface water quality standards. Alaska Admin. Code tit. 18, § 70.010(b).

GROUND WATER [Proposed 43 CFR 3809.420(B)(2)(ii)]

Mining operations must comply with Alaska’s antidegradation policy and ground water quality standards. Alaska Admin. Code tit. 18, § 70.010(b).).

ACID MINE DRAINAGE [Proposed 43 CFR 3809.420(b)(2)(i)(B) and (ii)(B)]

A mine operator must reclaim a mined area with the potential to generate acid mine drainage so that acid mine drainage is not generated or is not discharged offsite. Alaska Admin. Code tit. 11, § 97.240.

WETLANDS AND RIPARIAN AREAS [Proposed 43 CFR 3809.420(b)(3)]

Any placement of soils or other fill materials in “waters of the United States,” including dry washes, isolated waters and wetlands, must be permitted by the U.S. Corps of Engineers pursuant to Section 404 of the Clean Water Act. 33 U.S.C. § 1344. In reviewing the permit application, the Corps applies guidelines for disposal of fill materials promulgated by the Environmental Protection Agency. 40 C.F.R. pt. 230. The guidelines require that

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the Corps look at alternatives to the proposed fill activity before approving the permit application. Before the permit can be issued, Alaska must issue a document certifying that the permit limitations will be consistent with state water quality standards. 33 U.S.C. § 1341.

If a mining operation diverts a stream channel or modifies a flood plain to the extent that the stream channel is no longer stable, an operator must reestablish the stream channel in a stable location. A settling basin, however, cannot be placed in the way of a reestablished channel location unless the fines will be properly removed or protected from erosion. Alaska Admin. Code tit. 11, § 97.200(d). An operator may not redistribute topsoil or other growth media over surfaces likely to be exposed to annual flooding, unless the action is authorized in an approved reclamation plan and will not result in an unlawful point or nonpoint source discharge of pollutants. Alaska Admin. Code tit. 11, § 97.200(a)(3). Disturbed lands must be returned to a condition that can reasonably be expected to return waterborne soil erosion to pre-mining levels within one year after completion of reclamation. Alaska Admin. Code tit. 11, § 97.200(a)(1).

SOIL AND GROWTH MATERIAL [Proposed 43 CFR 3809.420(b)(4)]

A reclamation plan must detail measures for topsoil removal, storage, protection, and replacement. Alaska Admin. Code tit. 11 § 97.310(b)(6)(A). If topsoil is not promptly redistributed to an area being reclaimed, then the topsoil must be segregated, protected from erosion and contamination by acidic and toxic materials, and preserved in a condition suitable for later use. Alaska Admin. Code tit. 11, § 97.200(a)(2).

REVEGETATION [Proposed 43 CFR 3809.420(b)(5)]

An operator must take measures to promote natural revegetation, including redistribution of topsoil or other suitable growth media. Alaska Admin. Code tit. 11, § 97.200(a)(3). Mining operations must be left in a “stable condition,” Alaska Stat. § 27.19.020, which means “a condition that can reasonably be expected to return waterborne soil erosion to pre-mining levels within one year” after completion of reclamation and “that can reasonably be expected to achieve revegetation, where feasible, within five years after the reclamation is completed, without the need for fertilization or reseeding.” Alaska Admin. Code tit. 11, § 97.200(a)(1). An operator must stabilize a reclaimed site to a condition that will retain sufficient moisture for natural revegetation or for an approved alternate post-mining land use. Alaska Admin. Code tit 11, § 97.200(b). Pit walls, subsidence features, or quarry walls are exempt from these requirements if the steepness of the wall make attaining this standard impossible or impracticable; however, the wall must be left in a condition such that it will not collapse or allow loose rock that presents a safety hazard. Alaska Admin. Code tit. 11, § 97.200(c). If the natural composition, texture or porosity of surface materials are not conducive to natural revegetation, a mine operator must take measures to promote natural revegetation, including redistributing topsoil or other suitable growth media. Alaska Admin. Code tit. 11, § 97.200(a)(3).

FISH AND WILDLIFE [Proposed 43 CFR 3809.420(b)(6)]

The Alaska Department of Fish and Game reviews all proposed reclamation plans and can require a mine operator to obtain a “Title 16” permit if the proposed mining operations will impact fish or wildlife. A Title 16 permit will specify measures an operator must take to protect fish and wildlife. Alaska Stat. § 16.10.020.

ROADS AND STRUCTURES [Proposed 43 CFR 3809.420(c)(1)]

An operator must remove, dismantle, or otherwise properly dispose of buildings and structures constructed, used, or improved on state land unless the surface owner or manager authorizes the buildings or structures to stay. An operator must remove or otherwise properly dispose of all scrap iron, equipment, tools, piping, hardware, chemicals, fuels, waste and general construction debris on state land. Alaska Admin. Code tit. 11, § 97.210.

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DRILL HOLES [*Proposed 43 CFR 3809.420(c)(2)*]

A mine operator must stabilize and properly seal the openings of all shafts, adits, tunnels, and air vents to underground mine workings after mine closure to ensure protection of the public, wildlife, and the environment. Alaska Admin. Code tit. 11, § 97.220.

WASTE ROCK, TAILINGS AND LEACH PADS [*Proposed 43 CFR 3809.420(c)(5)*]

A reclamation plan must detail proposed tailings or spoil disposal areas and contain measures for the reclamation of tailings impoundments, settling ponds, reservoirs, heaps, open pits and cuts, shafts, adits, tunnels, portals, overburden, waste rock storage areas and all other affected areas. Alaska Admin. Code tit. 11, § 97.310(b)(4), (6)(B). After neutralization, an operator must reclaim heaps, pads, ponds, and other such facilities in a manner consistent with requirements imposed by DNR and DEC and the statutory and regulatory provisions of the Alaska reclamation law. Alaska Admin. Code tit. 11, § 97.230.

STABILITY, GRADING AND EROSION CONTROL [*Proposed 43 CFR 3809.420(c)(6)*]

Diverted stream channels must be left in a stable condition. Alaska Admin. Code tit. 11, § 97.200(d). An operator must stabilize and properly seal the openings of all shafts, adits, tunnels, and air vents to underground mine workings after mine closure to ensure protection of the public, wildlife, and the environment. Alaska Admin. Code tit. 11, § 97.220. Disturbed lands must be reclaimed so that the surface contours after reclamation are complete and conducive to natural revegetation or are consistent with an alternative post-mining land use intended by the land owner for mining operations on private land. Measures to accomplish this may include backfilling, contouring, and grading, but an operator need not restore the site's approximate original contour. Alaska Admin. Code tit. 11, § 97.200(b). Disturbed lands must be returned to a condition that can reasonably be expected to return waterborne soil erosion to pre-mining levels within one year after completion of reclamation. Alaska Admin. Code tit. 11, § 97.200(a)(1).

FINANCIAL GUARANTEE [*Proposed 43 CFR 3809.500 – 599*]

An operator must post a performance bond which reflects the reasonable and probable costs of reclamation, not to exceed \$750 for each acre of mined area. Alaska Stat. § 27.19.040(a). Alternatively, an operator may participate in a statewide bonding pool for mining operations established by the state. Alaska Stat. § 27.19.040(b). The posting of a performance bond, or participation in the bonding pool, does not limit the department's right to seek further compensation for a violation of Alaska's reclamation statute or the operator's approved reclamation plan. The miner is liable for the full costs of reclamation, regardless of the amount of the reclamation bond or bonding pool deposit and fees. Alaska Admin. Code tit. 11, § 97.430. If a mine operator violates an approved reclamation plan and has failed to comply with an order of DNR, DNR is authorized to cause the forfeiture of the performance bond and use the proceeds to reclaim the site. Alaska Stat. § 27.19.040(c), 27.19.070(a). A mine operator who has previously forfeited a reclamation bond or been held liable in a civil action must post a reclamation risk assessment fee equal to five times the bond liability for the proposed mining operation. Alaska Stat. § 27.19.070(c).

INSPECTION [*Proposed 43 CFR 3809.600*]

An operator must allow DNR to have access to the mining operation at reasonable times for the purpose of inspecting or monitoring compliance with an approved reclamation plan. Alaska Admin. Code tit. 11, § 97.340(b). The Alaska Environmental Conservation Act authorizes DEC to seek search warrants to investigate actual or suspected sources of pollution or to ascertain compliance with the terms of the Act. Alaska Stat. § 46.03.860.

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ENFORCEMENT ORDERS [*Proposed 43 CFR 3809.601*]

DNR may issue a compliance order for violations of the statutory or regulatory provisions of the Alaska reclamation law. Alaska Admin. Code tit. 11, § 97.630. DEC can issue compliance orders under the Alaska Environmental Conservation Act. Alaska Stat. § 46.03.850.

ENFORCEMENT -- PERMIT SUSPENSION OR REVOCATION [*Proposed 43 CFR 3809.602*]

DNR may suspend or revoke approval to operate those mining operations not being conducted as required in the approved reclamation plan. Alaska Stat. § 27.19.070(b). DEC can suspend or revoke permits issued under the water quality provisions of the Alaska Environmental Conservation Act, Alaska Stat. § 46.03.120, or air permits. Alaska Stat. § 46.14.280, Alaska Admin. Code tit. 18, ch. 50.

ENFORCEMENT -- SUITS FOR INJUNCTIONS AND/OR DAMAGES [*Proposed 43 CFR 3809.604*]

An operator who violates the approved reclamation plan and fails to comply with an order of the Commissioner is liable to the state in a civil action for the full amount of reclamation and administrative costs incurred by the state to reclaim. Alaska Stat. § 27.19.070(a). The Alaska Attorney General can recover damages for death to fish, animals, or vegetation, or other injuries that degrade the environment, caused by violations of the Alaska Environmental Conservation Act. Damages equal the costs to restock injured land or waters, to replenish a damaged or degraded resource, or otherwise restore the environment to its condition before the injury. Alaska Stat. § 46.03.780. Other suits for damages are governed by common law. The state may sue to recover natural resources damages under section 107(f) of the Comprehensive Environmental Response, Compensation and Liability Act. 42 U.S.C. § 9607(f). DNR can seek to have the Attorney General enforce an administrative order suspending or revoking approval to operate. Alaska Admin. Code tit. 11, § 97.630. The Alaska Environmental Conservation Act authorizes DEC to seek injunctions to enjoin violations of the Act. Alaska Stat. § 46.03.765.

CRIMINAL PENALTIES [*Proposed 43 CFR 3809.700*]

Alaska's reclamation law does not impose criminal liability. DEC can seek criminal penalties for violations of the Alaska Environmental Conservation Act. Alaska Stat. § 46.03.790.

CIVIL PENALTIES [*Proposed 43 CFR 3809.702*]

DNR may assess judicially enforceable administrative penalties in an amount up to the full amount of reclamation and administrative costs incurred by the state related to the action, for violations of Alaska's reclamation law. Alaska Stat. § 27.19.070(a), Alaska Admin. Code tit. 11, § 97.630. DEC can seek civil penalties for violations of the Alaska Environmental Conservation Act, Alaska Stat. § 46.03.760, of not less than \$500 nor more than \$100,000 for the initial violation, nor more than \$5,000 for each day after that.

CITIZEN SUITS [No provision in proposed rule]

Citizen suits are not authorized for violations of Alaska's reclamation law. The federal Clean Water Act authorizes citizen suits against persons who violate provisions of the Clean Water Act or state administrative orders that implement that Act.

ARIZONA

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State environmental and reclamation requirements for mining operations in Arizona are governed primarily by two major programs, the Arizona Environmental Quality Act ("EQA") administered by the Arizona Department of Environmental Quality ("ADEQ") and the Arizona Mined Land Reclamation Act ("MLRA") administered by the Arizona State Mine Inspector ("ASMI"). In addition, the U.S. Environmental Protection Agency ("EPA"), Region IX, administers the federal Clean Water Act NPDES permit program and the U.S. Army Corps of Engineers administers the Clean Water Act section 404 permit program.

The MLRA requires existing and new mining operations and exploration operations to submit and obtain approval of reclamation plans. Reclamation standards are established in the MLRA and implementing rules. The MLRA also requires financial assurance. New mining operations may not begin surface disturbances until ASMI has approved a reclamation plan. Existing mining operations must submit a reclamation plan to ASMI for approval by April 1, 1997.

The EQA established the Aquifer Protection Permit ("APP") Program, which applies to discharging facilities, including surface impoundments, mine tailings piles and ponds, and mine leaching operations. This program requires a permittee to employ the Best Available Demonstrated Control Technology ("BADCT") to achieve the greatest practicable reduction in the amount of discharge and not cause or contribute to a violation of aquifer water quality standards. A.R.S. 5 49-243, A.A.C.R. 18-9-108. The APP program also requires closure plans, post-closure care and a demonstration of financial capability to ensure that closure is conducted in a manner to protect water quality. "Existing facilities," which include discharging facilities in operation before 1986, may continue under either a notice of disposal or groundwater quality protection permit under a predecessor program, as long as they do not cause or contribute to a violation of aquifer water quality standards. A.A.C.R. 18-9-103. ADEQ is under statutory deadlines to complete issuance of APP's to existing facilities. A.R.S. § 49-241.01. To meet these deadlines, the Department has established a schedule for submission of permit applications for existing facilities.

AIR QUALITY [*Proposed 43 CFR 3809.420(b)(1)*]

Air quality standards established pursuant to state and federal law are enforceable through permit programs administered by ADEQ or by some counties. A.R.S. §§ 49-426 and 49-480. Where there is no specific permit covering an operation, ADEQ's air pollution control rules require precautions to be taken to limit airborne dust and particulate matter from roads, materials, storage piles, and tailing piles. A.A.C.R. 18-2-604 through -608.

WATER [*Proposed 43 CFR 3809.420(b)(2)*]

The MLRA requires restoration of, or limits impacts to, surface drainages. The APP program (1) regulates the water quality aspects of the hydrologic balance by providing ADEQ with broad authority to require a hydrogeologic study of the area that may be impacted by a discharge; (2) requires a demonstration that a discharge will not result in a violation of aquifer water quality standards; and (3) requires the greatest achievable reduction of discharges. A. R. S. § 49-243. Water quantity issues are regulated by the Arizona Department of Water Resources.

SURFACE WATER [*Proposed 43 CFR 3809.420(b)(2)(i)*]

Surface water quality standards are established pursuant to state statute and rules. A.R.S. § § 49-221 and 222; A.A.C.R. 18-11-101 through -123. These standards are enforced for discharges to surface waters through both the Clean Water Act National Pollutant Discharge Elimination System ("NPDES") permit program, 42 U.S.C. § 1342, administered by EPA Region IX, and the APP program, which requires an APP for point source discharges to navigable waters. A.R.S. § 49-241. ADEQ certifies federal NPDES and section 404 permits for compliance with state surface water quality standards pursuant to statutory authority. A.R.S. § 49-202. Discharges subject to compliance with aquifer water quality standards under the APP program also must not cause or contribute to a violation of surface water quality standards. A.A.C.R. 18-11-405.B. Finally, the state has both civil and criminal enforcement authority directly over water quality standards violations. A.R.S. § § 49-262 and 49-263.

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GROUND WATER [Proposed 43 CFR 3809.420(b)(2)(ii)]

ADEQ has established aquifer water quality standards by rule pursuant to its statutory authority. A.R.S. §§ 49-221 and 49-223; A.A.C.R. 18-11-401 through -408. By law, all aquifers are classified as drinking water aquifers unless reclassified pursuant to a petition process. A.R.S. § 49-224; A.A.C.R. 18-11-501 through -506. ADEQ must adopt federal primary maximum contaminant levels adopted under the federal Safe Drinking Water Act as aquifer water quality standards, unless ADEQ finds that adoption of such standards is inappropriate. A.R.S. § 49-223. As discussed above, the APP program requires a demonstration that the discharge will not cause or contribute to a violation of an aquifer water quality standard. A.R.S. § 49-243. Also, the state has direct enforcement authority against violations of aquifer water quality standards. A.R.S. §§ 49-262 and 49-263.

ACID MINE DRAINAGE [Proposed 43 CFR 3809.420(b)(2)(i)(B) and (ii)(B)]

Under the APP program, the definition of “inert material” specifically requires that mine rock be tested for its acid generating potential. A.R.S. § 49-201.18. If the test indicates that it is acid generating, the mine rock typically is considered a “discharging facility,” required to obtain an APP permit, and required to comply with BADCT. The determination of BADCT under the APP program for a mine would require the use of controls to mitigate the impacts of acid rock drainage to the groundwater. A.R.S. § 49-243.A. In addition to BADCT, the APP program requires groundwater monitoring at the applicable point of compliance downgradient of the mining operation to ensure that any pollutants discharged from the operation do not cause or contribute to a violation of aquifer water quality standards. A.R.S. § 49-243.B.2.

WETLANDS AND RIPARIAN AREAS [Proposed 43 CFR 3809.420(b)(3)]

Any placement of soils or other fill materials in “waters of the United States,” including dry washes, isolated waters and wetlands, must be permitted by the U.S. Corps of Engineers pursuant to Section 404 of the Clean Water Act. 33 U.S.C. § 1344. In reviewing the permit application, the Corps applies guidelines for disposal of fill materials promulgated by the Environmental Protection Agency. 40 C.F.R. pt. 230. The guidelines require that the Corps look at alternatives to the proposed fill activity before approving the permit application. Before the permit can be issued, Arizona must issue a document certifying that the permit limitations will be consistent with state water quality standards. 33 U.S.C. § 1341.

BADCT requirements under the APP program require the use of measures to limit sedimentation and erosion and facilitate surface drainage to protect water quality. In addition, the MLRA requires restoration of, or limits impacts to, surface drainages.

SOIL AND GROWTH MATERIAL [Proposed 43 CFR 3809.420(b)(4)]

Soil that is reasonably available from a new area of disturbance must be conserved if the reclamation plan calls for revegetation of the disturbance. A.R.S. § 27-974. The owner or operator may obtain an exception from this requirement only if recovery of soils is not practicable because of insufficient soil, limitations of topography or other physical constraints, or revegetation of the disturbance is not expected to be successful. *Id.* The rules require posting and erosion protection for soil stockpiles, proper redistribution of soils, and regulation of use of soils from off-site. A.A.C.R. 11-2-703, -704 and -705.

REVEGETATION [Proposed 43 CFR 3809.420(b)(5)]

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If the post-mining land use objective is grazing, wildlife habitat, or forestry, the reclamation plan must include procedures for revegetation. A.A.C.R. 11-2-501. Revegetation plan requirements are specified in the rules. A.A.C.R. 11-2-701. Revegetation standards require the establishment of plant species to support the approved post-mining land use and the establishment of vegetation species, density, or diversity different from pre-existing conditions or conditions on adjacent lands must be justified by differences in post-mining land use, site-specific conditions or erosion control needs. A.A.C.R. 11-2-702.

FISH AND WILDLIFE [*Proposed 43 CFR 3809.420(b)(6)*]

In addition to general requirements for fish and wildlife protection under the federal Endangered Species Act and Arizona game and fish conservation laws, the MLRA contains provisions to encourage the establishment of fish or wildlife habitat as part of post-mining land uses. Fish or wildlife habitat is listed as an appropriate post-mining land use. A.R.S. § 27973. If the proposed post-mining land use is grazing, fish or wildlife habitat, forestry, or recreation, the reclamation plan must identify the type of wildlife or fish habitat to be encouraged, measures to encourage that type of habitat, and a showing that those measures will not be incompatible with fish or wildlife habitat on adjacent lands. A.R.S. § 27-971.B.9.

ROADS AND STRUCTURES [*Proposed 43 CFR 3809.420(c)(1)*]

All mine facilities, including buildings and other structures, must be maintained in a safe manner, including restriction of access for public safety by constructing physical barriers and posting warning signs. A.R.S. § 27-975.C; A.A.C.R. 11-2-601. The rules also require reclamation of roads to restore surface drainage patterns or establish new patterns. A.A.C.R. 11-2-603.

DRILL HOLES [*Proposed 43 CFR 3809.420(c)(2)*]

Holes drilled for mineral exploration must be plugged, sealed or capped promptly after their use is completed, unless they are completed for water monitoring, withdrawal or other use. A.R.S. § 27-953.

WASTE ROCK, TAILINGS AND LEACH PADS [*Proposed 43 CFR 3809.420(c)(5)*]

Permanent piles of mine development rock, overburden, and tailings are subject to grading, revegetation or other erosion control measures so that surface drainages are not unduly restricted. A.A.C.R. 11-2-602. Closure plans under the APP program require that waste piles remaining after reclamation be closed in a manner that eliminates, to the greatest degree practicable, further discharges from the facility and any reasonable probability of exceeding aquifer water quality standards. A.A.C.R. 18-9-116. As discussed above, "stability" is defined to include erosion potential. The MLRA rules require that "site specific grading, revegetation or other proposed erosion-control measures shall be conducted, as necessary, to address erosion so that permanent piles of mine development rock, overburden, and tailings shall not restrict surface drainages in a manner that contributes to excessive erosion or which compromises the stability of the reclaimed facility." A.A.C.R. 11-2-602.C.

STABILITY, GRADING AND EROSION CONTROL [*Proposed 43 CFR 3809.420(c)(6)*]

Reclamation plans under the MLRA must describe the measures to be taken to achieve erosion control and stability. A.R.S. § 27-971. Mining units must be reclaimed to a stable condition for erosion and seismic activity. A.R.S. § 27-973; A.A.C.R. 11-2-602. In addition to achieving stability and erosion control, the surface of mining units must be reclaimed to achieve the post-mining land use, and measures must be taken to restrict public access to any surface features that may be a hazard to public safety. A.R.S. §§ 27-973.B, 27-975.A. Post-mining land uses are stated in A.R.S. § 27-973.B. Grading and other topographic contouring must be conducted to provide final land forms that are suitable for the post-mining land use objective and stable. A.A.C.R. 11-2-602.

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PIT RECLAMATION [*Proposed 43 CFR 3809.420(c)(7)*]

Backfilling or returning material to an open pit, rock face, or subsidence area may be excluded from a reclamation plan if it is impracticable, based upon the consideration of six factors, and if public access to the open pit, rock face or subsidence area is restricted by fencing or other institutional controls. A.R.S. § 49-975.

MAINTENANCE AND PUBLIC SAFETY [*Proposed 43 CFR 3809.420(c)(10)*]

Open shafts would be subject to the requirements for structures, see section above. A qualified engineer must certify that the final land form is stable under static and dynamic conditions considering site-specific seismic conditions, safety consistent with good engineering practices, and the hazard to public safety if failure occurs. A.R.S. § 27-973; A.A.C.R. 11-2-602. Measures must be taken to restrict public access to any surface features that may be a hazard to public safety. A.R.S. § 27-975.A.

FINANCIAL GUARANTEE [*Proposed 43 CFR 3809.500 – 599*]

The MLRA requires the establishment of financial assurance based upon a cost estimate for executing the reclamation plan. A.R.S. § 27-992; A.A.C.R. 11-2-802. Various types of financial assurance are allowed. A.R.S. § 27-991; A.A.C.R. 11-2-803 through -812. Financial assurance is not released until all requirements of the MRLA are satisfied. A.R.S. § 27-996; A.A.C.R. 11-2-817. Financial assurance is subject to forfeiture if reclamation of an exploration operation or mining unit has not been initiated when required or is suspended, if the operator stops conducting business in Arizona without transferring the reclamation plan and financial assurance obligations to a new operator, or for insolvency, bankruptcy, receivership or misconduct of an operator. A.A.C.R. 11-2-818. The process for forfeiture is described in A.A.C. R11-2-819 through -821.

INSPECTION [*Proposed 43 CFR 3809.600*]

The MLRA authorizes ASMI to enter and inspect any exploration operation or mining facility that is subject to the MLRA to determine compliance. A.R.S. § 27-1021. Similarly, ADEQ is authorized to inspect any property from which there is or may be a discharge to enforce the Environmental Quality Act. A.R.S. § 49-203.

ENFORCEMENT ORDERS [*Proposed 43 CFR 3809.601*]

ASMI may issue an administrative compliance order requiring compliance for any violation of the MLRA, its implementing rules, or an approved reclamation plan or if a person is causing an imminent and substantial danger to public safety. A.R.S. § 27-1022. ADEQ also may issue compliance orders requiring compliance for any violation of a water quality standard, APP program requirement, or if a person is creating an imminent and substantial endangerment to public health or the environment. A.R.S. § 49-261.

ENFORCEMENT -- PERMIT SUSPENSION OR REVOCATION [*Proposed 43 CFR 3809.602*]

Under the MLRA, ASMI may suspend, withdraw or revoke an approved reclamation plan if he determines that the operator is in violation of the MLRA. A.R.S. § 27-1023. ADEQ may revoke a permit for violations of law or a permit, misrepresenting or omitting any fact relevant to an application or permit condition, or causing a violation of an aquifer water quality standard. A.A.C.R. 18-9-121.F.

ENFORCEMENT -- SUITS FOR INJUNCTIONS AND/OR DAMAGES [*Proposed 43 CFR 3809.604*]

Both ASMI under the MLRA and the Director of ADEQ under the Environmental Quality Act may, through the Attorney General, seek injunctive relief in the event of a violation or "imminent and substantial endangerment."

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A.R.S. § § 27-1024 and 49-262. In addition, the Arizona Game and Fish Department is authorized to seek an injunction against discharges to surface waters that injure fish or wildlife. A.R.S. § 17-237.

Suits for damages are governed by common law. ADEQ may sue to recover natural resources damages under section 107(f) of the Comprehensive Environmental Response, Compensation and Liability Act. A.R.S. § 49-287.B.3.

CRIMINAL PENALTIES [*Proposed 43 CFR 3809.700*]

Causing a surface disturbance in violation of the MLRA or failing or refusing to conduct reclamation as required by the MLRA constitutes a criminal offense. A.R.S. § 27-1026. Criminal penalties may be imposed under the Environmental Quality Act for discharging without a permit, failing to monitor, sample or report discharges as required by a permit, violating a discharge limitation in a permit, or violating a water quality standard. A.R.S. § 49-263. There also are criminal penalties for certain violations of air quality laws. A.R.S. § 49-502.

CIVIL PENALTIES [*Proposed 43 CFR 3809.702*]

Civil penalties of up to \$ 15,000 per violation may be assessed for violations of the MLRA, MLRA rules, a reclamation plan, or a final compliance order. A.R.S. § 27-1024. Civil penalties of up to \$25,000 per day may be assessed for violations of any water quality standard, violation of the Environmental Quality Act or a rule or permit condition under the Act, or a final compliance order. A.R.S. § 49-262.C. Civil penalties also are authorized under state and county air pollution control laws. See A.R.S. § 49-451.

CITIZEN SUITS [*No provision in proposed rule*]

The Environmental Quality Act authorizes citizen suits against ADEQ for nondiscretionary acts or duties under the Act. A.R.S. § 49-264. The federal Clean Water Act authorizes citizen suits against persons who violate provisions of the Clean Water Act or state administrative orders that implement that Act.

CALIFORNIA

Mining operations in California are regulated by a number of state, regional and local agencies. The Division of Mines and Geology (Division) in the Department of Conservation oversees implementation of the Surface Mining and Reclamation Act (SMARA). Cal. Pub. Res. Code div. 2, ch. 9 (as amended), 14 Cal. Code of Regs. § § 3500 - 3, 3700 - 13. SMARA is administered primarily by county planning directors, commissions, and boards of supervision. SMARA prohibits surface mining without an operating permit, an approved reclamation plan, and the posting of a financial assurance. Cal. Pub. Res. Code § 2770(a). An operator must post a financial assurance to guarantee that reclamation is performed in accordance with an approved reclamation plan. Cal. Pub. Res. Code § 2773.1. Mining operations must comply with the provisions of the Porter-Cologne Water Quality Act, Cal. Water Code div. 7, ch. 1 - 10, and implementing regulations, Title 27 of the California Code of Regulations, adopted by the California Water Resources Control Board and administered by nine Regional Water Quality Control Boards, including the "Title 27" regulations which specify design, construction, operation, monitoring, financial assurance, closure and post-closure mine waste discharge requirements. §§ 22470 - 22510. In addition, the provisions of the California Air Pollution Control laws, Cal. Health & Safety Code C § 39000 - 44563, and implementing regulations 17 Cal. Code of Regs. div. 3, ch. 1, adopted by the California Air Resources Board and administered by Air Quality Management or Air Pollution Control Districts apply to mining operations.

AIR QUALITY [*Proposed 43 CFR 3809.420(b)(1)*]

Mining operations must comply with the provisions of the California Air Pollution Control laws, Cal. Health & Safety Code § § 39000-44563, and implementing regulations, 17 Cal. Code of Regs. div. 3, ch. 1, administered by the California Air Resources Board. In addition, because mining operations are non-vehicular sources of pollution, they are subject to regulatory control by California's 35 local and regional Air Pollution Control Districts. The

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California air districts have adopted rules, regulations, and permit programs that pertain to polluting activities in accordance with state and federal law. Each source must consult the rules of the air district in which it is located prior to construction and/or operation. In addition, because mining operations are non-vehicular sources of pollution, they are subject to regulatory control by California's 35 local and regional Air Pollution Control Districts. The air program includes standards applicable to fugitive dust, particulates, and emissions from milling and processing operations, including oxides of nitrogen and toxic air contaminants. Many of the air quality requirements are part of California's State Implementation Plan (SIP) required by the federal Clean Air Act. 42 U.S.C. § 7410.

WATER [*Proposed 43 CFR 3809.420(b)(2)*]

Surface mining and reclamation activities must be conducted to protect on-site and downstream beneficial uses of water in accordance with other state and federal laws. Cal. Pub. Res. Code § 2773(b)(4), 14 Cal. Code of Regs. § 3707. Surface and ground water must be protected from siltation and pollutants, which may diminish water quality. 14 Cal. Code of Regs. § 3710. In addition, operators of mining waste management units must comply with the Title 27 program implemented by Regional Water Quality Control Boards, including the requirement to submit information on "waste Characteristics" which could affect the waste's potential to cause acid or toxic pollution. The Title 27 implementing regulations require that such units be closed "so that they no longer pose a threat to water quality." Title 27 § 22510(a).

SURFACE WATER [*Proposed 43 CFR 3809.420(b)(2)(i)*]

SMARA performance standards require operators to protect surface water from siltation and pollutants, which could diminish water quality. 14 Cal. Code of Regs. § 3710(a). Point source discharges to surface waters from mining operations must obtain a National Pollutant Discharge Elimination System (NPDES) permit from California's Regional Water Quality Control Boards. An NPDES permit requires compliance with surface water quality standards and the State's antidegradation policy for surface water. 23 Cal. Code of Regs. Div. 7, ch. 9, art. 3. Additionally, operators must comply with NPDES storm water requirements. 40 CFR 122.26.

GROUND WATER [*Proposed 43 CFR 3809.420(B)(2)(ii)*]

SMARA performance standards require operators to protect ground water from siltation and pollutants, which could diminish water quality. 14 Cal. Code of Regs. § 3710(a). In addition, all mining waste management units are regulated by Regional Water Quality Control Boards which establish site-specific waste discharge requirements to ensure compliance with ground water quality standards and the State's antidegradation policy for ground water. Title 27 §§ 22470 – 22510 of the California Code of Regulations.

ACID MINE DRAINAGE [*Proposed 43 CFR 3809.420(b)(2)(i)(B) and (ii)(B)*]

California Water Code § 13260(1) requires that, for purposes of obtaining waste discharge requirements (i.e., a permit) from a Regional Water Quality Control Board for a discharge of mining waste, a report must be submitted on the physical and chemical characteristics of the waste that could affect its potential to cause pollution or contamination. The report must contain the results of tests to determine the acid-generating potential of the mining waste, and evaluate the potential of a discharge of such waste to produce, over the long term, acid mine drainage, including the discharge or leaching of heavy metals. The classification of mining wastes for purposes of management requirements under the Title 27 program is based in part on the acid-generating potential of the mining waste. 27 Cal. Code of Regs. § 22480. Mining waste management units are to be closed such that they no longer pose a threat to water quality. 27 Cal. Code of Regs. § 22510.

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WETLANDS AND RIPARIAN AREAS [Proposed 43 CFR 3809.420(b)(3)]

Any placement of soils or other fill materials in “waters of the United States,” including dry washes, isolated waters and wetlands, must be permitted by the U.S. Corps of Engineers pursuant to Section 404 of the Clean Water Act. 33 U.S.C. § 1344. In reviewing the permit application, the Corps applies guidelines for disposal of fill materials promulgated by the Environmental Protection Agency. 40 C.F.R. pt. 230. The guidelines require that the Corps look at alternatives to the proposed fill activity before approving the permit application. Before the permit can be issued, California must issue a document certifying that the permit limitations will be consistent with state water quality standards. 33 U.S.C. § 1341.

All surface mining and reclamation activities must be conducted to protect beneficial uses of surface water and control erosion, sedimentation, gulying and contamination. Cal. Pub. Res. Code § 2773(b)(4), 14 Cal. Code of Regs. § 3707. Erosion and sedimentation must be controlled during all phases of construction, operation, reclamation, and closure in order to minimize siltation of lakes and watercourses. 14 Cal. Code of Regs. § 3706(c). Surface water runoff and drainage from surface mining operations must be controlled to ensure that surrounding land and water resources are protected from erosion, gulying, sedimentation and contamination. 14 Cal. Code of Regs. § 3706(d). If natural drainages are impacted by surface mining activities, mitigation measures must be taken to assure that surface water runoff does not increase erosion or sedimentation. 14 Cal. Code of Regs. § 3707(e). Stream diversions must be constructed in accordance with other laws and, when no longer needed, all temporary stream channel diversions must be removed and the affected land reclaimed. 14 Cal. Code of Regs. § 3706(g). Piles or dumps of mining waste and overburden may not be permanently placed in wetlands without acceptable mitigation to offset wetland impacts and losses. 14 Cal. Code of Regs. § 3704(g).

SOIL AND GROWTH MATERIAL [Proposed 43 CFR 3809.420(b)(4)]

When an approved reclamation plan approved after 1991 requires revegetation or cultivation, operators must comply with SMARA performance standards for topsoil including requirements regarding the segregation, maintenance, and redistribution of topsoil. Cal. Pub. Res. Code § 2773(b)(8). Soil practices must be used where necessary to control water and wind erosion, including fugitive dust, and promote successful revegetation. 14 Cal. Code of Regs. § 3711. All salvageable topsoil suitable for revegetation must be removed as a separate layer from areas to be disturbed and topsoil and vegetation removal must not precede surface mining activities by more than one year. 14 Cal. Code of Regs. § 3711 (a). If sufficient topsoil is unavailable, other suitable material capable of sustaining vegetation must be removed as a separate layer use as a growth media. 14 Cal. Code of Regs. § 3711(b). Topsoil and suitable growth media that cannot be used immediately for reclamation, must be (1) stockpiled in an area where they will not be disturbed until needed for reclamation and (2) planted with a vegetative cover, or protected by equally effective measures from water and wind erosion and to discourage weeds. 14 Cal. Code of Regs. § 3711 (d). Topsoil stockpiles must be segregated from mine waste dumps. 14 Cal. Code of Regs. § 3704(c), 3711 (d). Additional performance standards for topsoil salvage, maintenance and redistribution apply to mining operations on prime agricultural lands where the approved post-mining land use is agriculture. 14 Cal. Code of Regs. § 3707.

REVEGETATION [Proposed 43 CFR 3809.420(b)(5)]

All surface mining and reclamation activities must comply with SMARA performance standards for revegetation, and reclamation must include revegetation unless revegetation is inconsistent with the approved post-mining land use. Cal. Pub. Res. Code § 2773(b)(3), 14 Cal. Code of Regs. § 3705. SMARA revegetation performance standards require operators to use a vegetative cover of native species, which (1) is capable of self-regeneration, (2) stabilizes the surface, and (3) protects against erosion. 14 Cal. Code of Regs. § 3705(a), (g). Operators must grow test plots of vegetation simultaneous with mining, 14 Cal. Code of Regs. § 3705(b), eliminate soil compaction, establish a suitable root zone before revegetation begins, 14 Cal. Code of Regs. § 3705(c), and conduct soil testing, 14 Cal. Code of Regs. § 3705(e). Operators must plant during “the most favorable time of the year for plant establishment,” 14 Cal. Code of Regs. § 3705(h), and use “soil stabilizing practices” to control erosion and

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facilitate plant establishment. 14 Cal. Code of Regs. § 3705(i). All roads must be revegetated, 14 Cal. Code of Regs. § 3705(d), and efforts must be taken to prevent interference with efforts to restore vegetation to lands affected by mining operation. 14 Cal. Code of Regs. § 3705(f) (temporary access roads, (l) (grazing). The success of revegetation will be judged by the effectiveness of the vegetation for the approved post-mining land use and by comparing the quantified measures of vegetative cover, density, and species-richness of the reclaimed lands to similar parameters of naturally occurring vegetation in the area. 14 Cal. Code of Regs. § 3705(m).

FISH AND WILDLIFE [Proposed 43 CFR 3809.420(b)(6)]

Mining operations and reclamation activities must comply with SMARA performance standards for wildlife habitat. Cal. Pub. Res. Code § 2773(b)(1), 14 Cal. Code of Regs. § 3703. State or federally listed rare, threatened, or endangered species, and their respective habitat, must be avoided and, if avoidance is impossible, mining operations must take mitigation measures. 14 Cal. Code of Regs. § 3703(a). Wildlife habitat must be established on disturbed land “in a condition at least as good as that which existed before the lands were disturbed.” 14 Cal Admin. Code § 3703(b). Wetland habitat must be avoided and any wetland habitat impacted by surface mining operations must be mitigated at a minimum of one-to-one ratio for wetland habitat acreage and wetland habitat value. 14 Cal Admin. Code § 3703(c). Any stream alterations require a 1603 agreement from the Department of Fish and Game, a 404 permit from the Corps of Engineers, and a 401 certification from the State Water Resources Control Board.

ROADS AND STRUCTURES [Proposed 43 CFR 3809.420(c)(1)]

All roads must be revegetated. 14 Cal. Code of Regs. § 3705(d). Mining operations must store all equipment, supplies, and other materials in areas designated in the approved reclamation plan. 14 Cal. Code of Regs. § 3709(a). All buildings, structures, and equipment must be dismantled and removed before final mine closure except as needed for the approved post-mining land use. Cal. Pub. Res. Code § 2773(b)(6), 14 Cal. Code of Regs. § 3709(b).

DRILL HOLES [Proposed 43 CFR 3809.420(c)(2)]

All drill holes, water wells, and monitoring wells must be completed or abandoned in a manner consistent with applicable legal requirements. 14 Cal. Code of Regs. § 3713(a). Prior to closure, all portals, shafts, tunnels, or other surface openings to underground workings must be gated or otherwise protected from public entry in order to eliminate any threat to public safety and to preserve access for wildlife habitat. 14 Cal. Code of Regs. § 3713(b).

WASTE ROCK, TAILINGS AND LEACH PADS [Proposed 43 CFR 3809.420(c)(5)]

Mine waste disposal units, including waste rock piles, heap leach piles, and tailings ponds and impoundments, must still comply with the Title 27 mine waste disposal regulations promulgated by the California Water Resources Control Board and the SMARA reclamation performance standards, including surface restoration and vegetation. Cal. Pub. Res. Code § 2773(b)(9). The Title 27 regulations require all mining waste management units to be closed (1) according to an approved closure and post-closure maintenance plan, which must incorporate the provisions of the SMARA reclamation plan, and (2) so that they no longer pose a threat to ground or surface water quality. Title 27 § 22510(a), (b). Mining waste includes overburden, waste rock, and tailings. Title 27 § 22480(a). All fill slopes, including permanent piles or dumps of mine waste and overburden, and cut slopes must conform to the surrounding topography and the approved post-mining land use and which can be revegetated. 14 Cal. Code of Regs. § 3704(e), (f).

STABILITY, GRADING AND EROSION CONTROL [Proposed 43 CFR 3809.420(c)(6)]

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At reclamation, an operator must comply with SMARA performance standards for backfilling, regrading, slope stability, and recontouring. Cal. Pub. Res. Code § 2773(b)(2), 14 Cal. Code of Regs. § 3704. Final reclaimed slopes must have a minimum slope stability factor of safety that is suitable for the approved post-mining land use. 14 Cal. Code of Regs. § 3704(d). All fill slopes, including permanent piles or dumps of mine waste and overburden, and cut slopes must conform to the surrounding topography and the approved post-mining land use and which can be revegetated. 14 Cal. Code of Regs. § 3704(e), (f). Topsoil and suitable growth media must be redistributed in a manner that results in a stable, uniform thickness consistent with the approved post-land use, site configuration, and drainage patterns. 14 Cal. Code of Regs. § 3711 (e).

PIT RECLAMATION [*Proposed 43 CFR 3809.420(c)(7)*]

Where backfilling is required for urban uses, the fill material must be appropriately compacted. 14 Cal. Code of Regs. § 3704(a). Where backfilling is required for resource conservation purposes, fill material must be backfilled to the standards required for the resource conservation use involved. 14 Cal. Code of Regs. § 3704(b).

FINANCIAL GUARANTEE [*Proposed 43 CFR 3809.590 – 599*]

A financial assurance, such as a bond, letter of credit, or certificate of deposit, is required for all mines. It must be updated annually to cover all reclamation costs. SMARA authorizes forfeiture of an operator's financial assurance if the operator is financially incapable of performing reclamation or has abandoned the operation. Cal. Pub. Res. Code § 2773.1(b). The Regional Water Quality Boards also impose financial assurance requirements under the Title 27 program for mine waste discharges.

INSPECTION [*Proposed 43 CFR 3809.600*]

SMARA requires inspections to determine compliance with the approved reclamation plan at least once a year and inspections must be conducted within six months after an operator files an annual report detailing the mine's status. Cal. Pub. Res. Code § 2774(b). The annual report must include proof of annual inspection along with other information about the status of the mining operation and the condition of the site. Cal. Pub. Res. Code § 2207. Inspections to ensure compliance with the Porter-Cologne Water Quality Act and the California Air Pollution Control laws are conducted, respectively, by the Regional Water Quality Control Boards and the Air Quality Districts.

ENFORCEMENT ORDERS [*Proposed 43 CFR 3809.601*]

SMARA authorizes the issuance of administrative orders to (1) compel compliance with SMARA or (2) require cessation on mining activities occurring without an approved reclamation plan or financial assurance. Cal. Pub. Res. Code § 2774.1(a). Operators who fail to comply with such an order are potentially subject to administrative penalties of \$5,000 per day. Cal. Pub. Res. Code § 2774.1(c). Administrative enforcement orders also are authorized by the Porter-Cologne Water Quality Act, Cal. Water Code Div. 7, ch. 5, and the California Air Pollution Control laws. Cal. Health & Safety Code div. 26, pt. 4, ch. 4.

ENFORCEMENT -- PERMIT SUSPENSION OR REVOCATION [*Proposed 43 CFR 3809.602*]

Operating permits issued under the authority of SMARA can be suspended or revoked by the lead permitting agency, usually the county planning commission, pursuant to local mining ordinances. Regional Water Quality Control Boards and the Air Quality Districts can suspend or revoke permits issued pursuant to the Porter-Cologne Water Quality Act or the California air Pollution Control laws.

ENFORCEMENT -- SUIT FOR INJUNCTIONS AND/OR DAMAGES [*Proposed 43 CFR 3809.604*]

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If a surface mine presents an imminent and substantial endangerment to the public health or environment because of noncompliance with SMARA, a court order to enjoin the mining operation may be sought. Cal. Pub. Res. Code § 2774.1(d). Injunctive relief also can be sought for violations of the Porter-Cologne Water Quality Act, Cal. Water Code div. 7., ch. 5, and the California Air Pollution Control laws. Cal. Health & Safety Code § 42453. Natural resource damages, in addition to removal costs, can be assessed for killing fish and wildlife. Cal. Fish & Game Code § § 12014, 12015, 12016.

CRIMINAL PENALTIES [Proposed 43 CFR 3809.700]

SMARA does not authorize criminal penalties. The Porter-Cologne Water Quality Act identifies the following as misdemeanors: failing to file reports of waste discharge; failing to file or falsifying technical or monitoring information required by RWQCB; knowingly filing a false report of waste discharge with regard to the discharge of hazardous waste; willfully withholding material information with regard to the discharge of hazardous waste; and failing to notify the State of discharges of hazardous substances into state waters. Cal. Water Code § § 13261, 13265, 13268, 13271. Stiffer criminal penalties may be assessed for negligent or intentional violation of waste discharge requirements for point source discharges to surface waters. Cal. Water Code § 13387. Criminal penalties may be assessed for deleterious substances, which impact, or threaten waters of the state. Cal. Fish & Game Code § 5650. Criminal penalties also are authorized under California's air pollution laws. Cal. Health & Safety Code div. 26, pt. 4, ch. 4.

CIVIL PENALTIES [Proposed 43 CFR 3809.702]

Operators who fail to comply with administrative orders issued under SMARA are subject to administrative penalties, Cal. Pub. Res. Code § 2774.1(c), which can be recovered in a judicial action. Cal. Pub. Res. Code § 2774.1(e). Civil penalties can be assessed against operators who fail to file the annual operating report required by SMARA. Cal. Pub. Res. Code § 2774.1(c). The Porter-Cologne Water Quality Act authorizes civil liability to be assessed for violations of administrative orders either by the Regional Water Quality Control Boards or a court. Cal. Water Code Div. 7, ch. 5. Civil penalties also are authorized under California's air pollution laws. Cal. Health & Safety Code div. 26, pt. 4, ch. 4.

CITIZEN SUITS [No provision in proposed rule]

SMARA does not authorize citizen suits. The California Environmental Quality Act authorizes citizen suits against State agencies, including the Department of Conservation, with respect to LEQA compliance. Cal. Pub. Res. Code § 21167. The federal Clean Water Act authorizes citizen suits against persons who violate provisions of the Clean Water Act or state administrative orders that implement that Act.

COLORADO

The Division of Minerals and Geology (Division) in the Colorado Department of Natural Resources has primary responsibility for the regulation of mining operations. The Division is overseen by the Mined Land Reclamation Board (Board). The Division administers the Colorado Mined Land Reclamation Act (MLRA), Colo. Rev. Statutes (C.R.S.) §§ 34-32-101 et seq., and the MLRA implementing regulations. 2 Code of Colo. Reg. (C.C.R.) § 407-1. The MLRA requires all hard rock metal mining operations to obtain a reclamation permit from the Board. C.R.S. § 34-32-109(7). A reclamation permit cannot be issued without an approved reclamation plan, C.R.S. § 34-32-112(1)(b), the posting of a performance warranty, and the posting of a financial warranty in an amount sufficient to reclaim all lands to be affected during the year. C.R.S. § 34-32-117. In addition, pursuant to the 1993 amendments to the MLRA, an environmental protection plan is required before the issuance of reclamation permits for designated mining operations. C.R.S. § 34-32-116.5. Designated mining operations are those mining operations at which "toxic or acidic chemicals used in extractive metallurgical processing are present on-site," or "acid or toxic-forming materials will be exposed or disturbed as a result of mining operations." C.R.S. § 34-32-

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103(3.5). Reclamation activities are to be conducted concurrent with mining operations to the extent practicable. C.R.S. § 34-32-116(7)(q). Mining operations and reclamation activities also must comply with the Colorado Water Quality Control Act, C.R.S. tit. 25, art. 8, and the Colorado Air Pollution Prevention and Control Act, C.R.S. tit. 25, art. 7, administered by the Colorado Department of Public Health and Environment (CDPHE).

AIR QUALITY [Proposed 43 CFR 3809.420(b)(1)]

Mining operations must comply with the Colorado Air Pollution Prevention and Control Act, C.R.S. tit. 25, art. 7, including construction and operating permit requirements administered by the CDPHE. Operators must use control measures and operating procedures as necessary to control fugitive particulate emissions from mining, haul roads, haul trucks, tailings piles and ponds, and blasting, as well as activities incidental to mining. A prohibition of off-property transport of air particulates, nuisance emission limitations and a 20% opacity guideline are applied to these activities. 5 C.C.R. § 1001-3, III.D.2 (d), (e), (f), (g), (I). In addition, operators must ensure that all surface areas of the affected land, including spoil piles, are stabilized and protected so as to effectively control erosion and attendant air and water pollution. C.R.S. § 34-32-116(7)(i). Air quality requirements are part of Colorado's State Implementation Plan (SIP) required by the federal Clean Air Act, and Colorado's implementation of the permit requirements of Title V of the Clean Air Amendments of 1990, 42 U.S.C. § 7410 (State Implementation Plans); 42 U.S.C. § 7661 (Title V Operating Permit Requirements).

WATER [Proposed 43 CFR 3809.420(b)(2)]

An operator must minimize disturbances to the prevailing hydrologic balance and to the quality and quantity of surface and ground water of the affected land and surrounding area during and after the mining operation and during reclamation. C.R.S. § 34-32-116(7)(g). Measures to minimize such disturbances include: (1) complying with applicable Colorado water laws and regulations governing injury to existing water rights; (2) complying with applicable federal and Colorado water quality laws and regulations; (3) complying with applicable federal and Colorado dredge and fill requirements; and (4) removing temporary or large siltation structures from drainways after disturbed areas are revegetated and stabilized. 2 C.C.R. § 407-1, 3.1.6(1). The MLRA requires the Division to ensure that all affected lands are stabilized and protected to effectively control erosion and attendant air and water pollution. C.R.S. § 34-32-116(7)(i).

SURFACE WATER [Proposed 43 CFR 3809.420(b)(2)(i)]

Mining operations must obtain a Colorado Discharge Permit System (CDPS) permit from the CDPHE for all additions of pollutants into surface waters from point sources. C.R.S. § 25-8-501(1). A CDPS permit will establish the location, quantity, and quality characteristics of permitted discharges. 5 C.C.R. § 5-1002-2, 6.9.3(2)(b). Mining operations must comply with Colorado's antidegradation rule and surface water quality standards. 5 C.C.R. § 5-1002-8, 3.1. An operator must minimize disturbances to the prevailing hydrologic balance and to the quality and quantity of surface and ground water to the affected land and surrounding area during and after the mining operation and during reclamation. C.R.S. § 34-32-116(7)(g).

GROUND WATER [Proposed 43 CFR 3809.420(b)(2)(ii)]

Under the Colorado Water Quality Control Act, the Water Quality Control Division of the CDPHE is responsible for implementing state water classifications and water quality standards for discharges to ground water from mining operations. The Division is responsible for setting points of compliance for such discharges at mine sites. C.R.S. § 25-8-202(7). Mining operations cannot cause a violation of Colorado ground water quality standards. 2 C.C.R. § 407-1, 3.1.7(1), 5 C.C.R. § 5-1002-8, 3.11. An operator must minimize disturbances to the prevailing hydrologic balance and to the quality and quantity of surface and ground water to the affected land and surrounding area during and after the mining operation and during reclamation. C.R.S. § 34-32-116(7)(g), 2 C.C.R. § 407-1, 3.1.6(1).

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ACID MINE DRAINAGE [Proposed 43 CFR 3809.420(b)(2)(i)(B) and (ii)(B)]

The MLRA requires acid-forming or toxic-producing materials exposed by mining “to be handled in a manner that will protect the drainage system from pollution.” C.R.S. § 34-32-116(7)(c); 2 C.C.R. § 407-1, 3.1.5(5).

The MLRA implementing regulations define “acid mine drainage” (“AMD”) as contamination of water by either low pH or metals. 2 C.C.R. § 407-1, 1.1(2). The regulations require operators of designated mining operations (“DMOs”) to submit to the Board for approval, an environmental protection plan which will assure that control measures will be put in place to prevent releases of acid or toxic substances during and after mining. 2 C.C.R. § 407-1, 6.1.4. DMO’s are those mining operations at which (a) designated chemicals used in the extractive metallurgical process are present on site or (b) toxic or acid-forming materials will be exposed or disturbed as a result of mining or reclamation. C.R.S. § 34-32-103 (3.5). “Designated chemicals” are chemicals that, at certain concentrations, represent a potential threat to human health, property or the environment. 2 C.C.R. § 407-1, 1.1(13). If the Division believes that an operation has the potential to be a DMO, yet the operator believes it does not, the operator may conduct testing and present results to the Division for approval. 2 C.C.R. § 407-1, 7.2.4. Operators must outline measures to be taken to prevent the release of AMD in the environmental protection plan. 2 C.C.R. § 407-1, 6.4.20(6). These may include, but are not limited to, measures such as low permeability caps and covers, surface water diversion structures, selective handling, selective storage, addition of alkaline amendments, and temporary water treatment. While mining is in progress, control measures must be implemented to prevent releases of AMD. Depending on the site, the permit, and the nature of the ore and waste rock, surface and/or ground water monitoring may be required, as may rock testing, to guide selective handling of ore or waste rock. After mining ceases and reclamation begins, operations must be free of AMD releases for a monitoring period of at least five years.

WETLANDS AND RIPARIAN AREAS [Proposed 43 CFR 3809.420(b)(3)]

Any placement of soils or other fill materials in “waters of the United States,” including dry washes, isolated waters and wetlands, must be permitted by the U.S. Corps of Engineers pursuant to Section 404 of the Clean Water Act. 33 U.S.C. § 1344. In reviewing the permit application, the Corps applies guidelines for disposal of fill materials promulgated by the Environmental Protection Agency. 40 C.F.R. pt. 230. The guidelines require that the Corps look at alternatives to the proposed fill activity before approving the permit application. Before the permit can be issued, Colorado must issue a document certifying that the permit limitations will be consistent with state water quality standards. 33 U.S.C. § 1341.

SOIL AND GROWTH MATERIAL [Proposed 43 CFR 3809.420(b)(4)]

The MLRA requires operators to segregate and maintain topsoil removed from affected land. Topsoil must be preserved from wind and water erosion, remain free of any contamination by any acid or toxic material, and be in a useable condition for sustaining vegetation when restored during reclamation. C.R.S. § 34-32-116(7)(f), 2 C.C.R. § 407-1, 3.1.9(1). Topsoil stockpiles must be stored in places and configurations to minimize erosion and disturbance by ongoing mining operations. 2 C.C.R. § 407-1, 3.1.9(3). Once stockpiled, topsoil must be rehandled as little as possible until replacement on the regraded, disturbed area. 2 C.C.R. § 407-1, 3.1.9(4). An operator must take measures to assure the stability of replaced topsoil on graded slopes, such as roughing in final grading to eliminate slippage zones that may develop between the deposited topsoil and heavily textured spoil surfaces. 2 C.C.R. § 407-1, 3.1.9(5). If topsoil is of insufficient quantity or of poor quality for sustaining vegetation, and if other materials can be shown to be more suitable for vegetative requirements, the operator must remove, segregate, and preserve in a like manner such other materials which are best able to support vegetation. 2 C.C.R. § 407-1, 3.1.9(6).

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REVEGETATION [Proposed 43 CFR 3809.420(b)(5)]

An operator must establish a “diverse, effective, and long-lasting vegetative cover that is capable of self-regeneration and at least equal in extent of cover to the natural vegetation of the surrounding area.” C.R.S. § 34-32-116(7)(e). Except for certain post-mining land uses (forestry and range), an operator must emphasize species native to the region. 2 C.C.R. § 407-1, 3.1.10(1). The revegetation development is to take into consideration environmental factors such as seasonable patterns of precipitation, temperature and wind; soil texture and fertility; slope stability; direction of slope faces; and biological factors. 2 C.C.R. § 407-1, 3.1.10(4). To ensure the establishment of a diverse and long-lasting vegetative cover, the operator must use appropriate techniques of site preparation and protection such as mechanical soil conditioning by discing and ripping, mulching, soil amendments and fertilization, and irrigation. 2 C.C.R. § 407-1, 3.1.10(5). No planting is required (1) on lands used for the disposal of refuse until cessation of operations; (2) on lands proposed for future mining; (3) on depressed haulage roads or final cuts when in use; (4) where permanent pools or lakes have been formed; or (5) on affected lands that are toxic, deficient in plant nutrients, or composed of sand, gravel, shale or stone that inhibits plant growth, and which cannot be remediated. 2 C.C.R. § 407-1, 3.1.10(8).

FISH AND WILDLIFE [Proposed 43 CFR 3809.420(b)(6)]

Applicants for reclamation permits for designated mining operations must consult with the Colorado Division of Wildlife, and wildlife protection measures will be incorporated into the reclamation permits. C.R.S. § 34-32-116.5(6). All aspects of a mining and reclamation plan must take into account the safety and protection of wildlife on the mine site, at processing sites, and along all access roads to the mine site with special attention given to critical periods in the life cycle of those species which require special consideration, such as elk calving, migration routes, peregrine falcon nesting, and grouse strutting grounds. 2 C.C.R. § 407-1, 3.1.8.

ROADS AND STRUCTURES [Proposed 43 CFR 3809.420(c)(1)]

If the affected land is owned by a legal entity other than any local, state, or federal entity, any buildings or structures which are constructed or placed on the affected lands in conjunction with the mining operations and have significant historical value may remain after reclamation if they will not conflict with the post-mining land use. C.R.S. § 34-32-116(7)(R); 2 C.C.R. § 407-1, 3.1.11.

DRILL HOLES [Proposed 43 CFR 3809.420(c)(2)]

All drill or auger holes that are part of a mining operation must be plugged with noncombustible materials that will prevent harmful or polluting drainage. Adits and shafts must be sealed, and where practicable, backfilled and graded. 2 C.C.R. § 407-1, 3.1.5(6).

WASTE ROCK, TAILINGS AND LEACH PADS [Proposed 43 CFR 3809.420(c)(5)]

All surface areas of the affected land, including spoil piles, must be stabilized and protected so as to effectively control erosion and attendant air and water pollution. C.R.S. § 34-32-116(7)(i).

STABILITY, GRADING AND EROSION CONTROL [Proposed 43 CFR 3809.420(c)(6)]

The MLRA requires that areas surrounding the affected land be protected from slides or damages during mining operations or reclamation activities. C.R.S. § 34-32-116(7)(h), 2 C.C.R. § 407-1, 3.1.5(3). All surface areas of the affected land, including spoil piles, must be stabilized and protected so as to effectively control erosion and attendant air pollution, including fugitive dust, and water pollution. C.R.S. § 34-32-116(7)(i). All grading must be done in a manner to control erosion and siltation of the affected lands and to protect areas outside the affected land from slides and other damage. 2 C.C.R. § 407-1, 3.1.5(3).

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The MLRA requires all grading to create a “final topography appropriate to the final land use” of the affected land. C.R.S. § 34-32-116(7)(a). All grading must be done in a manner to control erosion and siltation of the affected lands and must be stabilized. If not eliminated, all highwalls must be stabilized. 2 C.C.R. § 407-1, 3.1.5(3). All backfilling and grading must be completed as soon as feasible after mining. 2 C.C.R. § 407-1, 3.1.5(4). Maximum slopes and slope combinations must be compatible with the configuration of surrounding conditions and the final land use. 2 C.C.R. § 407-1, 3.1.5(7).

PIT RECLAMATION [Proposed 43 CFR 3809.420(c)(7)]

If an approved reclamation plan includes backfilling, the operator must replace overburden and waste materials in the mined areas and ensure adequate compaction for stability and prevent leaching of toxic or acid-forming materials. 2 C.C.R. § 407-1, 3.1.5(2).

FINANCIAL GUARANTEE [Proposed 43 CFR 3809.500 – 599]

Prior to obtaining a reclamation permit an operator must give a performance warranty and financial warranty approved by the Board. C.R.S. § 34-32-117(1). A performance warranty is a written promise to comply with the requirements of the MLRA. C.R.S. § 34-32-117(2). Financial warranties consist of a written promise to be responsible for reclamation costs, together with proof of financial responsibility. C.R.S. § 34-32-117(3). Proof of financial responsibility may consist of a surety bond, letter of credit, certificate of deposit, deed of trust or security agreement encumbering real or personal property creating a first lien in favor of the State, a trust fund held by an independent trustee, or certification of the warrantor by an independent auditor. C.R.S. § 34-32-117(3)(f). The Board prescribes the amount and duration of financial warranties and periodically reviews their continued adequacy. The Board may increase or decrease the amount and duration of required warranties. C.R.S. § 34-32-117(4). A financial warranty is subject to forfeiture for: (1) violating a cease and desist order; (2) failing to complete a corrective action; (3) defaulting on a performance warranty; (4) failing to maintain a financial warranty in good standing; or (5) lacking the financial ability to fulfill MLRA reclamation requirements. C.R.S. § 34-32-118(1). The Board will use forfeited funds to reclaim the lands covered by the financial warranties. C.R.S. § 34-32-118(5).

INSPECTION [Proposed 43 CFR 3809.600]

The Division must inspect a proposed surface mining operation before issuing a reclamation permit, 2 C.C.R. § 407-1, 3.2(7), and before releasing performance and financial warranties. C.R.S. § 34-32-117(5)(a). The MLRA authorizes inspection of a mining operation at any time to determine compliance with the terms of the MLRA. C.R.S. § 34-32-121, 2 C.C.R. § 407-1, 3.2(1). The CDPHE also possesses authority to inspect at any reasonable time under the Water Quality Control Act, C.R.S. § 25-8-306, and the Air Pollution Prevention and Control Act. C.R.S. § 25-7-111(c).

ENFORCEMENT ORDERS [Proposed 43 CFR 3809.601]

The MLRA authorizes the issuance of cease and desist orders for operating without a valid reclamation permit, C.R.S. § 34-32-123(1), violating MLRA statutory or regulatory provisions, or violating reclamation permit conditions. C.R.S. § 34-32-124(2)(a). Such orders may set forth alleged violations, time deadlines for termination of acts or practices complained of, and/or corrective actions, C.R.S. § 34-32-124 (2)(a). The CDPHE also possesses authority to issue administrative orders under the Water Quality Control Act, C.R.S. § 25-8-605, 606, and the Air Pollution Prevention and Control Act. C.R.S. § 25-7-115, 118, 119.

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ENFORCEMENT -- PERMIT SUSPENSION OR REVOCATION [*Proposed 43 CFR 3809.602*]

The Board may revoke a reclamation permit for violating MLRA statutory or regulatory provisions or permit conditions. C.R.S. § 34-32-124(6). The CDPHE also can suspend or revoke permits issued under the Water Quality Control Act, C.R.S. § 25-8-604, and the Air Pollution Prevention and Control Act. C.R.S. § 25-7-115.

ENFORCEMENT -- SUITS FOR INJUNCTIONS AND/OR DAMAGES [*Proposed 43 CFR 3809.604*]

The MLRA authorizes temporary restraining orders or preliminary or permanent injunctions to enjoin any mining operation operating without a valid reclamation permit, C.R.S. § 34-32-123(1), violating MLRA statutory or regulatory provisions, or violating reclamation permit conditions. C.R.S. § 34-32-124(3). The CDPHE also can seek to enjoin activities which violate the Water Quality Control Act, C.R.S. § 25-8-607, and the Air Pollution Prevention and Control Act. C.R.S. § 25-7-121. The MLRA authorizes the Board to recover from a mine operator any funds spent from an emergency response cash fund, established by the 1993 amendments to the MLRA, to respond to emergencies at mining operations. C.R.S. § 34-32-122(3)(c)(I). The Board also can seek to recover any cost from a mine operator, including administrative costs, incurred in carrying out a corrective action necessitated by MLRA violations. C.R.S. § 34-32-124(2)(b). Other suits for damages are governed by common law. The state may sue to recover natural resource damages under section 107(f) of the Comprehensive Environmental Response, Compensation and Liability Act of 1980. 42 U.S.C. § 9607(f).

CRIMINAL PENALTIES [*Proposed 43 CFR 3809.700*]

The MLRA does not establish criminal penalties for violations of its provisions. Criminal penalties up to \$25,000 per day per violation can be assessed for violations of the Colorado Water Quality Control Act, C.R.S. § 25-8-609. Second convictions incur double the fine. Violations of the Air Pollution Prevention and Control Act are punishable as misdemeanors and violators may incur fines up to \$25,000 per day per violation. Second convictions incur \$50,000 per day per violation. C.R.S. § 25-77-122.1. Any violator who knowingly places other persons in imminent danger of death or serious bodily injury is guilty of a felony punishable by fines up to \$50,000 per day per violation and/or up to four years imprisonment. C.R.S. § 25-77-122.1.

CIVIL PENALTIES [*Proposed 43 CFR 3809.702*]

The MLRA authorizes civil penalties of not less than \$1,000 per day nor more than \$5,000 per day for operating without a valid reclamation permit or mining beyond the approved permit boundary. C.R.S. § 34-32-123(2). Violations of MLRA permit conditions subject operators to civil penalties of not less than \$100 per day nor more than \$1,000 per day for each day the violation occurs. C.R.S. § 34-32-124(7). The CDPHE also can seek to have civil penalties imposed for violations, of up to \$10,000 per day per violation, for violations of the Water Quality Control Act, C.R.S. § 25-8-608, and up to \$15,000 per day per violation for violations of the Air Pollution Prevention and Control Act. C.R.S. § 25-7-122.

CITIZEN SUITS [No provision in proposed rule]

Neither the MLRA nor Colorado environmental laws authorize citizen suits. The federal Clean Water Act authorizes citizen suits against persons who violate provisions of the Clean Water Act or state administrative orders that implement that Act.

IDAHO

In Idaho, surface mining operations, including reclamation, are regulated primarily by the Idaho Department of Lands, which is overseen by the Idaho Board of Land Commissioners. The Department of Lands administers the Idaho Surface Mining Act. Idaho Code tit. 47, ch. 15, IDAPA § 20.03.02. Before surface mining operations can

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begin, a reclamation plan must be approved by the Department of Lands, Idaho Code § 47-1506(a)(3), (b), IDAPA § 20.03.02.070.01, and a performance bond posted in an amount equal to reasonable costs of reclamation under the reclamation plan, not to exceed \$2500 per acre. The board may require a bond for more than \$2500 per acre upon notice to the operator and an opportunity for a hearing. Idaho Code § 47-1512. An approved reclamation plan governs and determines the nature and extent of reclamation obligations. Idaho Code § 47-1507(a). Surface mining operations also must comply with surface and ground water quality standards, IDAPA § 16.01.02, and air pollution control requirements, IDAPA § 16.01.01, promulgated pursuant to the authority of the Idaho Environmental Protection and Health Act, Idaho Code tit. 39, ch. 1, and administered by the Idaho Division of Environmental Quality (IDEQ) in the Department of Health and Welfare. Facilities which use cyanide to process ore must comply with Idaho's cyanidation statute and regulations administered by the IDEQ. Idaho Code § 39-118A, IDAPA § 16.01.13000. These facilities must be permitted before construction, IDAPA § 16.01.13100.01, which requires an approved permanent closure plan, IDAPA § 16.01.13100.01, and sufficient financial assurance to guarantee closure, not to exceed \$100,000 for the entire facility. IDAPA § 16.01.13650.02.

AIR QUALITY [Proposed 43 CFR 3809.420(b)(1)]

The air pollution control provisions of the Idaho Environmental Protection and Health Act, Idaho Code tit. 39, ch. 1, and implementing regulations, IDAPA § 16.01.01, apply to mining operations. IDEQ issues construction and operating permits for mining facilities which emit air pollutants including fugitive dust. All mining operations must take "all reasonable precautions" to prevent the generation of fugitive dust. IDAPA § 16.01.1251. Air quality requirements are part of Idaho's State Implementation Plan (SIP) required by the federal Clean Air Act. 42 U.S.C. § 7410.

WATER [Proposed 43 CFR 3809.420(b)(2)]

Facilities which process ore by cyanidation must submit a water management strategy to IDEQ, which describes the hydrogeologic regime of the site and details the actions the operator will take to maintain that prevailing hydrologic regime. IDAPA § 16.01.13100.03.e, h, iii. Operators must use best management practices designed, constructed and maintained to control non-point source sediments to achieve state water quality standards and protect existing beneficial uses of adjacent surface waters. IDAPA § 20.03.02140.01. Similar efforts must be made at the close of each operating season.

SURFACE WATER [Proposed 43 CFR 3809.420(b)(2)(i)]

Point source discharges to surface waters from mining operations must have a National Pollutant Discharge Elimination System (NPDES) permit issued by the United States Environmental Protection Agency. 42 U.S.C. § 1342. Mine operators cannot discharge any pollutant in concentrations which may violate water quality standards, IDAPA § 16.01.02080.01, and must use best management practices to control non-point source pollution and storm water runoff to achieve state water quality standards. IDAPA § § 16.01.02350, 20.03.02140. Mining operations in Idaho must comply with the State's antidegradation policy. IDAPA § 16.01.02051, Exec. Order No. 88-23 (Nov. 14, 1988). A surface water monitoring program will be required for mining facilities which use cyanide. IDAPA § 16.01.13200.04.

GROUND WATER [Proposed 43 CFR 3809.420(b)(2)(ii)]

Ground water quality must be monitored during operations and after closure. IDAPA § 16.01.13200.04. Mining operations cannot discharge any solution, which causes a violation of the State's ground water quality standards, IDAPA § § 16.01.02080.01, 02299, and 16.01.11200, 11400 and must comply with the State's antidegradation policy. IDAPA § 16.01.02051, Exec. Order No. 88-23 (Nov. 14, 1988). In addition, wells must be constructed in a manner that will "guard against waste and contamination of the ground-water resources of the state of Idaho." Rules and Regulations, Well Construction Standards, Rule 3.1.1. Mine facilities which use cyanide to process ore

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must be able to assure that discharges do not violate the surface or ground water quality standards. IDAPA §§ 16.01.13200.01-02.

ACID MINE DRAINAGE [Proposed 43 CFR 3809.420(b)(2)(i)(B) and (ii)(B)]

An operator must submit a reclamation plan that includes a description of foreseeable, site-specific impacts from acid rock drainage and the best management practices that will be used to mitigate the impacts from the acid rock drainage. Idaho Code § 47-1506(1)(viii).

WETLANDS AND RIPARIAN AREAS [Proposed 43 CFR 3809.420(b)(3)]

Any placement of soils or other fill materials in “waters of the United States,” including dry washes, isolated waters and wetlands, must be permitted by the U.S. Corps of Engineers pursuant to Section 404 of the Clean Water Act. 33 U.S.C. § 1344. In reviewing the permit application, the Corps applies guidelines for disposal of fill materials promulgated by the Environmental Protection Agency. 40 C.F.R. pt. 230. The guidelines require that the Corps look at alternatives to the proposed fill activity before approving the permit application. Before the permit can be issued, Idaho must issue a document certifying that the permit limitations will be consistent with state water quality standards. 33 U.S.C. § 1341.

Operators must use best management practices to design, construct and maintain non-point source sediment controls to achieve state water quality standards and protect existing beneficial uses of adjacent surface waters. IDAPA § 20.03.02140.01. Similar efforts must be made at the close of each operating season. If water runoff from affected lands results in siltation of surface waters in excess of that which normally results from runoff, the operator must prepare affected lands and adjoining lands as necessary to meet state water quality standards. IDAPA § 20.03.02140.01.

SOIL AND GROWTH MATERIAL [Proposed 43 CFR 3809.420(b)(4)]

Mine operators must remove available topsoil or other growth medium before an area is disturbed and, if topsoil or overburden removal exposes areas to potential erosion, the Department of Lands can require the use of best management practices to prevent violation of water quality standards. IDAPA § § 20.03.02140.01.a, and 03.a. Topsoil, or other growth medium, must be stockpiled in a manner minimizing rehandling and exposure to excessive wind and water erosion including the use of vegetation, silt fences, chemical binders, seeding, and mulching or other methods to control erosion. IDAPA § 20.03.02140.03.b. Abandoned affected lands must be topped with topsoil or other growth medium to achieve a general stable uniform thickness. Excessive compaction of topsoil is to be avoided and topsoil redistribution must be timed “so that seeding, or other protective measures, can be readily applied to prevent compaction and erosion.” IDAPA § 20.03.02140.03.d.

REVEGETATION [Proposed 43 CFR 3809.420(b)(5)]

Mine operators must revegetate mined areas, overburden piles, and abandoned roads, Idaho Code § 47-1509(a)(8), by planting species “which can be expected to result in vegetation comparable to the vegetation which was growing on the area occupied by the affected lands” prior to surface mining operations. Idaho Code § § 47-1510, IDAPA § 20.03.02140.10a. Introduced species may be planted if they are known to be comparable to previous vegetation, or if known to be of equal or superior use for the approved post-mining land use of the affected land or, if necessary, to achieve a quick, temporary cover for soil stabilization purposes. IDAPA § 20.03.02140.10.c. Revegetative success must be measured against the existing vegetation on the site before mining, or against an adjacent reference area supporting similar types of vegetation, and must be sufficient to control erosion. IDAPA § 20.03.02140.10.b. Planting should be done in a manner that promotes “rapid stabilization of the soil surface.” IDAPA § 20.03.02140.10.e. Seeding and planting of affected lands should be conducted during the first normal period for favorable planting conditions after final seedbed preparation. IDAPA § 20.03.02140.09.a. The

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performance bond cannot be released completely until after revegetation activities have been completed consistent with the reclamation plan. IDAPA § 20.03.02120.09.

FISH AND WILDLIFE [*Proposed 43 CFR 3809.420(b)(6)*]

The Idaho Department of Fish and Game comments on all applications for an approved reclamation plan and for permits to use cyanide. Abandoned exploration drill holes must be plugged or otherwise left so as to eliminate hazards to animals. IDAPA § 20.03.02060.07.a. Tailings ponds must be reclaimed so that they will not pose a hazard to animal life. Idaho Code § 47-1509(a)(9).

ROADS AND STRUCTURES [*Proposed 43 CFR 3809.420(c)(1)*]

Roads must be constructed to minimize erosion. IDAPA § 20.03.02140.04.a. All access and haul roads must be adequately drained. IDAPA § 20.03.02140.04.b. Abandoned roads must be cross-ditched as needed to avoid erosion gullies and be revegetated. Idaho Code § 47-1509(a)(5), IDAPA § 20.03.02140.04.e. The Idaho Surface Mining Act and implementing regulations prohibit the release of the entire amount of a performance bond until final removal of equipment and structures related to the mining activity. IDAPA § 20.03.02120.09.c.

DRILL HOLES [*Proposed 43 CFR 3809.420(c)(2)*]

Drill holes are to be plugged or otherwise left so as not to pose a hazard to humans or animals. Idaho Code § 47-1509(a)(6), IDAPA § 20.03.02060.07.a. Wells must be filled as required to stop the upward or downward movement of water. Rules and Regulations, Well Construction Standards, Rule 3.12.1.

WASTE ROCK, TAILINGS AND LEACH PADS [*Proposed 43 CFR 3809.420(c)(5)*]

All waste piles and depressions must be reduced to the lowest practicable grade of natural stability for the waste. IDAPA § 20.03.02140.05.b. Wastes not used in backfilling must be transported and placed in a sloped, naturally stable area. IDAPA § 20.03.02140.06. These wastes must be compacted and should be covered and graded to allow surface drainage and ensure long-term stability. IDAPA § 20.03.02140.05.

A proposed reclamation plan must identify the location of all tailings ponds, pits, mineral stockpiles, and overburden piles. IDAPA § 20.03.02070.03. Tailings ponds must be reclaimed so that they will not pose a hazard to human or animal life. Idaho Code § 47-1509(a)(9). Wastes not used in backfilling must be transported and placed in a sloped, naturally stable area. IDAPA § 20.03.02140.06.a. These wastes must be compacted and should be covered and graded and allow surface drainage and ensure long-term stability. IDAPA § 20.03.02140.06.c. All surface water flows should be diverted and drained from the waste piles. IDAPA § 20.03.02140.06.b. A mine operator may use terraces to stabilize the face of any fill and must ensure the diversion and drainage away from the fill material of surface water. IDAPA § 20.03.02140.06.d, e. Revegetation must be conducted on the waste piles. IDAPA § 20.03.02140.06.f.

STABILITY, GRADING AND EROSION CONTROL [*Proposed 43 CFR 3809.420(c)(6)*]

All mining operations must take “all reasonable precautions to prevent the generation of fugitive dust.” IDAPA § 16.01.1251. Abandoned affected lands must be topped with topsoil or other growth medium “to achieve a general stable uniform thickness.” IDAPA § 20.03.02140.03.d. Operators must use mulch or annual grains on areas with severe slopes “to aid in the stabilization of soil and soil moisture conservation.” IDAPA § 20.03.02140.10.i. Backfill materials should be compacted to ensure stability. IDAPA § 20.03.02140.03.e.

A proposed reclamation plan must detail, on a drainage control map, the best management practices to be used to minimize erosion to affected lands. IDAPA § 20.03.02070.04.b. At reclamation, mine operators must level (1)

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ridges of overburden so that such ridges have a minimum width of 10 feet at the top, Idaho Code § 47-1509(a)(1), and (2) peaks of overburden so that such peaks have a minimum width of 15 feet at the top. Idaho Code § 47-1509(a)(2), IDAPA § 20.03.02140.03. Overburden piles “must be reasonably prepared to control erosion” using best management practices. Idaho Code § 47-1509(a)(3), IDAPA § 20.03.02140.03.c. Abandoned affected lands must be topped to the extent “that such overburden is reasonably available from the pit, with that type of overburden, which is conducive to control of erosion or the growth of vegetation.” Idaho Code § 47-1509(a)(7), IDAPA § 20.03.02140.03.d. All waste piles and depressions must be reduced to the lowest practicable grade of natural stability for the waste. IDAPA § 20.03.02140.05.b. A reclamation plan must include scaled cross-sections showing planned surface profiles before and after mining and reclamation. IDAPA § 20.03.02070.04.a.

FINANCIAL GUARANTEE [Proposed 43 CFR 3809.500 – 599]

Prior to conducting any surface mining operations an operator must submit a bond in an amount determined by the Board to be the estimated reasonable costs of reclamation. In lieu of any bond an operator may deposit cash and governmental securities with the Board. Idaho Code § 47-1512(a). The performance bond will not exceed \$2,500 per acre unless the Board determines that a greater amount is necessary and gives the operator notice of the determination and an opportunity for a hearing. Idaho Code § 47-1512(c). The State Board of Land Commissioners can request the State attorney general to institute proceedings to have the performance bond of an operator who fails to comply with an administrative order issued under the Surface Mining Act forfeited. Idaho Code § 47-1513(b), IDAPA § 20.03.02160.02. If a performance bond is forfeited, the State Board of Land Commissioners is authorized to reclaim the affected land. Idaho Code § 47-1505(a)(5). IDEQ also administers bonds to assure neutralization of waste, according to the rules governing ore processing by cyanidation.

INSPECTION [Proposed 43 CFR 3809.600]

Idaho’s regulatory agencies coordinate with the federal agencies and with each other to inspect all surface mining operations at reasonable times. Idaho Code § 47-1505(a)(4), IDAPA § 20.03.02160.01. IDEQ possesses similar inspection authorities to enforce Idaho’s air, water and solid waste program, Idaho Code § 39-108.2.b, including mining facilities which use cyanide to process ore. IDAPA § 16.01.13500.06.

ENFORCEMENT ORDERS [Proposed 43 CFR 3809.601]

The Surface Mining Act authorizes formal complaints against mine operators who fail to comply with the provisions of Surface Mining Act and corrective action orders to remedy such noncompliance. Idaho Code § 47-1513(a), IDAPA § 20.03.02.003.02. The Department of Lands can issue administrative orders for noncompliance, IDAPA § 20.03.02.003.04, and institute proceedings to have the operator’s performance bond forfeited. IDAPA § 20.03.02160.02. IDEQ possesses authority to enter into consent orders with recipients of notice of violations to remedy the damage caused by the violation of Idaho air, water or solid waste laws. Idaho Code § 39-108.3.a.

ENFORCEMENT -- PERMIT SUSPENSION OR REVOCATION [Proposed 43 CFR 3809.602]

The State Board of Land Commissioners is authorized to cancel an approved reclamation plan for violations of the Surface Mining Act if the alleged violator fails to respond to a formal complaint about the violation. Idaho Code § 47-1513(a). Permits for the use of cyanide at mining facilities can be revoked for material violations of the permit or governing regulations. IDAPA § 16.01.13850.01.

ENFORCEMENT -- SUITS FOR INJUNCTIONS AND/OR DAMAGES [Proposed 43 CFR 3809.604]

The Surface Mining Act authorizes injunctive relief against any operator conducting surface mining operations without posting a performance bond or any operator violating an approved reclamation plan when the performance bond will be inadequate to reclaim the land if forfeited. Idaho Code § 47-1513(d), (e), IDAPA § 20.03.02160.05.

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Injunctions also are authorized to enjoin violations of an approved plan if “immediate and irreparable injury, loss, or damage to the state may be expected to occur.” IDAPA § 20.03.02160.05. Injunctive relief may be sought to enjoin any violation of the provisions of the Surface Mining Act, or regulations or orders issued thereunder. Idaho Code § 47-1513(f). IDEQ can seek injunctions for violations of the Idaho Environmental Health Act. Idaho Code § § 39-108.8, 109. The Surface Mining Act authorizes suits for damages from an operator who violates the terms of a reclamation plan. Idaho Code § 47-1513(e). IDEQ can seek to recover any expenses incurred in enforcing Idaho Environmental Health Act or terminating any source of environmental degradation or health hazard against the alleged violator. Idaho Code § § 39-108.6, 109. Other suits for damages are governed by common law. The state may sue to recover natural resource damages under section 107(f) of the Comprehensive Environmental Response, Compensation and Liability Act. 42 U.S.C. § 9607(f).

CRIMINAL PENALTIES [Proposed 43 CFR 3809.700]

Criminal misdemeanor penalties of up to \$5,000 or one year imprisonment, or both, can be assessed for knowing and willful violations of the Surface Mining Act. Idaho Code § 47-1513(g), IDAPA § 20.03.02160.06.b. Willful or negligent violations of the provisions of the Idaho Environmental Health Act, or the terms of any notice, order, permit, standard, rule or regulation issued in accordance with any such law are misdemeanors punishable by fines up to \$10,000 for each separate violation or \$1,000 per day for continuing violations, whichever is greater. Persons who knowingly violate air quality permit provisions are guilty of misdemeanors punishable by a fine of not more than \$10,000 for each separate violation or for each day of a continuing violation. Some air quality violations are also punishable by fines up to \$250,000 per day or imprisonment up to 15 years. Such violations by an organization incur fines up to \$1,000,000. Idaho Code § 39-117.

CIVIL PENALTIES [Proposed 43 CFR 3809.702]

If an operator lacks a performance bond or acts in a manner not provided for in the approved reclamation plan, civil penalties in an amount determined by the Board to be the anticipated cost of reasonable reclamation may be assessed. Idaho Code § 47-1513(c), (d), IDAPA § 20.03.02160.04. Additionally, penalties up to \$2,500 per day of violation may be assessed for any violation of the Surface Mining Act or regulations, or orders issued thereunder. Idaho Code § 47-1513(f), IDAPA § 20.03.02160.06.a. Failure to comply with applicable well construction standards or allowing a well to cause waste or contamination of the State’s ground water are grounds for the imposition of civil penalties. Rules and Regulations, Well Construction Standards, Rule 8. IDEQ can assess, or seek through a civil enforcement action, civil penalties for violations of Idaho environmental laws, including the cyanidation rules and regulations. Civil penalties up to \$10,000 per violation or \$1,000 for each day of a continuing violation, whichever is greater, may be assessed. For air quality violations, \$10,000 for each separate violation and each day of continuing air violation may be assessed. Idaho Code § § 39-108.5, 109.

CITIZEN SUITS [No provision in proposed rule]

Citizen suits are not authorized by the Idaho Surface Mining Act or the Idaho Environmental Health Act. The federal Clean Water Act authorizes citizen suits against persons who violate provisions of the Clean Water Act or state administrative orders that implement that Act.

MONTANA

The Montana Department of Environmental Quality (DEQ) has primary responsibility for the regulation of mining operations and reclamation activities. DEQ administers the Montana Metal Mine Reclamation Act (MMRA), Mont. Code Ann. § § 82-4-301 - 362, Mont. Admin. R. 17.24.101-189. An operating permit is required for “mining, ore processing or reprocessing of tailings or waste material, [to] construct or operate a hard-rock mill,

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[to] use cyanide ore-processing reagents, or [to] disturb land in anticipation of those activities.”² Mont. Code Ann. § 82-4-335(1). An operating permit cannot be issued without an approved reclamation plan, Mont. Code Ann. § 82-4-335(4), which will include substantive reclamation standards an operator must meet at the time of reclamation. DEQ considers wetland identification to be part of the required baseline information necessary to develop an adequate reclamation plan. Reclamation must occur as specified in the approved reclamation plan unless written approval of a change of plan is received from the DEQ. Mont. Code Ann. § 82-4-336(2). The MMRA requires reclamation activities to be conducted simultaneously with operations and must be completed within a specified reasonable length of time. Mont. Code Ann. § 82-4-336(1), Mont. Admin. R. 17.24.115(18). An applicant for an operating permit must provide a performance bond in an amount set by DEQ.³ Mont. Code Ann. § 82-4-338. Mining operations also must comply with the Montana Water Quality Act, Mont. Code Ann. § 75-5-101 - 641, and the Clean Air Act of Montana, Mont. Code Ann. § 75-2-101 - 429, also administered by the DEQ.

AIR QUALITY [Proposed 43 CFR 3809.420(b)(1)]

The Clean Air Act of Montana, Mont. Code Ann. § 75-2-101 - 429, and implementing regulations, Mont. Admin. R. 17.8, apply to mining operations. An air quality permit must be obtained from DEQ if emissions of any air pollutant (other than lead) from a new mine property, including fugitive dust, exceeds 25 tons per year. All mine operators must use “reasonable precautions” to control fugitive dust emissions. Mont. Admin. R. 17.8.308. MMRA regulations require mine operators to use “proper precautions” to assure that “exposed cuts and tailings or spoil disposal areas will not be subject to wind erosion to the extent that air-borne detritus becomes a public nuisance or detriment to the flora and fauna of the area.” Mont. Admin. R. 17.24.115(13). Air quality requirements are part of Montana’s State Implementation Plan (SIP) required by the federal Clean Air Act and Montana’s implementation of the permit requirements of Title V of the Clean Air Amendments of 1990. 42 U.S.C. § 7410 (State Implementation Plans); 42 U.S.C. § 7661 (Title V Operating Permit Requirements).

WATER [Proposed 43 CFR 3809.420(b)(2)]

An applicant for an operating permit must provide ground and surface water hydrologic data characterizing the hydrologic regime of the area. Mont. Code Ann. § 82-4-335(4)(k). Operators of mills must describe the methods by which surface and ground water will be restored or maintained to meet state water quality standards. Mont. Admin. R. 17.24.169(1)(d). The Montana Water Quality Act is applicable to both surface and ground water and requires mine operators to comply with the Act’s nondegradation policy, and requires that discharges to state waters comply with standards and appropriate permit conditions. Mont. Code Ann. § 75-5-303. The MMRA requires that all discharges from abandoned open pits greater than two acres in size must be consistent with the requirements of the Montana Water Quality Act, with such effluents meeting water quality standards. Mont. Admin. R. 17.24.151. Montana’s Water Quality Act requires that discharges to state waters must comply with standards and appropriate permit conditions.

SURFACE WATER [Proposed 43 CFR 3809.420(b)(2)(i)]

Mine operators must obtain a Montana Pollutant Discharge Elimination System (MPDES) permit from DEQ for all discharges into surface waters from point sources. Mont. Code Ann. § 75-5-401, Mont. Admin. R. 17.30.1201. DEQ may impose monitoring requirements in an MPDES permit. Mont. Code Ann. § 75-5-602. MPDES permit

² Small miners who qualify for a small miner exclusion in the MMRA must obtain an operating permit for that portion of any operation where a cyanide ore processing reagent will be used or disposed. Mont. Code Ann. § 82-4-305(7), Mont. Admin. R. 17.24.185.

³ The MMRA also requires an applicant for an operating permit to certify that the applicant is not in violation of any Montana or federal environmental or mining law. Mont. Code Ann. § 82-4-335(9).

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holders must comply with the State's nondegradation policy and surface water quality standards. Mont. Code Ann. § 75-5-303, Mont. Admin. R. 17.30.601.

GROUND WATER [Proposed 43 CFR 3809.420(B)(2)(ii)]

Discharges to ground water are regulated by provisions contained in operating permits issued under the MMRA. Mine operators must comply with the State's nondegradation policy and ground water quality standards. Mont. Code Ann. § 75-5-303, Mont. Admin. R. 17.30.1011, 1503. DEQ may require ground water monitoring information, if the mine operation causes or is likely to cause violations of ground water quality standards. Mont. Admin. R. 17.30.1022. Reclamation plans must provide for permanent landscaping and contouring to "minimize" the amount of precipitation infiltrating into disturbed areas, including "tailings impoundments and waste rock dumps" and "measures to prevent objectionable post-mining groundwater discharges." Mont. Code Ann. § 82-4-336(10). The MMRA requires that all discharges from abandoned open pits greater than two acres in size must be consistent with the requirements of the Montana Water Quality Act, with such effluents meeting water quality standards. Mont. Admin. R. 17.24.151.

ACID MINE DRAINAGE [Proposed 43 CFR 3809.420(b)(2)(i)(B) and (ii)(B)]

In order to prevent acid drainage or sedimentation, a reclamation plan must provide for earth dams or other devices to control water drainage. Mont. Admin. R. 17.24.115(4). DEQ requires permittees to submit information adequate to determine the potential for acid generation. Acid rock drainage must be controlled in a manner that assures non-degradation of surface and ground waters. When mining activities will leave an open pit exceeding two acres of surface area and the composition of the floor or walls of the pit are likely to cause formation of acid, toxic, or otherwise pollutive solutions on exposure to moisture, the reclamation plan must include adequate control measures to prevent or mitigate acid generation and migration. Mont. Code Ann. § 82-4-336(5), Mont. Admin. R. 17.24.151. The reclamation plan must provide measures to prevent objectionable post-mining groundwater discharges. Mont. Code Ann. § 82-4-336(1). Where operations result in the need to prevent acid drainage or sedimentation, on or in adjoining lands or streams, reclamation plans must include reasonable devices to control water drainage. Mont. Admin. Code § 17.24.115(4). Montana control efforts include capping and redirecting drainage to ensure that post-mining geochemical rates of change are minimized. Water treatment is considered as a contingency plan, to be bonded if site conditions warrant, and then to be implemented if necessary. Monitoring is required to document that water quality standards are met, to document geochemical changes, and to document that any special handling (of materials) requirements have been met. Monitoring is tailored to site-specific conditions.

WETLANDS AND RIPARIAN AREAS [Proposed 43 CFR 3809.420(b)(3)]

Any placement of soils or other fill materials in "waters of the United States," including dry washes, isolated waters and wetlands, must be permitted by the U.S. Corps of Engineers pursuant to Section 404 of the Clean Water Act. 33 U.S.C. § 1344. In reviewing the permit application, the Corps applies guidelines for disposal of fill materials promulgated by the Environmental Protection Agency. 40 C.F.R. pt. 230. The guidelines require that the Corps look at alternatives to the proposed fill activity before approving the permit application. Before the permit can be issued, Montana must issue a document certifying that the permit limitations will be consistent with state water quality standards. 33 U.S.C. § 1341.

DEQ considers wetland identification (including function and values) to be a part of the required baseline information necessary to develop an adequate reclamation plan. DEQ defers to the Corps of Engineers for reclamation standards. The MMRA regulations require that, after reclamation, water be diverted or treated to control siltation, erosion, and other water pollution. Mont. Admin. R. 17.24.115(7). Reclamation plans also must provide for surface water diversions to prevent water pollution and unnecessary erosion. Mont. Admin. R. 17.24.115(15).

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SOIL AND GROWTH MATERIAL [Proposed 43 CFR 3809.420(b)(4)]

To be approved, a reclamation plan must provide for the stockpiling and reuse of soils from all disturbed areas, where practicable. Mont. Admin. R. 17.24.115(2). DEQ reclamation plan guidelines recommend that an applicant for an operating permit submit the following information for both subsoil and topsoil: (1) replacement volumes; (2) average replacement depths; (3) soil amendments (e.g., fertilizer, lime, mulch); (4) scarification prior to topsoil replacement; (5) grading techniques/compaction; and (6) special handling techniques.

REVEGETATION [Proposed 43 CFR 3809.420(b)(5)]

Reclamation plans must provide for vegetative cover appropriate to the post-mining use of the affected land. Mont. Code Ann. § 82-4-336(6). Revegetation must begin as quickly as possible in a manner consistent with accepted agricultural and reforestation practices. All fill and cut slopes must be revegetated, along with all drill sites and spoils from discovery pits or other excavations and the exploration road. Mont. Admin. R. 17.24.107, 17.24.104. If revegetation is unsuccessful, the operators must make a second attempt consistent with the advice of the Board of Environmental Review. Mont. Admin. R. 17.24.115(3). Revegetation must be accomplished in the first appropriate season after necessary grading in accordance with accepted agricultural or reforestation practices. Mont. Admin. R. 17.24.115(18).

FISH AND WILDLIFE [Proposed 43 CFR 3809.420(b)(6)]

An applicant for an operating permit must provide data on wildlife in the area to be disturbed relevant to the proposed post-mining land use. Mont. Admin. R. 17.24.115(1)(c).

ROADS AND STRUCTURES [Proposed 43 CFR 3809.420(c)(1)]

Roads must be located, constructed, and maintained to control and minimize channeling and other erosion. Mont. Admin. R. 17.24.115(8). Operators of permitted mills, which includes “any facility for ore, tailings, or waste rock processing and disposal,” Mont. Admin. R. 17.24.165(6), must remove facilities. Mont. Admin. R. 17.24.165(8), 17.24.169(1)(f). Facility is defined as “any building, impoundment, embankment, waste or tailings disposal site, or other man-made structure associated with a particular activity.” Mont. Admin. R. 17.24.165(5).

DRILL HOLES [Proposed 43 CFR 3809.420(c)(2)]

The first 25 feet of all adits must be backfilled. Shafts must be backfilled. Mont. Admin. R. 17.24.107(6). All exploration drill holes must be plugged at the surface. Mont. Admin. R. 17.24.106.

WASTE ROCK, TAILINGS AND LEACH PADS [Proposed 43 CFR 3809.420(c)(5)]

Reclamation plans must provide for permanent landscaping and contouring to minimize the amount of precipitation that infiltrates into disturbed areas, including tailings impoundments and waste rock dumps. Mont. Code Ann. § 82-4-336(10). Operators must detail in reclamation plans the method of disposing of mining debris, including mill tailings, and the location and size of such disposal areas. Mont. Admin. R. 17.24.115(14). Operators of permitted mills, which includes “any facility for ore, tailings, or waste rock processing and disposal,” Mont. Admin. R. 17.24.165(6), must remove facilities. Mont. Admin. R. 17.24.165(8), 17.24.169(1)(f). Facility is defined as “any building, impoundment, embankment, waste or tailings disposal site, or other man-made structure associated with a particular activity.” Mont. Admin. R. 17.24.165(5). DEQ regulations require

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“leaching pads, tailing ponds, or water, waste, or product holding facilities [to] be constructed, operated, and maintained” so as to prevent pollution discharge, seepage, drainage, or infiltration. Mont. Admin. R. 17.30.637(4).

STABILITY, GRADING AND EROSION CONTROL [Proposed 43 CFR 3809.420(c)(6)]

DEQ regulations implementing the Clean Air Act of Montana require mine operators to use “reasonable precautions” to control fugitive dust emissions. Mont. Admin. R. 17.8.308. MMRA regulations require mine operators to use “proper precautions” to assure that “exposed cuts and tailings or spoil disposal areas will not be subject to wind erosion to the extent that air-borne detritus becomes a public nuisance or detriment to the flora and fauna of the area.” Mont. Admin. R. 17.24.115(13). The MMRA requires reclamation of all disturbed land to “comparable utility and stability as that of adjacent areas, except for open pits and rock faces which may not be feasible to reclaim in the same fashion as other disturbed land.” Mont. Code Ann. § 82-4-336(7). Reclamation plans must demonstrate that upon partial or complete saturation graded fill, tailings, or spoil slopes will be stable, and grading must provide for adequately designed contour trenches, benches, and rock-lined channelways on disturbed areas. Mont. Admin. R. 17.24.115(2). Reclamation plan guidelines require a monitoring program to establish post-reclamation soils and geologic stability with respect to wind erosion, soil loss, and subsidence.

A reclamation plan must provide for permanent landscaping and contouring to “minimize” the amount of precipitation infiltrating into disturbed areas, including “tailings impoundments and waste rock dumps.” Mont. Code Ann. § 82-4-336(10). Operators of mills must grade the slopes of materials potentially acid or toxic-forming to prevent future erosion of such materials offsite. Mont. Admin. R. 17.24.169(1)(b). Final grading must be performed with non-noxious, nonflammable, noncombustible solids unless approval has been granted for a supervised sanitary fill. Mont. Code Ann. § 82-4-336(4), Mont. Admin. R. 17.24.115(12). Exploration activities must be reclaimed in a manner consistent with the provisions of the MMRA and implementing regulations. Mont. Code Ann. § 82-4-332, Mont. Admin. R. 17.24.103. All drill sites and spoils from discovery pits or other excavations and the exploration road must be revegetated. Mont. Admin. R. 17.24.107(4).

PIT RECLAMATION [Proposed 43 CFR 3809.420(c)(7)]

Where mining has left an open pit exceeding two acres of surface area and the composition of the floor or walls of the pit are likely to cause the formation of acid, toxic, or otherwise pollutive solutions on exposure to moisture, the reclamation plan must provide for (1) the insulation of all faces from moisture or water contact by covering to a depth of two feet or more with material or fill not susceptible to generation of such objectionable effluents; and (2) the processing or evaporation in the pit or drainage to settling or treatment basins of such objectionable effluents to safe levels before release. Mont. Code Ann. § 82-4-336(5). In the case of open pits and rock faces, the reclamation plan must provide for reclamation to a condition of stability structurally competent to withstand geologic and climatic conditions without significant failure that would be a threat to public safety and the environment. Mont. Code Ann. § 82-4-336(7). The MMRA requires reclamation of all disturbed land to “comparable utility and stability as that of adjacent areas, except for open pits and rock faces which may not be feasible to reclaim in the same fashion as other disturbed land.” Mont. Code Ann. § 82-4-336(7).

SOLID WASTE [Proposed 43 CFR 3809.420(c)(8)]

Mine operators must comply with solid waste disposal requirements “in a manner that will prevent water pollution or deleterious effects upon revegetation efforts.” Mont. Admin. R. 17.24.115(6).

FINANCIAL GUARANTEE [Proposed 43 CFR 3809.500 – 599]

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Permit applicants must file a performance bond in an amount determined by DEQ of not less than \$200 or more than \$2,500 for each acre of disturbed land. In lieu of a bond, applicants may file a cash deposit, an assignment of a certificate of deposit, or other surety acceptable to DEQ. Regardless of the per-acre limitations, the bond may not be less than the estimated cost to the state to implement the closure plan. Mont. Code Ann. § 82-4-338(1), Mont. Admin. R. 17.24.140. DEQ must review the amount of each bond at least every five years and modify the bond requirement if it determines that the bond level should be adjusted. Mont. Code Ann. § 82-4-338(2), Mont. Admin. R. 17.24.141. A bond cannot be released until the permit provisions have been fulfilled. Mont. Code Ann. § 82-4-338(3). If an operator fails to comply with the terms of a notice of noncompliance or an order suspending the operating permit within the time limits set forth in the notice or order, the performance bond can be forfeited. Mont. Code Ann. § 82-4-9362(2).

INSPECTION [Proposed 43 CFR 3809.600]

DEQ must inspect a proposed mine site before issuing an operating permit. Mont. Code Ann. § 82-4-337(1)(d). Once permitted, DEQ must inspect mining operations at least annually and at least once per quarter for each active operation that uses cyanide, or that must be monitored for acid rock drainage, or exceeds 1,000 acres of permitted area. Mont. Code Ann. § 82-4-341(1), Mont. Admin. R. 17.24.128. Inspections may result from a citizen complaint. Mont. Admin. R. 17.24.129. DEQ is authorized to conduct compliance inspections at “any reasonable time” under the Montana Water Quality Act. Mont. Code Ann. § 75-5-603, and the Montana Clean Air Act. Mont. Code Ann. § 75-2-403.

ENFORCEMENT ORDERS [Proposed 43 CFR 3809.601]

DEQ can issue notices of noncompliance and orders suspending operating permits. These notices of noncompliance and orders must specify in what respects the operator has failed to comply with the MMRA and must order abatement within a specified time period. Mont. Code Ann. § 82-4-362(1), Mont. Admin. R. 17.24.132, 133, 136. DEQ also can issue noncompliance notices and orders under the Montana Water Quality Act. Mont. Code Ann. § 75-5-611, 613, and the Montana Clean Air Act. Mont. Code Ann. § 75-2-401. An order issued as part of a notice or after a hearing may prescribe the date by which the violation must cease, time limits for ordered corrective actions to be taken, or dates by which penalties must be paid.

ENFORCEMENT -- PERMIT SUSPENSION OR REVOCATION [Proposed 43 CFR 3809.602]

DEQ may issue an order suspending an operating permit for violations of the MMRA, MMRA implementing regulations, or permit provisions. Mont. Code Ann. § 82-4-362(1), Mont. Admin. R. 17.24.133. If the operator fails to comply with the terms of the suspension order, the operating permit can be revoked. Mont. Code Ann. § 82-4-362(2). DEQ also can suspend or revoke any permit issued under the Montana Water Quality Act, Mont. Code Ann. § 75-5-401, 613, and the Montana Clean Air Act. Mont. Code Ann. § 75-2-401.

ENFORCEMENT -- SUITS FOR INJUNCTIONS AND/OR DAMAGES [Proposed 43 CFR 3809.604]

DEQ can seek a restraining order or a temporary or permanent injunction for violating or threatening to violate an order issued under the MMRA. Mont. Code Ann. § 82-4-361(2). DEQ can seek to enjoin activities violating the Montana Water Quality Act, Mont. Code Ann. § 75-5-614, and the Montana Clean Air Act. Mont. Code Ann. § 75-2-412(4). A property owner who uses ground water may bring an action for damages against a mining operation that diminishes the quality or quantity of the water supply, after pursuing administrative remedies with the DEQ. Mont. Code Ann. § 82-4-355. Other suits for damages are governed by common law. The state may sue to recover natural resource damages under section 107(f) of the Comprehensive Environmental Response, Compensation and Liability Act. 42 U.S.C. § 9697(f).

CRIMINAL PENALTIES [Proposed 43 CFR 3809.700]

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The MMRA does not authorize criminal penalties. Criminal penalties of fines up to \$25,000 per day of violation or up to one year in prison are authorized under the Montana Water Quality Act. Second offenses subject a person to fines up to \$50,000 per day of violation or up to two years in prison. Mont. Code Ann. § 75-5-632. The Montana Clean Air Act, Mont. Code Ann. § 75-2-412(1) authorizes criminal penalties for violations of the Act, including fines up to \$10,000 per violation or imprisonment for up to two years, or both.

CIVIL PENALTIES [Proposed 43 CFR 3809.702]

Civil penalties of up to \$1,000 per day per violation can be assessed for violations of the MMRA, MMRA implementing regulations, or operating permits. Mont. Code Ann. § 82-4-361(1). If a violation creates an imminent danger to the health or safety of the public or causes significant environmental harm, the maximum penalty is \$5,000 for each day of violation. Mont. Code Ann. § 82-4-361(1)(b). DEQ can seek civil penalties of up to \$25,000 per day under the Montana Water Quality Act, Mont. Code Ann. § 75-5-631, and \$10,000 per day (\$80,000 maximum) under the Montana Clean Air Act. Mont. Code Ann. § 75-2-413.

CITIZEN SUITS [No provision in proposed rule]

The MMRA authorizes citizen suits for an action of mandamus by “any person having an interest that is or may be adversely affected” against the state for failure to enforce the MMRA, after notification of the state of such failure. Mont. Code Ann. § 82-4-354. The MMRA also authorizes citizen suits to compel performance directly against a violator if the DEQ fails to act. Mont. Code Ann. § 82-4-354(3). The federal Clean Water Act authorizes citizen suits against persons who violate provisions of the Clean Water Act or state administrative orders that implement that Act.

NEVADA

The Division of Environmental Protection (DEP) in the Nevada Department of Conservation and Natural Resources regulates mining operations, including reclamation. DEP administers the following major statutory authorities which apply to mining:

The Nevada Reclamation Law, Nev. Rev. Stat. Ch. 519A, Nev. Admin. Code ch. 519A

The Water Pollution Control Law, Nev. Rev. Stat. §§ 445.131-354, Nev. Admin. Code §§ 445.070-174, 242-24388

Solid and hazardous waste management laws, Nev. Rev. Stat. §§ 444.440 -.465, Nev. Admin. Code §§ 444.570 -.7499 (statute and regulations governing solid waste disposal), Nev. Rev. Stat. §§ 459.400 -.600, Nev. Admin. Code §§ 444.850 -.8746 (statute and regulations governing hazardous waste management)

The Air Pollution Control Law, Nev. Rev. Stat. §§ 445.401-710, Nev. Admin. Code §§ 445.430.

Nevada’s Reclamation Law requires mining operators to obtain an operating permit before conducting a mineral exploration project, Nev. Rev. Stat. § 519A.180, or a mining operation. Nev. Rev. Stat. § 519A.200. An operating permit cannot be issued without an approved reclamation plan. Nev. Rev. Stat. § 519A.190, Nev. Admin. Code § 519A.125 (exploration), Nev. Rev. Stat. § 519A.210, Nev. Admin. Code § 519A.140 (mining). In addition, a permit will not become effective until a surety is filed with DEP or the federal land manager in an amount sufficient to ensure reclamation of the entire site. Nev. Rev. Stat. § § 519A.190.5, 210.5, Nev. Admin. Code §§ 519A.350, 360. In order to obtain a permit under the Nevada Reclamation Law, an operator must agree in writing to be responsible for the reclamation of any land damaged as a result of the exploration or mining operation. Nev. Rev. Stat. §§ 519A.190.3, 519A.210.3. The reclamation activities must be “economically and technologically

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practicable in achieving a safe and stable condition” suitable for the selected productive post-mining use of the land. Nev. Rev. Stat. § 519A.230.4

AIR QUALITY [Proposed 43 CFR 3809.420(b)(1)]

Mine operators must comply with the Nevada Air Pollution Control Law, Nev. Rev. Stat. §§ 445.401-710, and implementing regulations. Nev. Admin. Code §§ 445B.001 - .395. An operating permit must be obtained if emissions are expected and throughout exceeds 50lbs/hour. Nev. Admin. Code §§ 445B.287, .303. Fugitive dust at mine sites must be controlled. Nev. Admin. Code § 445B.365. Ambient air quality standards must be met at the site boundary. Air quality requirements are part of Nevada’s State Implementation Plan (SIP) required by the federal Clean Air Act, and Nevada’s implementation of the permit requirements of Title V of the Clean Air Amendments of 1990. 42 U.S.C. § 7410 (State Implementation Plans); 42 U.S.C. § 7661 (Title V Operating Permit Requirements).

WATER [Proposed 43 CFR 3809.420(b)(2)]

All mines with the potential to degrade waters of the State must be permitted. Nev. Admin. Code § 445A.424. An application for a Nevada mining facility permit must include hydrogeological and lithological information that describes the subsurface of the site. Nev. Admin. Code § 445A.395. In addition, an applicant must submit a fluid management plan, a monitoring plan, and a draft closure plan. Nev. Admin. Code §§ 445A.397, .398. Mine facilities must be designed to protect surface and ground waters from degradation below state and federal water quality standards. Nev. Admin. Code §§ 445A.424. Mine operators may be required to reclaim (1) roads and drill pads by restoring or stabilizing drainage areas or streambeds, (2) solution ponds, settling ponds, and other nontailings impoundments by restoring the surface water regime existing before the disturbance, and (3) open pit mines by creating a lake for recreation, wildlife or other uses. Nev. Admin. Code § 519A.345.

SURFACE WATER [Proposed 43 CFR 3809.420(b)(2)(i)]

Mine operators must obtain a National Pollutant Discharge Elimination System (NPDES) permit from DEP for point source discharges to surface water. Nev. Admin. Code § 445A.228. Additionally, Nevada has promulgated separate and additional permitting requirements for mines with the potential to degrade surface or ground water. Nev. Admin. Code §§ 445A.350 - .447. Mine facilities cannot cause the degradation of surface water below state water quality standards. Nev. Admin. Code § 445A.424. Additionally, “process components” typically must meet a “zero-discharge” design standard, and any component containing process fluids must be designed with liners or other engineered containment features. Nev. Admin. Code §§ 445A.385, .432 - .439. Water pollution control permits require the monitoring of surface and ground water “which may be affected by the facility.” Nev. Admin. Code § 445A.440. At closure, a mine operator must demonstrate that the facility no longer has any potential to degrade surface or ground water. Nev. Admin. Code §§ 445A.430, .431, .446. Monitoring of surface and ground water quality must continue after closure of the facility. Nev. Admin. Code § 445A.446.

GROUND WATER [Proposed 43 CFR 3809.420(B)(2)(ii)]

Nevada has promulgated permitting requirements for mines with the potential to degrade surface or ground water. Nev. Admin. Code §§ 445A.350 - .447. Mine facilities cannot cause the degradation of ground water below federal and state drinking water quality standards. Nev. Admin. Code § 445A.424. Additionally, “process components” typically must meet a “zero-discharge” design standard, and any component containing process fluids must be designed with liners or other engineered containment features. Nev. Admin. Code §§ 445A.385, .432 - .439. Water pollution control permits require the monitoring of ground water “which may be affected by the facility.” Nev. Admin. Code § 445A.440. At closure, a mine operator must demonstrate that the facility no longer has any potential to degrade ground water. Nev. Admin. Code §§ 445A.430, .431, .446. Monitoring of ground water quality must continue after closure of the facility. Nev. Admin. Code § 445A.446.

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ACID MINE DRAINAGE [Proposed 43 CFR 3809.420(b)(2)(i)(B) and (ii)(B)]

Nevada's water quality permitting requirements – which are designed to prevent degradation of waters of the State – provide the authority to impose controls on acid generation. Nev. Admin. Code §§ 445A.350 - .447. DEP requires operators to develop and carry out a sampling program before and during mine operations to identify the potential for acid generation. Waste Rock and Overburden Evaluation Policy, Bureau of Mining Regulation and Reclamation, Nevada DEP (September 14, 1990). The program must be “representative,” taking into account lithological, mineralogical and color variation, extent of sulfides and oxidation and other factors. *Id.* Operators must use static and kinetic testing methods to assess acid generation potential. *Id.* at page 2. If acid generation potential is identified, whether before operations begin or during operations, the operator must develop neutralization and containment methods and propose them to DEP for approval. *Id.* At least two years before closure of a process component is contemplated, the operator must update its closure plans in a “Final Permanent Closure Plan.” Preparation Requirements and Guidelines, Permanent Closure Plans and Final Closure Reports, Bureau of Mining Regulation and Reclamation (September 1, 1994). The Closure plan must address how waste rock, mine pits, and other features will be stabilized to prevent degradation of waters of the State. *Id.* at page 8. When closure is complete, the operator must submit a “Final Closure Report” which demonstrates that waste rock, pits and other features have been stabilized and do not have the potential to degrade waters of the State. *Id.* at page 9.

WETLANDS AND RIPARIAN AREAS [Proposed 43 CFR 3809.420(b)(3)]

Any placement of soils or other fill materials in “waters of the United States,” including dry washes, isolated waters and wetlands, must be permitted by the U.S. Corps of Engineers pursuant to Section 404 of the Clean Water Act. 33 U.S.C. § 1344. In reviewing the permit application, the Corps applies guidelines for disposal of fill materials promulgated by the Environmental Protection Agency. 40 C.F.R. pt. 230. The guidelines require that the Corps look at alternatives to the proposed fill activity before approving the permit application. Before the permit can be issued, Nevada must issue a document certifying that the permit limitations will be consistent with state water quality standards. 33 U.S.C. § 1341.

A reclamation plan must detail the “methods of drainage that will be used during the mining operation and reclamation,” Nev. Rev. Stat. § 519A.220.1(g), and “measures to be taken to minimize loading of sediments to surface water during the operation and reclamation.” Nev. Admin. Code § 519A.270.12.

SOIL AND GROWTH MATERIAL [Proposed 43 CFR 3809.420(b)(4)]

Reclamation plans must include a plan for the “management of topsoil and growth medium.” Nev. Admin. Code § 519A.270.13(a). Topsoil is defined as “the material at or near the surface of the earth which has been modified and acted upon by natural, physical, chemical or biological agents in a manner which will allow it to support vegetation.” Nev. Admin. Code § 519A.095. If practicable and necessary for the establishment of the post-mining land use, sufficient topsoil, if available, must be removed from the affected land before disturbing and stockpiled for use in reclamation. The stockpile must be stabilized to prevent excessive losses from wind and water erosion. If topsoil is unavailable, any growth medium to be used at reclamation that requires removal and stockpiling must be managed in the same manner as topsoil. Nev. Admin. Code § 519A.325.1.

REVEGETATION [Proposed 43 CFR 3809.420(b)(5)]

Reclamation plans must include a revegetation strategy for disturbed lands. Nev. Rev. Stat. §§ 519A.201.(h), 230.1(b), Nev. Admin. Code § 519A.270.13. A mine operator must establish plant species which will result in vegetation productivity comparable to that existing before the mining operation began. Nev. Admin. Code § 519A.330. DEP may require revegetation for roads and drill pads, waste piles, tailings dams and ponds, and heap leach pads. Nev. Admin. Code § 519A.345.

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FISH AND WILDLIFE [Proposed 43 CFR 3809.420(b)(6)]

A mine operator “which develops or maintains an artificial body of water containing chemicals directly associated with the processing of ore” must obtain a permit from the Nevada Department of Wildlife. Nev. Rev. Stat. § 502.390. The permit will specify measures and operating standards that protect wildlife. Nev. Admin. Code § 502.480. Any wildlife mortality must be reported to the Department of Wildlife. Nev. Admin. Code § 502.485. Upon closure, impoundments must be neutralized, or fenced and covered.

ROADS AND STRUCTURES [Proposed 43 CFR 3809.420(c)(1)]

A reclamation plan must outline the proposed disposition of buildings and equipment, Nev. Admin. Code § 519A.270.14, or describe any surface facilities, including roads and buildings, not to be reclaimed. Nev. Admin. Code § 519A.270.15. DEP may require a mine operator to reclaim buildings, foundations, facilities, structures and other equipment by (1) demolishing to the level of the foundation and burying the demolished items on the site or disposed off-site, (2) salvaging and sale, or (3) continuing to use in a manner consistent with the post-mining land use. Nev. Admin. Code § 519A.345.8. DEP may require revegetation and reclaiming of roads by ripping or scarifying the surface, constructing water bars, or restoring drainage areas or streambeds. Nev. Admin. Code § 519A.345.

DRILL HOLES [Proposed 43 CFR 3809.420(c)(2)]

Well drillers must take “every reasonable precaution” to prevent contamination of an aquifer. Nev. Admin. Code § 534.370. DEP may require revegetation for drill pads or reclaiming by ripping or scarifying the surface, constructing water bars, or restoring drainage areas or streambeds. Nev. Admin. Code § 519A.345. Upon abandonment, wells, including those drilled during a mining operation or exploration, must be backfilled or plugged if the well does not reach ground water, or plugged and cement grouted. Nev. Admin. Code § 534.421. All wells must be plugged as soon as possible. Nev. Admin. Code § 534.425. In addition, for purposes of determining the amount of the surety required by the Nevada Reclamation Law, mine operators must notify DEP of the “average number of drill holes to be left open at any one time during the life of the project.” Nev. Admin. Code § 519A.140.2(g). Reclamation must be accomplished in a way that “ensure[s] public safety,” including the sealing or securing of shafts, tunnels and adits and the plugging of drill holes. Nev. Admin. Code § 519A.315 (see also Nev. Admin. Code § 513.390 for acceptable methods of securing mine shafts and openings).

WASTE ROCK, TAILINGS AND LEACH PADS [Proposed 43 CFR 3809.420(c)(5)]

DEP may require a mine operator to regrade waste rock piles to reduce erosion and enhance stability and divert surface water runoff to reduce erosion; regrade tailings impoundments and heap leach pads to promote surface water runoff and reduce surface water infiltration and runoff; and to revegetate waste piles, tailings dams and ponds, and heap leach pads. Nev. Admin. Code § 519A.345.

STABILITY, GRADING AND EROSION CONTROL [Proposed 43 CFR 3809.420(c)(6)]

Under the Nevada Air Pollution Control Act, fugitive dust must be controlled during mining operations and reclamation activities. Nev. Admin. Code § 445B.365. DEP may require a mine operator to grade waste rock piles to reduce erosion and enhance stability. Nev. Admin. Code § 519A.345. A reclamation plan must include information on the post-mining topography, including detailing “the treatment of slopes” and “technical criteria used to determine the final gradient and stability of slopes” created or affected by the mining operation. Nev. Rev. Stat. § 519A.220.1(d), Nev. Admin. Code § 519A.270.7, .8. At abandonment, reclaimed sites must be in a “safe and stable condition suitable for the productive post-mining use of the land” including slopes in a structurally stable condition. MLRA regulations define “stable condition” as “resistant to excessive erosion” and “structurally competent to withstand normal geologic and climatic conditions without significant failure that would be a threat

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to public safety and the environment.” Nev. Admin. Code § 519A.315. DEP may require a mine operator to restore or stabilize drainage beds. Nev. Admin. Code § 519A.345.

Reclaimed land must be “resistant to excessive erosion,” Nev. Admin. Code § 519A.315, and land subject to excessive erosion will not be considered to be reclaimed. Nev. Admin. Code § 519A.275.4. DEP may require a mine operator to (1) reclaim roads and drill pads by ripping or scarifying the surface, constructing water bars, or restoring drainage areas or streambeds, (2) regrade waste rock piles and divert surface water runoff to reduce erosion, (3) regrade tailings impoundments and heap leach pads to promote surface water runoff and reduce surface water infiltration and runoff, and (4) approximate the form of the land before disturbance. Nev. Admin. Code § 519A.345.

PIT RECLAMATION [Proposed 43 CFR 3809.420(c)(7)]

Mine operators may be required to reclaim open pit mines by creating a lake for recreation, wildlife or other uses. Nev. Admin. Code § 519A.345.

FINANCIAL GUARANTEE [Proposed 43 CFR 3809.500 – 599]

The MLRA requires that surety be provided in an amount sufficient to ensure reclamation of the entire area to be affected by the mine project. Nev. Admin. Code § 519A.350, .360. The amount of the surety must be at least the cost of the reclamation if conducted by the state and/or federal agency with jurisdiction over the land. Nev. Admin. Code § 519A.360.2. The MLRA authorizes the forfeiture of surety if a mining operation has been completed, abandoned, or temporarily closed for a period greater than that allowed by the permit without initiating reclamation. The surety also may be forfeited if the reclamation permit is suspended or revoked. Nev. Admin. Code § 519A.390. The surety may be released when all of the requirements of the reclamation have been fulfilled, except that the State must release a portion of the surety covering the reclamation of a discrete part of the disturbance or a discrete reclamation activity when that portion is completed. Nev. Admin. Code § 519A.385.

INSPECTION [Proposed 43 CFR 3809.600]

MLRA regulations provide for DEP inspection of mining operations, Nev. Admin. Code § 519A.395, and a site must be inspected before releasing a posted surety. Nev. Admin. Code § 519A.385.4. DEP also has inspection authority under the Water Pollution Control Law, Nev. Rev. Stat. § 445.304, and the Air Pollution Control Law. Nev. Rev. Stat. 445.581.

ENFORCEMENT ORDERS [Proposed 43 CFR 3809.601]

DEP can issue notices of noncompliance pursuant to the MLRA. Nev. Admin. Code § 519A.400. DEP also can issue compliance orders for violations of the Water Pollution Control Law, Nev. Rev. Stat. § 445A.690, or the Air Pollution Control Act. Nev. Rev. Stat. § 445B.450. DEP also can issue orders to require assessment of spills and releases of hazardous substances, pollutants and contaminants, and corrective action. Nev. Rev. Stat. §§ 459.748 - .780; Nev. Admin. Code § 445A.226 - .22755.

ENFORCEMENT -- PERMIT SUSPENSION OR REVOCATION [Proposed 43 CFR 3809.602]

DEP can suspend or revoke a reclamation permit for noncompliance with the MLRA, implementing regulations, or an approved reclamation plan. Nev. Admin. Code § 519A.220. DEP can modify, revoke or suspend permits issued under the Water Pollution Control Law for violations of permit terms and for obtaining a permit by misrepresentation. Nev. Rev. Stat. § 445A.600, Nev. Admin. Code § 445A.387.3. The Air Pollution Control Law also provides for revocation. Nev. Rev. Stat. § 445B.300.2; Nev. Admin. Code § 445B.325.

ENFORCEMENT -- SUITS FOR INJUNCTIONS AND/OR DAMAGES [Proposed 43 CFR 3809.604]

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DEP may seek injunctive relief for violations of the Water Pollution Control Law, or standards, regulations, or permits thereunder. Nev. Rev. Stat. § 445A.695. DEP possesses similar authority under the Air Pollution Control Law. Nev. Rev. Stat. § 445B.460. DEP can collect “actual damages” resulting from violations of the Water Pollution Control Law, including expenses incurred in performing remediation and compensation for loss of wildlife, fish or aquatic life. Nev. Rev. Stat. § 519A.331. Other suits for damages are governed by common law. The state may sue to recover natural resource damages under section 107(f) of the Comprehensive Environmental Response, Compensation and Liability Act. 42 U.S.C. § 9607(f).

CRIMINAL PENALTIES [Proposed 43 CFR 3809.700]

Any violation of the MLRA constitutes a misdemeanor. Nev. Rev. Stat. § 519A.280. Mine operators who fail to obtain a wildlife permit from the Department of Wildlife for bodies of water containing chemicals or abide by such a permit are guilty of a misdemeanor. Nev. Rev. Stat. § 502-390.5. The Water Pollution Control Law authorizes criminal penalties for defendants who acted “intentionally or with criminal negligence” in violating the Act, Nev. Rev. Stat. § 445A.705. The Air Pollution Control Law also provides for criminal penalties. Nev. Rev. Stat. § 445B.470.4.

CIVIL PENALTIES [Proposed 43 CFR 3809.702]

The MLRA authorizes civil penalties in addition to, or in lieu of, criminal penalties. Nev. Rev. Stat. § 519A.280, Nev. Admin. Code § 519A.405. The Water Pollution Control Law authorizes the assessment of civil penalties either administratively by DEP or by a court for violations of the Law, or permits, standards, regulations, or final orders thereunder. Nev. Rev. Stat. § 445A.331. Civil penalties – including administrative penalties – also are authorized by the Air Pollution Control Law. Nev. Rev. Stat. § 445B.500, .640.

CITIZEN SUITS [No provision in proposed rule]

Citizen suits are not authorized by the MLRA or other Nevada state environmental statutes. The federal Clean Water Act authorizes citizen suits against persons who violate provisions of the Clean Water Act or state administrative orders that implement that Act.

NEW MEXICO

In New Mexico, mining activities are regulated by: the Mining and Minerals Division (MMD) in the Energy, Minerals and Natural Resources Department, which regulates operational and reclamation activities; the Department of the Environment, which regulates air, ground water, and surface water quality; and the State Engineer’s Office, which regulates water quantity. MMD administers the New Mexico Mining Act (NMMA) which became effective on June 18, 1993.⁴ N.M. Stat. Ann. § 69-36-1-20. “Existing mining operation” means an extraction operation that produced marketable minerals for a total of at least two years between January 1, 1970, and June 18, 1993. N.M. Stat. Ann. § 69-36-3.E. A “new mining operation” is one that engages in a development

⁴ The NMMA defines “reclamation” as:

the employment during and after a mining operation of measures designed to mitigate the disturbance of affected areas and permit areas and to the extent practicable, provide for the stabilization of a permit area following closure that will minimize future impact to the environment from the mining operation and protect air and water resources.

N.M. Stat. Ann. § 69-36-3.K.

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or extraction operation after June 18, 1993, and is not an existing mine. N.M. Stat. Ann. § 69-36-3.I. All requirements listed below which cite N.M. Stat. Ann. § 69-36-7.H apply to new mines only.

After June 18, 1993, new mining operations in New Mexico must obtain an operating permit from MMD. N.M. Stat. Ann. § 69-36-12. Both new and existing mining operations were required to submit to MMD, by June 30, 1994, either a site assessment, which described existing state and federal permits and regulatory requirements and provided other environmental data, or a notice of intent to close. N.M. Stat. Ann. § 69-36-5. New mining operations cannot receive an operating permit without an approved reclamation plan and posted financial assurance. N.M. Stat. Ann. § 69-36-7.H, I, Q. The New Mexico Mining Commission created by the NMMA, N.M. Stat. Ann. § 69-36-6, promulgated regulations to implement the terms of the NMMA on July 12, 1994. More detailed requirements for most of the topics listed below are found in these regulations, called the NMMA Rules (“Rules”). In addition to the requirements imposed by the NMMA, mining operations must comply with the New Mexico Water Quality Act, N.M. Stat. Ann. § 74-6-1 - 17, and the New Mexico Air Quality Control Act, N.M. Stat. Ann. § 74-2-1 - 17, administered by the Environment Department.

AIR QUALITY [Proposed 43 CFR 3809.420(b)(1)]

Mining operations must comply with the New Mexico Air Quality Control Act, N.M. Stat. Ann. § 74-2-1 - 17, and implementing regulations, Air Quality Control Regulations, administered by the New Mexico Department of the Environment. The Department of the Environment issues construction and operating permits for mining facilities which emit air pollutants, including fugitive dust. Air quality requirements are part of New Mexico’s State Implementation Plan (SIP) as required by the federal Clean Air Act, and New Mexico’s implementation of the permit requirements of Title V of the Clean Air Amendments of 1990. 42 U.S.C. § 7410 (State Implementations Plans); 42 U.S.C. § 7661 (Title V Operating Permit Requirements).

WATER [Proposed 43 CFR 3809.420(b)(2)]

The NMMA requires that new mining operations incorporate measures to reduce, to the extent practicable, the formation of acid and other toxic drainage that may otherwise occur following closure and which would cause federal or state water quality standards to be exceeded. N.M. Stat. Ann. § 69-36-7.H(5). All mining operations must comply with the State’s antidegradation policy and the New Mexico Standards for Interstate and Intrastate Streams. NMWQCC.

SURFACE WATER [Proposed 43 CFR 3809.420(b)(2)(i)]

A key provision of the NMMA requires that mining operations demonstrate that their activities will not cause federal or state water quality standards to be exceeded. N.M. Stat. Ann. § 69-36-7.P (2). Mining operations with point source discharges to surface water must obtain a National Pollutant Discharge Elimination System (NPDES) permit from the U.S. Environmental Protection Agency. 42 U.S.C. § 1342. MMD cannot completely release a new operator’s financial assurance so long as the lands to which the release would apply are contributing suspended solids above background levels to the streamflow of intermittent and perennial streams. N.M. Stat. Ann. § 69-36-7.R. (1).

GROUND WATER [Proposed 43 CFR 3809.420(B)(2)(ii)]

Mining operations, including processing facilities, with the potential to discharge to ground water must have a ground water discharge plan approved by the New Mexico Department of the Environment.⁵ NMWQCC Water

⁵ A mining operation, without processing facilities or catchment ponds without the potential to create a hazard, does not need to have an approved ground water discharge plan. NMWQCC Water Quality Regs. § 3-3105.(H). (Exemption for “leachate which results from the direct natural infiltration of precipitation through disturbed

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Quality Regs. § § 3104, 3106. A ground water discharge plan must provide for ground water monitoring, including monitoring after closure, NMWQCC Water Quality Regs. § 3107, and compliance with ground water protection standards. NMWQCC Water Quality Regs. § 3103. The Department of the Environment possesses the authority to require a surface mining operation to submit an environmental closure plan and financial assurance before approving a ground water discharge plan, NMWQCC Water Quality Regs. § 3107.

ACID MINE DRAINAGE [*Proposed 43 CFR 3809.420(b)(2)(i)(B) and (ii)(B)*]

The NMMA requires that new mining operations incorporate measures to reduce, to the extent practicable, the formation of acid and other toxic drainage that may otherwise occur following closure and which would cause federal or state water quality standards to be exceeded. N.M. Stat. Ann. § 69-36-7.H(5). Surface runoff from nonpoint sources containing acid or other toxic substances must be contained within the permit area. N.M. Stat. Ann. § 69-36-7.H (6). Closure plans must detail site specific conditions including depth to ground water, concentration of contaminants, and acid-generating potential of waste material. A mining material sampling program must be approved by the Department of the Environment which characterizes waste material potential contamination concerns and assesses control measures needed for closure. Static and /or kinetic testing is required to predict acid generation potential, and an assessment of oxygen migration may be required. The closure plan must include engineered design drawings, technical specifications, and quality assurance plans for control of acid generation, control of acid rock drainage migration and collection and treatment of acid rock drainage once it has migrated. Post closure monitoring and a contingency plan for the remediation of ground water that exceeds New Mexico Water Quality Control pollutant standards is required.

WETLANDS AND RIPARIAN AREAS [*Proposed 43 CFR 3809.420(b)(3)*]

Any placement of soils or other fill materials in “waters of the United States,” including dry washes, isolated waters and wetlands, must be permitted by the U.S. Corps of Engineers pursuant to Section 404 of the Clean Water Act. 33 U.S.C. § 1344. In reviewing the permit application, the Corps applies guidelines for disposal of fill materials promulgated by the Environmental Protection Agency. 40 C.F.R. pt. 230. The guidelines require that the Corps look at alternatives to the proposed fill activity before approving the permit application. Before the permit can be issued, New Mexico must issue a document certifying that the permit limitations will be consistent with state water quality standards. 33 U.S.C. § 1341.

SOIL AND GROWTH MATERIAL [*Proposed 43 CFR 3809.420(b)(4)*]

Mine operators must take measures to preserve topsoil from erosion or contamination and assure that the topsoil is in a useable condition for sustaining vegetation when needed. N.M. Stat. Ann. § 69-36-7.H (8).

REVEGETATION [*Proposed 43 CFR 3809.420(b)(5)*]

MMD must retain, for revegetated areas, the amount of financial assurance necessary for a third party to reestablish vegetation for a period of 12 years after the last year of augmented seeding, fertilization, irrigation, or other work, unless the post-mining land use is inconsistent with the further need for revegetation. N.M. Stat. Ann. § 69-36-7.R (1). Mine operators must attain, in the permit area, “a self-sustaining ecosystem appropriate for the life zone of the surrounding areas following closure unless conflicting with the approved post-mining land use.” N.M. Stat. Ann. § 69-36-7.H (4). Topsoil must be preserved from contamination and erosion so that it is in a useable condition for sustaining vegetation. N.M. Stat. Ann. § 69-36-7.H (8).

materials, unless the [Department of the Environment] determines that a hazard to public health may result.”)

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FISH AND WILDLIFE [*Proposed 43 CFR 3809.420(b)(6)*]

The NMMA Rules contain provisions which assure the protection of the environment and wildlife and the establishment of a self-sustaining ecosystem. N.M. Stat. Ann. § 69-36-7.H (2) (4).

ROADS AND STRUCTURES [*Proposed 43 CFR 3809.420(c)(1)*]

The removal of buildings, equipment or structures at closure must be in accord with the approved closeout or reclamation plan as developed under the NMMA and Rules.

DRILL HOLES [*Proposed 43 CFR 3809.420(c)(2)*]

Mine discovery or drill holes that encounter ground water must be plugged, or otherwise constructed, maintained, and operated so that any water encountered is permanently confined to the aquifer. State Engineer Regs. § 4-21.

WASTE ROCK, TAILINGS AND LEACH PADS [*Proposed 43 CFR 3809.420(c)(5)*]

The NMMA requires that “all waste, waste management units, pits, heaps, pads and any other storage piles [be] designed, sited and constructed in a manner that facilitates, to the maximum extent practicable, contemporaneous reclamation.” N.M. Stat. Ann. § 69-36-7.H(7). These waste areas must be reclaimed to meet the general standards imposed by the NMMA and Rules.

STABILITY, GRADING AND EROSION CONTROL [*Proposed 43 CFR 3809.402(c)(6)*]

To the extent practicable, a mine operator must stabilize a permit area following closure to minimize future impact to the environment from the mining operation and protect air and water resources. N.M. Stat. Ann. § 69-36-3.K. This obligation includes minimizing fugitive dust emissions from the mining operation. N.M. Stat. Ann. § 74-2-7B. The NMMA requires backfilling or partial backfilling only when necessary to achieve reclamation objectives that cannot be achieved through other mitigation measures. N.M. Stat. Ann. § 69-36-7.H (3).

MAINTENANCE AND PUBLIC SAFETY [*Proposed 43 CFR 3809.420(c)(10)*]

Upon abandonment, a mine operator must effectively close or fence all surface openings through which a person could enter. N.M. Stat. Ann. § 69-27-3.

FINANCIAL GUARANTEE [*Proposed 43 CFR 3809.500 – 599*]

A permit applicant must file financial assurance prior to issuance of a permit. The amount of financial assurance shall be sufficient to assure completion of the performance requirements of the permit, including closure and reclamation, if the work had to be performed by the State or a third party. The amount of financial assurance must be periodically reviewed for inflationary increases and changes in reclamation and closure costs. Financial assurance cannot duplicate or be less comprehensive than federal financial requirements and cannot include any type or variety of self-guarantee or self-insurance. N.M. Stat. Ann. § 69-36-7.Q.

The Rules provide that if a permittee refuses or is unable to conduct or complete the reclamation or closeout plan, if the terms of the permit are not met, or if the permittee defaults on the conditions under which the financial assurance was accepted, the Director shall take action to forfeit all or part of the financial assurance. 19 NMAC 10.2.1211.A. Water Quality regulations require that each discharge plan approved by the Department of the Environment must include a closure plan with financial assurances. NMWQCC Water Quality Regs. § 3107.

INSPECTION [*Proposed 43 CFR 3809.600*]

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MMD must inspect an active mining operation at least twice a year and a mining operation conducting significant reclamation activities once a month. Inactive sites will be inspected at least once per year. N.M. Stat. Ann. § 69-36-7.S. Before releasing any portion of a permittee's financial assurance, MMD must inspect the reclaimed mine site. N.M. Stat. Ann. § 69-36-7.R. The New Mexico Department of the Environment also possesses inspection authorities under the Water Quality Act, N.M. Stat. Ann. § 74-6-9.E, and the Air Quality Control Act. N.M. Stat. Ann. § 74-2-13.

ENFORCEMENT ORDERS [*Proposed 43 CFR 3809.601*]

The NMMA authorizes the Director of MMD to issue cessation orders for acts which will cause a significant imminent environmental harm or an abatement order for violations of the NMMA which will not cause a significant imminent environmental harm. N.M. Stat. Ann. § 69-36-7.S (3), (4). The Director can issue an order to show cause as to why a permit should not be suspended or revoked when the Director finds a pattern of violations of the NMMA are willful violations or are caused by a permittee's unwarranted failure to comply with the act. N.M. Stat. Ann. § 69-36-7-S. (5). The New Mexico Department of the Environment also can issue compliance orders, including cease and desist and abatement orders, under the Water Quality Act, N.M. Stat. Ann. § 74-6-10, and § 74-6-11.B, and the Air Quality Control Act. N.M. Stat. Ann. § 74-2-12.A.

ENFORCEMENT -- PERMIT SUSPENSION OR REVOCATION [*Proposed 43 CFR 3809.602*]

A mining operation permit can be suspended or revoked for a violation of a permit condition or an NMMA statutory or regulatory provision. N.M. Stat. Ann. § 69-36-12.C. The New Mexico Department of the Environment also can suspend or revoke permits issued under the Water Quality Act, N.M. Stat. Ann. § 74-6-5.L, and § 74-6-10.B, or the Air Quality Control Act. N.M. Stat. Ann. §§ 74-2-10.B, 12.B.

ENFORCEMENT -- SUIT FOR INJUNCTIONS AND/OR DAMAGES [*Proposed 43 CFR 3809.604*]

The MMD can seek to have court enforcement of a cessation or abatement order issued by the Division. N.M. Stat. Ann. § 69-36-7.S (3), (4). The New Mexico Department of the Environment is authorized to seek injunctive relief against any violator of the Water Quality Act, N.M. Stat. Ann. § 74-6-10.A, and § 74-6-11.A, and air pollutant sources presenting an imminent and substantial endangerment to the public health or welfare or the environment under the New Mexico Air Quality Control Act. N.M. Stat. Ann. §§ 74-2-10.A, 12.A(2). The New Mexico Natural Resources Trustee Act, N.M. Stat. Ann. § 75-7-1 - 5, establishes a natural resources trustee whose responsibilities include recovering damages "for injury to, destruction of or loss" of New Mexico's natural resources. N.M. Stat. Ann. § 75-7-3.A. Damage awards will include "the cost of restoration, replacement or acquisition of equivalent resources, plus compensation for the loss of use or enjoyment of the natural resources" and reimbursement of the state's enforcement expenses. N.M. Stat. Ann. § 75-7-4. Other suits for damages are governed by common law. The state may sue to recover natural resource damages under section 107(f) of the Comprehensive Environmental Response, Compensation and Liability Act. 42 U.S.C. § 9607(f).

CRIMINAL PENALTIES [*Proposed 43 CFR 3809.700*]

Any person who knowingly or willfully violates the NMMA, or regulations, orders or permits issued pursuant to the NMMA is guilty of a misdemeanor. Criminal penalties can include a fine not to exceed \$10,000 per day of violation or imprisonment of up to one year, or both. N.M. Stat. Ann. § 69-36-18. Criminal acts defined in the Water Quality Act are all punishable felonies, N.M. Stat. Ann. § 74-6-10.2. The Air Quality Control Act, N.M. Stat. Ann. § 74-2-14, provides for misdemeanor and felony penalties that range from fines of \$10,000 to \$250,000 and/or six months to nine years imprisonment.

CIVIL PENALTIES [*Proposed 43 CFR 3809.702*]

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Civil penalties up to \$10,000.00 per day of noncompliance, may be assessed for violations of the NMMA, or regulations, orders, or permits issued pursuant to the NMMA. N.M. Stat. Ann. § 69-36-17. The Water Quality Act and the Air Quality Control Act authorize the New Mexico Department of the Environment to assess civil penalties up to \$15,000 per day of non-compliance per violation, N.M. Stat. Ann. § § 74-6-5.P, 10.A.C. N.M. Stat. Ann. § § 74-2-12.B, 12.1.

CITIZEN SUITS [No provision in proposed rule]

The NMMA authorizes citizen suits against (1) the New Mexico Department of Environment, New Mexico Energy, Minerals and Natural Resources Department, or the New Mexico Mining Commission for violations of the NMMA or for failing to perform a non-discretionary act or duty under NMMA or (2) any violator of a rule, regulation, order, or permit issued pursuant to NMMA. N.M. Stat. Ann. § 69-36-14. No citizen suits are allowed under the Water Quality Act or Air Quality Control Act. The federal Clean Water Act authorizes citizen suits against persons who violate provisions of the Clean Water Act or state administrative orders that implement that Act.

OREGON

Mining activities, including reclamation, are regulated by the Oregon Department of Geology and Mineral Industries (DOGAMI). DOGAMI administers the Oregon Mined Land Reclamation Act (MLRA). Or. Rev. Stat. §§ 517.750-900, Or. Admin. R. ch. 632, div. 37. The MLRA requires an operating permit issued by DOGAMI for all surface mining operations. Or. Rev. Stat. § 517.790(1). An operating permit cannot be issued without an approved reclamation plan and the filing of a performance bond or security deposit with DOGAMI. Or. Rev. Stat. §§ 517.790(2) and 517.810. The MLRA imposes more stringent requirements for chemical process mines, defined as a mining or processing operation for metal-bearing ores that uses chemicals to dissolve metals from ore. Or. Rev. Stat. §§ 517.952-989. Chemical process mines must use best available, practicable, and necessary technology to assure compliance with environmental standards. Or. Rev. Stat. 517.956(1). Mining operations also must comply with the Oregon Water Pollution Control Law, Or. Rev. Stat. §§ 468B.005-500, and the Oregon Air Pollution Control Law, Or. Rev. Stat. §§ 468A.005-992, administered by the Oregon Department of Environmental Quality (DEQ).

AIR QUALITY [Proposed 43 CFR 3809.420(b)(1)]

Mining operations must comply with the Oregon Air Pollution Control Law, Or. Rev. Stat. §§ 468A.005-992, administered by the Oregon DEQ. DEQ issues construction and operating permits for mining operations that emit air pollutants, including fugitive dust. Or. Rev. Stat. § 468A.310 - 330. As a condition in all operating permits, operators must protect off-site flora or fauna from fugitive dust. Air quality requirements are part of Oregon's State Implementation Plan (SIP) required by the federal Clean Air Act. 42 U.S.C. § 7410.

WATER [Proposed 43 CFR 3809.420(b)(2)]

An operating plan must include a "process water budget analysis" and surface water management procedures to ensure against ground water contamination. Or. Admin. R. 632-37-060(5), (8). Reclamation and closure plans must contain procedures for ore storage sites and tailings disposal facilities to meet decommissioning performance standards to protect air quality, surface and ground water quantity and quality, and living resources, and for the appropriate isolation or removal of waste material. Or. Admin. R. 632-37-070(12).

SURFACE WATER [Proposed 43 CFR 3809.420(b)(2)(i)]

A National Pollutant Discharge Elimination System (NPDES) permit, issued by the DEQ, is required for any discharge from a point source at a mine site during operations or reclamation into surface waters. Or. Rev. Stat. §

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468B.050. Mine operators must comply with the State's surface water quality standards. Or. Admin. R. 340-041-0001 - 0975.

GROUND WATER [*Proposed 43 CFR 3809.420(B)(2)(ii)*]

Chemical process mines must use best available, practicable, and necessary technology to assure compliance with environmental standards. Or. Rev. Stat. § 517.956(1). An operating plan must include a "process water budget analysis" and surface water management procedures to ensure against ground water contamination. Or. Admin. R. 632-37-060(5), (8). Reclamation and closure plans must contain procedures for ore storage sites and tailings disposal facilities to meet decommissioning performance standards for the protection of air quality, surface and ground water quantity and quality, and living resources, and for the appropriate isolation or removal of waste material. Or. Admin. R. 632-37-070(12). Mine operators must comply with the State's nondegradation policy for ground water, Or. Rev. Stat. § 468B.155, and ground water quality protection rules. Or. Admin. R. 340-040-0001-0135.

ACID MINE DRAINAGE [*Proposed 43 CFR 3809.420(b)(2)(i)(B) and (ii)(B)*]

DOGAMI may require that an operator specify in the operating plan a list and procedures for the handling and storage of acid-forming materials generated from or required for mining or processing at the proposed operation. Or. Admin. R. 632-35-025(2)(c)(Q). An operating plan also must include a "process water budget analysis" and surface water management procedures to ensure against ground water contamination. Or. Admin. R. 632-37-060(5), (8). Reclamation and closure plans must include a characterization and management plan for all wastes, including the quantity and quality of such wastes. Or. Admin. R. 632-37-070(4). Reclamation and closure plans must contain procedures for ore storage sites and tailings disposal facilities to meet decommissioning performance standards to protect surface and ground water quantity and quality, and living resources, and for the appropriate isolation or removal of waste material. Or. Admin. R. 632-37-070(12).

WETLANDS AND RIPARIAN AREAS [*Proposed 43 CFR 3809.420(b)(3)*]

Any placement of soils or other fill materials in "waters of the United States," including dry washes, isolated waters and wetlands, must be permitted by the U.S. Corps of Engineers pursuant to Section 404 of the Clean Water Act. 33 U.S.C. § 1344. In reviewing the permit application, the Corps applies guidelines for disposal of fill materials promulgated by the Environmental Protection Agency. 40 C.F.R. pt. 230. The guidelines require that the Corps look at alternatives to the proposed fill activity before approving the permit application. Before the permit can be issued, Oregon must issue a document certifying that the permit limitations will be consistent with state water quality standards. 33 U.S.C. § 1341.

A reclamation and closure plan must provide for the rehabilitation or restoration of affected stream channels and stream banks to maximize water retention and minimize bank erosion, channel scour, siltation, and increased water temperature. Or. Admin. R. 632-37-070(6).

SOIL AND GROWTH MATERIAL [*Proposed 43 CFR 3809.420(b)(4)*]

A reclamation and closure plan must detail procedures for the salvage, storage, and replacement of topsoil or acceptable substitute and recontouring, stabilization, and topsoil replacement of all disturbed areas. Or. Admin. R. 632-37-070(1), (2).

REVEGETATION [*Proposed 43 CFR 3809.420(b)(5)*]

A reclamation and closure plan must contain provisions for the revegetation of all disturbed areas consistent with the establishment of a self-sustaining ecosystem comparable to undamaged ecosystems in the area of the mine. Or.

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Admin. R. 632-37-070(3). Vegetation includes seedbed preparation, mulching, fertilizing, species selection, and seeding and planting rates and schedules. Or. Admin. R. 632-37-070(3). During revegetation, operators must use native species and comply with other requirements imposed by DOGAMI. Or. Admin. R. 632-37-130(5), (6). Revegetation will be considered successful if such revegetation is comparable in stability and utility to adjacent analogous areas. Or. Admin. R. 632-37-130(4).

FISH AND WILDLIFE [Proposed 43 CFR 3809.420(b)(6)]

Chemical process mining operations must: (1) comply with protection measures for fish and wildlife promulgated by the State Department of Fish and Wildlife; (2) maintain an objective of zero wildlife mortality, including covering or containing processing solutions and associated waste water to preclude access to wildlife; (3) take onsite and offsite mitigation measures to ensure no overall net loss of habitat; (4) ensure no loss of existing critical habitat of any state or federally threatened or endangered species; and (5) report fish and wildlife mortality. Or. Rev. Stat. § 517.956(2). Surface reclamation of a chemical process mine must assure protection of fish and wildlife, and be certified by the State Department of Fish and Wildlife that the reclamation establishes a self-sustaining ecosystem consistent with the permittee's habitat restoration obligations. Or. Rev. Stat. § 517.956(3). A consolidated application for a permit to operate a chemical process mining operation must include a fish and wildlife protection and mitigation plan. Or. Rev. Stat. § 517.971(7)(d).

ROADS AND STRUCTURES [Proposed 43 CFR 3809.420(c)(1)]

A reclamation and closure plan must detail procedures for removing and disposing of all equipment, refuse, structures and foundations. Or. Admin. R. 632-37-070(10). Only permanent structures authorized to remain after closure in the approved reclamation plan can remain after reclamation. Or. Admin. R. 632-37-130(11).

DRILL HOLES [Proposed 43 CFR 3809.420(c)(2)]

DOGAMI regulates all exploration activities, including the abandonment of exploration drill holes. Or. Admin. R. ch. 632, div. 33. All exploration drill holes must be abandoned in a manner so as to (1) prevent loss of quality and minimize, to the greatest extent practicable, loss of quantity to surface and ground waters and prevent interaquifer mixing, and (2) prevent aquifer contamination from surface drainage. Or. Admin. R. 632-33-025(7)(e)(A). Abandonment must occur in a manner consistent with procedures set out in MLRA implementing regulations. Or. Admin. R. 632-33-025(7)(e)(B). Exploration areas, including surface openings, must be reclaimed in a manner consistent with MLRA implementing regulations. Or. Admin. R. 632-33-010(12).

ACID-FORMING, TOXIC, OR OTHER DELETERIOUS MATERIALS. [Proposed 43 CFR 3809.420(c)(3)]

DOGAMI may require that an operator specify in the operating plan a list and procedures for the handling and storage of acid-forming materials generated from or required for mining or processing at the proposed operation. Or. Admin. R. 632-35-025(2)(c)(Q). Chemical process mines must use best available, practicable, and necessary technology to assure compliance with environmental standards. Or. Rev. Stat. § 517.956(1).

WASTE ROCK, TAILINGS AND LEACH PADS [Proposed 43 CFR 3809.420(c)(5)]

Reclamation and closure plans must include a characterization and management plan for all wastes, including the quantity and quality of such wastes. Or. Admin. R. 632-37-070(4). Reclamation and closure plans also must contain procedures to ensure that ore storage sites meet decommissioning performance standards intended to protect air quality, surface and ground water quantity and quality, and living resources, and for the appropriate isolation or removal of waste material. Or. Admin. R. 632-37-070(12). Post-closure monitoring is required to ensure compliance with decommissioning performance standards. Or. Admin. R. 632-37-130(3).

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STABILITY, GRADING AND EROSION CONTROL [Proposed 43 CFR 3809.420(c)(6)]

As a condition in all operating permits, operators must protect off-site flora or fauna from fugitive dust. A reclamation and closure plan must detail procedures for the recontouring, stabilization, and topsoil replacement of all disturbed areas. Or. Admin. R. 632-37-070(2). All final slopes must be stable, blend with adjacent terrain, and be compatible with the establishment of a self-sustaining ecosystem. Or. Admin. R. 632-37-130(7).

A reclamation and closure plan must provide for recontouring, stabilization, topsoil replacement, and the establishment of required slopes. Or. Admin. R. 632-37-070(8). All final slopes must be stable, blend with adjacent terrain, and be compatible with the establishment of a self-sustaining ecosystem. Or. Admin. R. 632-37-130(7). Reclaimed cutbanks must not have slopes exceeding 1.5:1, though exceptions for steeper slopes may be allowed if they will be stable and the steeper slopes blend into adjacent terrain features, existed prior to mining, or are consistent with the establishment of a self-sustaining ecosystem comparable to undamaged ecosystems in the area of the mine. Or. Admin. R. 632-37-130(8). Fill slopes must be 2:1 or flatter unless steeper slopes are approved. Or. Admin. R. 632-37-130(9).

FINANCIAL GUARANTEE [Proposed 43 CFR 3809.500 – 599]

An applicant for a mining permit must file a bond or security deposit in an amount determined by DOGAMI, not to exceed the total cost for reclamation if the department were to perform the reclamation. Or. Rev. Stat. § 517.810. In addition, for chemical process mines a bank financial security may be required to deal with the credible accident. The MLRA authorizes DOGAMI to recover the costs of reclamation from the performance bond or security deposit posted with DOGAMI if the permittee fails to complete reclamation. Or. Rev. Stat. § 517.860.

INSPECTION [Proposed 43 CFR 3809.600]

DOGAMI must inspect a proposed mine site prior to issuing an operating permit. Or. Rev. Stat. § 517.830(1). The MLRA also authorizes DOGAMI to conduct inspections at reasonable times after advance notice has been given to the permittee. If the department has reason to believe that the provisions of an operating permit are being violated or that a mining operation is being conducted without a permit, the department may inspect without prior notice. Or. Rev. Stat. §§ 517.850, 930. DOGAMI must inspect an exploration area to ensure compliance with the terms of an exploration permit prior to releasing the financial security for such area. Or. Admin. R. 632-33-045. The State Department of Fish and Wildlife is authorized to inspect chemical process mines with an operating permit containing permit conditions to protect fish and wildlife. Or. Rev. Stat. § 517.988(2). The Oregon DEQ also possesses inspection authority at all reasonable times to enforce the provisions of the Water Pollution Control Law and the Air Pollution Control Law. Or. Rev. Stat. § 468.095.

ENFORCEMENT ORDERS [Proposed 43 CFR 3809.601]

DOGAMI can order an operator to suspend operations if the operator is conducting a surface mining operation without a valid operating permit or violating permit conditions. Or. Rev. Stat. § 517.880. DOGAMI may order civil penalties for violations of MLRA statutory or regulatory provisions, an operating permit, or orders which involves a chemical process mine. Or. Rev. Stat. § 517.992. DOGAMI also can issue closure orders for violations of the exploration regulations. Or. Admin. R. 632-33-025(11). The Oregon DEQ can issue similar administrative orders to enforce the provisions of the Water Pollution Control Law and the Air Pollution Control Law. Or. Rev. Stat. § 468.035(j).

ENFORCEMENT -- PERMIT SUSPENSION OR REVOCATION [Proposed 43 CFR 3809.602]

The MLRA authorizes permit revocations for failure to pay civil penalties. Or. Rev. Stat. § 517.992(8), Or. Admin. R. 632-37-150(8). DOGAMI can revoke exploration permits through the issuance of a Closure Order. Or. Admin. R. 632-33-040. The Oregon DEQ can modify, suspend, or revoke permits issued under the Water

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Pollution Control Law or Air Pollution Control Law for material misrepresentations or false statements in a permit application, failing to comply with permit conditions, or violating statutory or regulatory requirements or an administrative order. Or. Rev. Stat. § 468.070(1).

ENFORCEMENT -- SUITS FOR INJUNCTIONS AND/OR DAMAGES [*Proposed 43 CFR 3809.604*]

DOGAMI can seek to have the Attorney General enjoin surface mining operations being conducted in violation of an administrative order to suspend operations, Or. Rev. Stat. § 517.880, or exploration activities being conducted in violation of an administrative closure order. Or. Admin. R. 632-33-025(11)(b). The Oregon DEQ can seek equitable remedies, including temporary or permanent injunctions, to enforce compliance with, and restrain further violations of, the Water Pollution Control Law and Air Pollution Control Law. Or. Rev. Stat. § 468.100(1). The Oregon Water Pollution Control Law imposes strict liability upon any person responsible for the injury, death, contamination, or destruction of fish or wildlife, or injury or destruction of fish or wildlife habitat, caused by pollution. The State of Oregon can recover the value of the fish or wildlife so injured or destroyed and for all costs of restoring fish and wildlife production in the affected areas, including habitat restoration. Or. Rev. Stat. § 468B.060. Other suits for damages are governed by common law. The state may sue to recover natural resource damages under section 107(f) of the Comprehensive Environmental Response, Compensation and Liability Act. 42 U.S.C. § 9607(f).

CRIMINAL PENALTIES [*Proposed 43 CFR 3809.700*]

Criminal penalties in the form of fines up to \$1,000 (\$10,000 for a nonaggregate surface mining operation) may be assessed under the MLRA for operating a surface mining operation without an operating permit, violating the conditions of an operating permit, or violations of MLRA statutory or regulatory provisions. Or. Rev. Stat. § 517.990. Criminal penalties also are authorized for violations of the Water Pollution Control Act and the Air Pollution Control Act. Or. Rev. Stat. §§ 468.920-963, which include fines up to \$200,000. Each day a violation occurs is a separate punishable offense. The crime of environmental endangerment incurs imprisonment of up to 15 years and/or fines up to \$2,000,000. Subsequent convictions incur imprisonment up to 30 years and/or fines up to \$5,000,000. Or. Rev. Stat. § 468.951

CIVIL PENALTIES [*Proposed 43 CFR 3809.702*]

Civil penalties of not less than \$200 per day and not more than \$50,000 per day may be assessed for violations of MLRA statutory or regulatory provisions, an operating permit, or an order which involves a chemical process mine. Or. Rev. Stat. § 517.992, Or. Admin. R. 632-37-150. Civil penalties up to \$10,000 per day can be assessed for violations of the Water Pollution Control Law and Air Pollution Control Law. Or. Rev. Stat. §§ 468.130, 140, 996. Additionally, persons who intentionally or recklessly violate the Water Pollution Control Law or the Air Pollution Control Law may incur civil penalties up to \$100,000 if the violation creates the imminent likelihood for an extreme hazard to the public health or causes extensive damage to the environment. Or. Rev. Stat. § 468.996.

CITIZEN SUITS [No provision in proposed rule]

The MLRA does not authorize citizen suits. The federal Clean Water Act authorizes citizen suits against persons who violate provisions of the Clean Water Act or state administrative orders that implement that Act.

SOUTH DAKOTA

Mining activities, including reclamation, are regulated by the South Dakota Department of Environment and Natural Resources (DENR) which is overseen by the Board of Minerals and Environment. S.D. Codified Laws § 1-40-25. DENR administers the Mined Land Reclamation Act (MLRA). S.D. Codified Laws ch. 45-6B, S.D. Admin. R. 74:29, the Mineral Exploration Act, S.D. Codified Laws ch. 45-6C, and South Dakota's Water

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Pollution Control Act, S.D. Codified Laws ch. 34A-2, S.D. Admin. R. 74:50-56, and Air Pollution Control Act. S.D. Codified Laws ch. 34A-1, S.D. Admin. R. 74:36. The MLRA requires all mine operators to obtain a mining permit from DENR. S.D. Codified Laws § 45-6B-5, 78. A mining permit cannot be issued without an approved reclamation plan, S.D. Codified Laws § § 45-6B-5(2), 7, and the submission of surety in an amount necessary to guarantee the costs of reclamation. S.D. Codified Laws § § 45-6B-20, 21, 26. Also, Mine operators are required to request the department to determine whether a potential mine site exhibits special, exceptional, critical, or unique characteristics. S.D. Codified Laws § 45-6B-33.3 to 33.8, S.D. Admin. R. 74:29:10. This "Request for Determination of Special, Exceptional, Critical, or Unique Lands" is required to be submitted at least 60 days before the submittal of a mine permit application. S.D. Admin. R. 74:29:10:04(1). If proposed mine lands are found to have special, exceptional, critical, or unique characteristics, the Board of Minerals and Environment may find the lands unsuitable for mining or can impose additional restrictions on the mining operation. S.D. Codified Laws § 45-6B-33.5.

The MLRA also requires the posting of financial assurance to guarantee the costs of postclosure care and maintenance after the completion of reclamation. S.D. Codified Laws § 45-6B-91. At reclamation, mine operators must comply with the minimum reclamation standards established by the MLRA, along with state water and air quality standards. The MLRA requires concurrent reclamation during all phases of mining operations and the submission of an estimated timetable for reclamation with the reclamation plan. S.D. Admin. R. 74:29:08.

AIR QUALITY [Proposed 43 CFR 3809.420(b)(1)]

The South Dakota Air Pollution Control Law, S.D. Codified Laws ch. 34A-1, and implementing regulations, S.D. Admin. R. 74:36, apply to mining operations, particularly as to fugitive dust, particulates, and emissions from milling and processing operations. Air quality permits are required for mine sites that have regulated pollution sources. This permit may include addressing fugitive emissions, S.D. Admin R 74:36:65:06 (standard for issuance of operating permit). Air quality requirements are part of South Dakota's State Implementation Plan (SIP) as required by the federal Clean Air Act. 42 U.S.C. § 7410.

WATER [Proposed 43 CFR 3809.420(b)(2)]

During operations and reclamation, mine operators must minimize any disturbance to the prevailing hydrologic balance of the affected land and surrounding area and to the quality and quantity of surface and ground water systems. S.D. Codified Laws § 45-6B-41. To accomplish this goal mine operators must: (1) comply with South Dakota water quality and water rights laws and regulations and federal dredge and fill requirements; (2) remove temporary or large sedimentation, erosion, or drainage controls after revegetation and stabilization; (3) design permanent diversion structures not to erode; and (4) divert unchanneled surface water around the operation to minimize pollution and erosion and to protect the operation and downstream water users who have prior water rights. S.D. Admin. R. 74:29:07:08. Erosion control measures must be implemented during all phases of construction, operation, reclamation, and closure, and depressions from the accumulation of water are prohibited unless they are consistent with the approved post-mining land use. S.D. Admin. R. 74:29:07:04. Original drainages must be preserved and alternative drainages may be approved if they are functionally compatible with, and complement the prevailing hydrologic balance of the surrounding area. S.D. Admin. R. 74:29:07:04(5). DENR may require an applicant for a mining permit to submit information sufficient for DENR to determine the potential impact mining could have to the hydrologic balance of the affected land. S.D. Admin. R. 74:29:02:11. A surface and ground water monitoring plan for the life of the mine may be required. S.D. Admin R. 74:29:02:11(7).

The South Dakota Water Pollution Control Act prohibits causing, or placing wastes in a location where they are likely to cause, pollution to any waters of the state. S.D. Codified Laws § 34A-2-21. The Act also prohibits discharging any wastes which cause further reduction of water quality. S.D. Codified Laws § 34A-2-22. "Waters of the state" include both surface and ground water. S.D. Codified Laws § 34A-2-2(12). These anti-pollution and anti-degradation provisions apply to releases from mine facilities.

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SURFACE WATER [*Proposed 43 CFR 3809.420(b)(2)(i)*]

A Surface Water Discharge permit, issued by DENR, is required for any discharge from a point source at a mine site, during operations or reclamation, into surface waters of the State. S.D. Codified Laws § 34A-2-36, S.D. Admin. R. 74:52. A Surface Water Discharge permit requires surface water monitoring. S.D. Admin. R. 74:52. These monitoring requirements are integrated into hydrologic monitoring requirements of the mining permit. A Surface Water Discharge permit requires that a discharge not cause a violation of South Dakota surface water quality standards. S.D. Admin. R. 74:51. Mining operations which divert streams must ensure that water quality meets surface water quality standards. S.D. Admin. R. 74:29:07:10(6).

GROUND WATER [*Proposed 43 CFR 3809.420(b)(2)(ii)*]

A DENR issued ground water discharge permit is required for any discharges into the ground water from a surface mining operation. S.D. Codified Laws § 34A-2-36.1. The ground water discharge permit requires that the discharge not cause a violation of South Dakota ground water quality standards. S.D. Admin. R. 74:54:01, 74:54:02:06(7). The State's ground water strategy to maintain and improve ground water quality includes mineral exploration, development and mine reclamation under the MLRA and Mineral Exploration Act. S.D. Codified Laws § 34A-2-103.

ACID MINE DRAINAGE [*Proposed 43 CFR 3809.420(b)(2)(i)(B) and (ii)(B)*]

South Dakota's regulatory approach stresses the importance of acid rock drainage (ARD) prevention from the start of operations. Prevention mechanisms are required in operating and reclamation plans to avoid acid generation problems from startup to closure. Stringent pre-mining static and kinetic predictive testing and extensive operational "in-pit" testing of mined rock, allow acid and non-acid rock to be identified early and disposed of accordingly. Ore that tests above the total sulfur cutoff is to be amended with limestone or another suitable base amendment sufficient to obtain a neutralization potential to acid generating potential ratio of at least 3 to 1. Static and kinetic testing continues throughout the life of the project and is reported annually in the water quality report. If pit highwalls are determined to be acid generating, submission of a mitigation plan for capping must be submitted. The DENR reserves the right to adjust the reclamation surety to cover backfill and capping requirements for high walls. To the greatest extent possible, measures are to be taken to minimize the amount of acid generating rock exposed in the highwalls. Construction fill must be segregated from acid producing rock. Operators must account for the amount of non-reactive rock that will be contaminated by intermixing with acid generating rock in handling processes and DENR may require some operators to take specific measures to minimize the effects of intermixing. DENR requires operators to submit quarterly a cumulative log documenting waste rock management practices undertaken during routine mining operations during that quarter. A water treatment plant must be designed to effectively manage and treat all acid mine drainage and remain operational for as long as water treatment is required to comply with water quality limitations. Sludge disposal facilities may not be placed in an acid generating environment. Operators are required to submit to DENR conceptual contingency plans for mitigation measures in the event any completed component of a facility begins to generate acid mine drainage or the water treatment system fails. Operators must monitor surface water quality throughout the postclosure period. South Dakota includes in its permits a provision that allows postclosure financial assurances to be used to take corrective actions to mitigate acid generation problems. Operators must submit a performance monitoring plan for the postclosure period which includes monitoring measures to be used to assess control of acid generation in reclaimed facilities. Specific ARD predictive, prevention, testing, reporting, rock handling, reclamation, bonding, treatment and other requirements will vary depending on site specific conditions and ARD potential at the mine.

WETLANDS AND RIPARIAN AREAS [*Proposed 43 CFR 3809.420(b)(3)*]

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Any placement of soils or other fill materials in “waters of the United States,” including dry washes, isolated waters and wetlands, must be permitted by the U.S. Corps of Engineers pursuant to Section 404 of the Clean Water Act. 33 U.S.C. § 1344. In reviewing the permit application, the Corps applies guidelines for disposal of fill materials promulgated by the Environmental Protection Agency. 40 C.F.R. pt. 230. The guidelines require that the Corps look at alternatives to the proposed fill activity before approving the permit application. Before the permit can be issued, South Dakota must issue a document certifying that the permit limitations will be consistent with state water quality standards. 33 U.S.C. § 1341.

For permanent or temporary diversions of intermittent and perennial streams, the stream banks must be stabilized, vegetated and protected where necessary by rock, geosynthetic liners or filter media, riprap, or similar measures to minimize erosion and degradation of surface water quality. S.D. Admin. R. 74:29:07:10(2), (3). Permanent diversions must be designed and constructed to prevent erosion and to carry flow consistent with the flow produced by the stream’s original width, depth, shape and gradient. S.D. Admin. R. 74:29:07:10(3). Channel and flood plain diversions must be designed to prevent erosions during the passage of the approved design precipitation event. S.D. Admin. R. 74:29:07:10(5). In addition, surface runoff diversions around milling or processing facilities using potentially toxic chemicals or materials must be capable of carrying the flow from the six-hour probable maximum precipitation event without causing erosion and all surface runoff diversions must be capable of carrying a minimum of the two-year, six-hour precipitation event without causing erosion. S.D. Admin. R. 74:29:07:09(6), (7).

SOIL AND GROWTH MATERIALS [*Proposed 43 CFR 3809.420(b)(4)*]

All salvageable topsoil or other suitable material must be removed from the affected land before being disturbed and segregated from other spoil. Mine operators must take efforts to avoid deterioration of topsoil including: (1) using vegetative cover or other means to prevent wind and water erosion; (2) preventing contamination by other acid or toxic material; and (3) ensuring the topsoil remains in a useable condition for sustaining vegetation. If sufficient topsoil does not exist on the affected land, other suitable material such as subsoil may be used as a topsoil substitute if the material is capable of establishing and sustaining vegetation. Substituted materials must be removed, segregated, and preserved like topsoil. S.D. Codified Laws § 45-6B-40, S.D. Admin. R. 74:29:07:07. To avoid loss of topsoil by erosion, diversion ditches may not discharge on topsoil storage areas, spoil, or areas containing other unconsolidated material. S.D. Admin. R. 74:29:07:09(8). Topsoil, spoil or other unconsolidated materials may not be pushed into or placed within 10 feet of the banks of a stream or in a location which may subject them to waters from flooding. S.D. Admin. R. 74:29:07:10(1). At reclamation, topsoil must be distributed as necessary to establish and sustain the required vegetation and the reclamation plan must contain an estimate of the amount of topsoil needed to complete reclamation. S.D. Codified Laws § 45-6B-40, S.D. Admin. R. 74:29:07:07(5).

REVEGETATION [*Proposed 43 CFR 3809.420(b)(5)*]

If reclamation will involve revegetation, the mine operator must establish “a diverse, effective and long-lasting vegetative cover that is capable of self-regeneration and at least equal in extent of cover to the natural vegetation of the surrounding area.” S.D. Codified Laws § 45-6B-39. Vegetative species and composition must be appropriate for the post-mining land use and introduced, naturalized or nonnative plant species may be used only if they are suitable for post-mining land use and are approved by the Board of Minerals and Environment. S.D. Admin. R. 74:29:07:06(1). Mine operators must develop methods for revegetation which incorporate reference areas, baseline data comparisons, or other procedures to determine post-reclamation revegetation success. S.D. Admin. R. 74:29:07:06(2), (3). Seeding and planting must be done in accordance with accepted agricultural practices and affected lands must be seeded during the first normal period of favorable planting conditions after final topsoil preparation. S.D. Admin. R. 74:29:07:06(4).

FISH AND WILDLIFE [*Proposed 43 CFR 3809.420(b)(6)*]

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A reclamation plan must include a description of critical resources and plans for mitigating potential impacts to such critical resources. Critical resources include: critical deer winter range; threatened or endangered species and other critical wildlife resource identified by the Department of Game, Fish and Parks; and cold water fish life propagation water. S.D. Codified Laws § 45-6B-92. During the mine planning process, MLRA regulations require the consideration of preventive measures to minimize harmful impacts to wildlife. S.D. Admin. R. 74:29:07:02(6).

ROADS AND STRUCTURES [Proposed 43 CFR 3809.420(c)(1)]

Drainage control structures must be used in connection with roads and railroad spurs as needed to control runoff and to minimize erosion, sedimentation, and flooding. S.D. Admin. R. 74:29:07:12(5). All buildings and structures constructed, used, or improved by the operator must be dismantled and removed from the mine site unless they are consistent with the approved post-mining land use. S.D. Admin. R. 74:29:07:13. All buildings and equipment associated with a millsite also must be removed. S.D. Admin. R. 74:29:05:04.

DRILL HOLES [Proposed 43 CFR 3809.420(c)(2)]

All underground mine openings and workings or previously existing underground mine workings intercepted by surface mining activities must be sealed during reclamation. S.D. Admin. R. 74:29:07:17. Under the South Dakota Mineral Exploration Act, reclamation is mandatory on all lands affected by mineral exploration activities, S.D. Codified Laws § 45-6C-3(1), including: the restoration of “each drill site and other affected land as nearly as possible to its original condition,” S.D. Codified Laws § 45-6C-33, and the capping, sealing, and plugging of each test hole immediately following drilling and probing. S.D. Codified Laws § 45-6C-28, S.D. Admin. R. 74:11:08.

ACID-FORMING, TOXIC OR OTHER DELETERIOUS MATERIALS [Proposed 43 CFR 3809.420(c)(3)]

Acid-forming or toxin-producing materials that have been mined must be handled and disposed in a manner that will control unsightliness and protect the hydrologic system from pollution. S.D. Admin. R. 74:29:07:05.

WASTE ROCK, TAILINGS AND LEACH PADS [Proposed 43 CFR 3809.420(c)(5)]

Spoil must be located to avoid blocking intermittent or perennial drainages; permanent spoil dumps must be approved by the Board of Minerals and Environment to be stable; the mine operator must take efforts to minimize water pollution from spoil; and all spoil material that is toxic or acid-forming or that will prevent reestablishment of vegetation of the reclaimed land surface must be properly disposed of during the mining operation unless such materials occur naturally on the land surface. S.D. Admin. R. 74:29:07:14. Diversion ditches may not discharge on storage areas containing top soil, spoil, or other unconsolidated material. S.D. Admin. R. 74:29:07:09(8). All refuse from the mining operation must be disposed in a manner creating the least amount of unsightliness and unproductive areas, and which will not pollute surface or ground water. S.D. Codified Laws § 45-6B-38, S.D. Admin. R. 74:29:07:05. Upon final reclamation, all tailings impoundments not designed for retention of fluids must be free draining with drainage not causing erosion or water pollution, interfering with the postclosure monitoring system, or limiting access to the site. S.D. Admin. R. 74:29:05:05. All areas of the affected land, including spoil piles, must be stabilized so as to control erosion and possible water and air pollution, including fugitive dust. S.D. Codified Laws § 45-6B-43, S.D. Admin. R. 74:29:07:09.

STABILITY, GRADING AND EROSION CONTROL [Proposed 43 CFR 3809.420(c)(6)]

All areas of the affected land, including spoil piles, must be stabilized during operation and reclamation activities so as to control erosion and possible water and air pollution, including fugitive dust. S.D. Codified Laws § 45-6B-43, S.D. Admin. R. 74:29:07:04. A mine operator must prevent or minimize slides, subsidence, or other damage

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to the mine site and surrounding area during mining and reclamation to the mine site and surrounding area. S.D. Codified Laws § 45-6B-42, S.D. Admin. R. 74:29:07:16. All highwalls which are not eliminated or reduced must be stabilized. S.D. Admin. R. 74:29:07:04(2).

Erosion control measures must be implemented during all phases of construction, operation, reclamation, and closure, and depressions for the accumulation of water are prohibited unless they are consistent with the approved post-mining land use. S.D. Admin. R. 74:29:07:04. Original drainages must be preserved as much as possible. S.D. Admin. R. 74:29:07:04(2)(4).

Diversion ditches and other surface runoff diversions must be stabilized by planting grasses and using rock, riprap, concrete, geosynthetic liners or filter media, or other methods to control erosion. S.D. Admin. R. 74:29:07:09(1), (2), (3). In addition, surface runoff diversions around milling or processing facilities using potentially toxic chemicals or materials must be capable of carrying the flow from the six-hour probable maximum precipitation event without causing erosion and all surface runoff diversions must be capable of carrying a minimum of the two-year, six-hour precipitation event without causing erosion. S.D. Admin. R. 74:29:07:09(6), (7). Diversion ditches may not discharge on storage areas containing top soil, spoil, or other unconsolidated material. S.D. Admin. R. 74:29:07:09(8).

The MLRA requires all reclaimed slopes and slope combinations to be: (1) visually and functionally compatible with the configuration of the surrounding area; (2) suitable for post-mining land use; and (3) structurally stable. S.D. Admin. R. 74:29:07:04(1). Landforms created as the result of grading, backfilling, or other topographic reconstruction of the affected land must blend in with, and complement, the visual continuity of the surrounding area. S.D. Admin. R. 74:29:07:04(7). Grading must control erosion and sedimentation, protect areas outside the affected land from slides or other damage, and minimize the need for long-term maintenance. S.D. Codified Laws § 45-6B-37, 42, S.D. Admin. R. 74:29:07:04(2). A reclamation plan must include grading, backfilling, and other topographic reconstruction techniques to achieve visually and functionally compatible contours. S.D. Admin. R. 74:29:07:03.

FINANCIAL GUARANTEE [*Proposed* 43 CFR 3809.500 – 599]

The Board of Minerals & Environment requires a surety to guarantee the costs of reclamation of public and private lands. S.D. Codified Laws § 45-6B-20. The amount of the surety is based on the cost of reclaiming only the extent of disturbed lands at any one time during the various stages of the mining operation. S.D. Codified Laws § 45-6B-21. The surety may be guaranteed by a corporate surety bond, cash, or government securities. S.D. Codified Laws §§ 45-6B-22, 23. The Board may require any operator whose mining operation employs cyanide leaching or any other chemical or biological leaching process to extract minerals from ore, to file additional proof of financial assurance based on the cost of responding to and remediating accidental releases of cyanide or other leaching agents into the environment. The additional financial assurance must be at least \$25,000 but not more than \$500,000. S.D. Codified Laws § 45-6B-20.1. Additionally, mining operations are required to do post closure monitoring and care for up to thirty years. Each mining operation must post financial assurance to guarantee the costs of postclosure care and maintenance over the postclosure period. S.D. Codified Laws § 45-6B-91.

If an operator violates a cease and desist order, the MLRA authorizes the South Dakota attorney general to institute a proceeding for forfeiture of the surety posted with the Board of Minerals and Environment. S.D. Codified Laws § 45-6B-66. If a surety is forfeited, the state is to reclaim the land in a manner consistent with the terms of MLRA. S.D. Codified Laws § 45-6B-68.

INSPECTION [*Proposed* 43 CFR 3809.600]

Any refusal to allow inspection by the Board of Minerals and Environment is a violation of a mining permit. S.D. Codified Laws § 45-6B-72. The Board of Minerals and Environment must inspect a proposed mine site before issuing a mining permit. S.D. Codified Laws § 45-6B-20. Compliance inspections at any reasonable time are

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authorized by the South Dakota Water Pollution Control Act, S.D. Codified Laws § 34A-2-45, and the Air Pollution Control Act. S.D. Codified Laws § 34A-1-41.

ENFORCEMENT ORDERS [*Proposed 43 CFR 3809.601*]

The MLRA authorizes the issuance of cease and desist orders for any violations of the MLRA, or permits or regulations thereunder. S.D. Codified Laws § 45-6B-49. Cease and desist orders also are authorized by the Mineral Exploration Act. S.D. Codified Laws § 45-6C-37. DENR can issue administrative orders to enforce the provisions of the Water Pollution Control Act, including emergency orders, S.D. Codified Laws §§ 34A-2-48, 53, 60, 68, and the Air Pollution Control Act. S.D. Codified Laws §§ 34A-1-44 through 51.

ENFORCEMENT -- PERMIT SUSPENSION OR REVOCATION [*Proposed 43 CFR 3809.602*]

The Board of Minerals and Environment may modify, suspend or revoke a mining permit for violation of a permit provision. S.D. Codified Laws § 45-6B-51. Under the Mineral Exploration Act, the Board of Minerals and Environment also can suspend exploration activities for violations of an exploration permit. S.D. Codified Laws § 45-6C-39. DENR may revoke, suspend or modify permits issued under the Water Pollution Control Act, S.D. Codified Laws §§ 34A-2-49 - 51, and the Air Pollution Control Act. S.D. Codified Laws § 34A-1-21.

ENFORCEMENT -- SUITS FOR INJUNCTIONS AND/OR DAMAGES [*Proposed 43 CFR 3809.604*]

The Board of Minerals and Environment may seek a temporary restraining order, a preliminary injunction, or a permanent injunction to prevent any further or continued violation of the MLRA. S.D. Codified Laws § 45-6B-52. The Mineral Exploration Act also authorizes temporary restraining orders, and preliminary and permanent injunctions. S.D. Codified Laws § 45-6C-40. DENR can seek to enjoin violations of the Water Pollution Control Act, S.D. Codified Laws §§ 34A-2-65, 72, 73, and the Air Pollution Control Act. S.D. Codified Laws § 34A-1-52. A violator of any mining permit provision potentially is liable for damages to the environment. S.D. Codified Laws § 45-6B-70. Any person who violates the Mineral Exploration Act, S.D. Codified Laws § 45-6C-45, the South Dakota Water Pollution Control Act, S.D. codified Laws § 34A-2-75 or the South Dakota Air Pollution Control Act, S.D. Codified Laws § 34A-1-47, also is liable for damages to the environment. Other suits for damages are governed by common law. The state may sue to recover natural resource damages under section 107(f) of the Comprehensive Environmental Response, Compensation and Liability Act. 42 U.S.C. § 9607(f).

CRIMINAL PENALTIES [*Proposed 43 CFR 3809.700*]

Any mining operation within one hundred feet of a lake or stream without a mining permit constitutes a misdemeanor crime. S.D. Codified Laws § 45-6B-71.1. Criminal violations of the South Dakota Water Pollution Control Act, S.D. Codified Laws § 34A-2-75, and the Air Pollution Control Act, S.D. Codified Laws § 34A-1-62, are misdemeanors punishable by jail terms or fines up to \$10,000 per day of violation.

CIVIL PENALTIES [*Proposed 43 CFR 3809.702*]

Civil penalties of \$100 to \$1000 per day of violation can be assessed for violations of a mining permit, S.D. Codified Laws § 45-6B-70, and mining operations which occur without a mining permit. S.D. Codified Laws § 45-6B-71. The Mineral Exploration Act also authorizes civil penalties for violations, which include fines from \$100 to \$1000 per day, or for damages to the environment, or both. S.D. Codified Laws § 45-6C-45. DENR can seek civil penalties of up to \$10,000 per day per violation or for damages to the environment of the state, or both, under the Water Pollution Control Act, S.D. Codified Laws §§ 34A-2-53, 75, and the Air Pollution Control Act. S.D. Codified Laws § 34A-1-39.

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CITIZEN SUITS [No provision in proposed rule]

The MLRA does not authorize citizen suits. The South Dakota Compensation for Damages Act does authorize suits by surface owners for damages caused by mining activities. S.D. Codified Laws § § 45-5A-1-11. The South Dakota Air Pollution Control Act preserves the right of any person to damages or other relief on account of injury to persons or property and to maintain any action or other appropriate proceedings. S.D., Codified Laws § 34A-1-54. The federal Clean Water Act authorizes citizen suits against persons who violate provisions of the Clean Water Act or state administrative orders that implement that Act.

UTAH

Mining operations, including reclamation activities, are regulated both by the Division of Oil, Gas and Mining (DOG M) within the Utah Department of Natural Resources (DNR) and the Department of Environmental Quality (DEQ). DOGM administers the Utah Mined Land Reclamation Act (MLRA).⁶ Utah Code Ann. § § 40-8-1 - 23, Utah Admin. R647.⁷ Before beginning surface mining operations, the MLRA requires that a notice of intention to conduct mining operations, including a reclamation plan, be approved by DOGM, Utah Code Ann. § 40-8-13, and the posting of surety with DOGM in an amount sufficient to reclaim the site. Utah Code Ann. § 40-8-14. The MLRA requires that during operations disturbed areas be reclaimed when no longer needed and areas which have been disturbed but are not routinely or currently used be kept in a safe, environmentally stable condition. Utah Admin. R647-4-107.6. Mining operations also must comply with the Utah Water Quality Act, Utah Code Ann. § § 19-5-101 - 120, Utah Admin. R317, and the Utah Air Conservation Act, Utah Code Ann. § § 19-2-101-127, Utah Admin. R307, administered by the DEQ.

AIR QUALITY [Proposed 43 CFR 3809.420(b)(1)]

Mining operations must comply with the Utah Air Conservation Act, Utah Code Ann. §§ 19-2-101-127, Utah Admin. R307; including construction and operating permit requirements, administered by the Division of Air Quality (DAQ). Operators must minimize fugitive dust generated by (1) site preparation, mining activities, and reclamation activities, Utah Admin. R307-205-5, and (2) grading, excavating, depositing, or natural erosion, or other causes associated with a tailings operation, Utah Admin. R307-205-6. The Utah air pollution regulations specify acceptable fugitive dust control measures and may require a dust control plan to be submitted to DAQ. In addition should crushing, screening etc. be done at the mine site an Approval Order (permit) is required to be obtained from DAQ before the operation can proceed, Utah Admin. R307-401. Air quality requirements are part of Utah's State Implementation Plan (SIP) required by the federal Clean Air Act. 42 U.S.C. § 7410.

WATER [Proposed 43 CFR 3809.420(b)(2)]

With its notice of intention, an operator must file an impact assessment identifying projected impacts to surface and ground water systems. Utah Admin. R647-4-109.1. If natural channels have been affected by mining operations, then reclamation must be performed such that the channels will be left in a stable condition with

⁶ The MLRA defines "reclamation" as:

actions performed during or after mining operations to shape, stabilize, revegetate, or otherwise treat the land affected in order to achieve a safe, stable, ecological condition and use which will be consistent with local environmental conditions.

Utah Code Ann. § 40-8-4(14). The MLRA specifically states that it is not intended to "abrogate or interfere with any powers or duties" of DEQ. Utah Code Ann. § 40-8-5(3).

⁷ The MLRA implementing regulations distinguish among exploration activities, Utah Admin. R647-2, small mining operations, Utah Admin. R647-3, and large scale mining operations. Utah Admin. R647-4.

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respect to actual and reasonably expected water flow so as to avoid or minimize future damage to the hydrologic system. Utah Admin. R647-4-111.2. Detailed hydrologic information must also be submitted to DEQ with an application for a ground water discharge permit.

SURFACE WATER [*Proposed 43 CFR 3809.420(b)(2)(i)*]

Point source discharges to surface waters from mining operations must obtain a Utah Pollutant Discharge Elimination System (UPDES) permit from the Division of Water Quality (DWQ) in DEQ. Utah Code Ann. § 19-5-107, Utah Admin. R317-8. The UPDES permit establishes limits on the amount of particular constituents which may be discharged. Utah Admin. R317-8-5. Mining operations must comply with the State's antidegradation policy and surface water quality standards which define the water quality goals of the State's water bodies by designating the use or uses to be made of the water and establishing criteria to protect those uses. Utah Admin. R317-2; 3.

ACID MINE DRAINAGE [*Proposed 43 CFR 3809.420(b)(2)(i)(B) and (ii)(B)*]

Acid generation potential associated with surface runoff or discharges must be assessed with UPDES permits and Water Quality standards referenced above. Acid generation potential associated with ground water releases are assessed and regulated as part of the ground water permit and standards referenced below.

GROUND WATER [*Proposed 43 CFR 3809.420(b)(2)(ii)*]

Mining operations must comply with Utah's Ground Water Quality Protection Rules which seek to prohibit the reduction of ground water quality, to prevent ground water contamination, and to provide protection of existing levels of ground water quality. A ground water discharge permit from DWQ is required for any person or entity proposing to construct or operate a facility which could result in a release of contaminants to ground water. Utah Code Ann. § 19-5-107, Utah Admin. R317-6-6.2. Detailed hydrologic information must be submitted to DEQ with an application for a ground water discharge permit. Utah Admin. R317-6-6.3. A ground water discharge permit requires the use of best available treatment technology to minimize discharges and that such discharge not impair present and future beneficial uses of the ground water. Utah Admin. R317-6-6.4. Utah has adopted an anti-degradation policy for ground water which provides for the maintenance and protection of current and probable future beneficial uses of ground water, protection of higher quality waters at their existing water quality, and prevention of degradation of water quality that would be injurious to existing or potential beneficial use. Utah Admin. R317-2-3. Utah has adopted ground water quality standards for potential ground water contaminants based on the maximum contaminant levels (MCLs) established by the Safe Drinking Water Act. Utah Admin. R317-6-2. Any operator found to be in violation of permit conditions or otherwise in an out-of-compliance status, must promptly take corrective actions including preparation of a Contamination Investigation and implementation of a Corrective Action Plan monitored by DEQ. Utah Admin. R317-6-6.15.

WETLANDS AND RIPARIAN AREAS [*Proposed 43 CFR 3809.420(b)(3)*]

Any placement of soils or other fill materials in "waters of the United States," including dry washes, isolated waters and wetlands, must be permitted by the U.S. Corps of Engineers pursuant to Section 404 of the Clean Water Act. 33 U.S.C. § 1344. In reviewing the permit application, the Corps applies guidelines for disposal of fill materials promulgated by the Environmental Protection Agency. 40 C.F.R. pt. 230. The guidelines require that the Corps look at alternatives to the proposed fill activity before approving the permit application. Before the permit can be issued, Utah must issue a document certifying that the permit limitations will be consistent with state water quality standards. 33 U.S.C. § 1341.

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If natural channels are to be affected by the mining operation, the operator must take appropriate actions to avoid or minimize the environmental damage, Utah Admin. R647-4-107.2, and reclamation must be performed such that the channels will be left in a stable condition with respect to actual and reasonably expected water flow so as to avoid or minimize future damage to the hydrologic system. Utah Admin. R647-4-111.2.

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SOIL AND GROWTH MATERIALS [*Proposed 43 CFR 3809.420(b)(4)*]

The MLRA requires operators to remove suitable soil material and store such material in a stable condition where practical so as to be available for reclamation. Utah Admin. R647-4-107.5. After final grading, soil materials must be redistributed on a stable surface so as to minimize erosion, prevent undue compaction, and promote revegetation. Utah Admin. R647-4-111.12.

REVEGETATION [*Proposed 43 CFR 3809.420(b)(5)*]

During revegetation, an operator must seed with adaptable perennial species that will grow on the site, provide basic soil and watershed protection, and support the post-mining land use. Utah Admin. R647-4-111.13. Revegetation is considered accomplished when the revegetation has achieved 70 percent of the pre-mining vegetative ground cover and the vegetation has survived three growing seasons following the last seeding, fertilization or irrigation, unless such practices are to continue as part of the post-mining land use. If the pre-mining vegetative ground cover is unknown, then the ground cover of adjacent undisturbed area that is representative of the pre-mining ground cover will be used as a standard. Utah Admin. R647-4-111.13.11.

FISH AND WILDLIFE [*Proposed 43 CFR 3809.420(b)(6)*]

With its notice of intention, an operator must file an impact assessment identifying projected impacts to state and federal threatened and endangered species or their critical habitat. Utah Admin. R647-4-109.2. The Utah Department of Natural Resources, Division of Fish and Wildlife reviews all mining and reclamation plans. Wildlife protection measures will be established on a site-specific basis before approval of a notice of intention. In addition, wildlife protection measures may be imposed in the ground water permit so as to prevent wildlife and public access to the facility.

ROADS AND STRUCTURES [*Proposed 43 CFR 3809.4209(c)(1)*]

In surface mining, and in open cuts for pads or roadways, high walls must be reclaimed and stabilized by backfilling against them or by cutting the wall back to achieve a slope angle of 45 degrees or less. Utah Admin. R647-4-111.7. When on-site roads and pads will be used after the cessation of operations, the operator must turn over the property with adequate surface drainage structures and in a condition suitable for continued use. Utah Admin. R 647-4-111.8. Structures, rail lines, utility connections, equipment and debris must be buried or removed. Utah Admin. R647-4-111-11. After completion of operations, an operator must take actions to minimize hazards to the public safety and welfare including the disposal of trash, scrap metal and wood, buildings, extraneous debris, and other materials incident to mining. Utah Admin. R647-4-111.1.12.

DRILL HOLES [*Proposed 43 CFR 3809.420(c)(2)*]

Drill holes must be plugged according to procedures established in the MLRA implementing regulations. DOGM may approve the plugging of drill holes in an alternative manner, if the operator can prove to the satisfaction of DOGM that another method will provide adequate protection to ground water and ensure long term stability of the land. Plugging must occur as soon as practical and drill holes cannot be left unplugged for more than 30 days without the approval of DOGM. Utah Code Ann. § 40-8-7(1)(c), Utah Admin. R647-4-108. After completion of operations, an operator must minimize hazards to the public safety and welfare including the permanent sealing of shafts and tunnels and the plugging of drill, core, or other exploratory holes in a manner consistent with the statutory and regulatory provisions of the MLRA. Utah Admin. R647-4-111.1.11, 12.

WASTE ROCK, TAILINGS AND LEACH PADS [*Proposed 43 CFR 3809.420(c)(5)*]

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Operators must minimize fugitive dust generated by grading, excavating, depositing, or natural erosion, or other causes associated with a tailings operation. Utah Admin. R307-12-6. All deleterious or potentially deleterious material must be safely removed from the site or left in an isolated or neutralized condition such that adverse environmental effects are eliminated or controlled. Utah Admin. R647-4-107.4, 111.4. Waste piles, spoil piles, and fills must be regraded to a stable configuration and must be sloped to minimize safety hazards and erosion while providing for successful revegetation. Utah Admin. R647-4-111.6. At reclamation, water impoundment structures, including tailings ponds, must be self-draining and mechanically stable unless shown to have sound hydrologic design and to be beneficial to the post-mining land use. Utah Admin. R647-4-111.9.

STABILITY, GRADING AND EROSION CONTROL [Proposed 43 CFR 3809.420(c)(6)]

Operators must minimize fugitive dust generated by (1) site preparation, mining activities, and reclamation activities, Utah Admin. R307-12-5, and (2) grading, excavating, depositing, or natural erosion, or other causes associated with a tailings operation. Utah Admin. R307-12-6. With its notice of intention, an operator must file an impact assessment identifying projected impacts on air quality, slope stability, erosion control, and public health and safety. Utah Admin. R647-4-109.4. Waste piles, spoil piles and fills must be regraded to a stable configuration and must be sloped to minimize safety hazards and erosion and provide for successful revegetation. Utah Admin. R647-4-111.6.

Mining operations and reclamation activities must be conducted so that sediment from disturbed areas is adequately controlled and the degree of erosion control must be appropriate for the site-specific and regional conditions of topography, soil, drainage, water quality, or other characteristics. Utah Admin. R647-4-107.3, 111.3.

An operator must leave the on-site area in a condition which is capable of supporting the post-mining land use. Utah Admin. R647-4-111.5. In surface mining, and in open cuts for pads or roadways, high walls must be reclaimed and stabilized by backfilling against them or by cutting the wall back to achieve a slope angle of 45 degrees or less. Utah Admin. R647-4-111.7.

FINANCIAL GUARANTEE [Proposed 43 CFR 3809.500 – 599]

Prior to commencement of operations an operator must provide surety in amount determined by DOGM based on the magnitude, type, and costs of approved reclamation activities planned for the land affected and the nature, extent, and duration of operations. Utah Code Ann. § 40-8-14(1)(2). The form of surety can be any combination of contractual agreements, collateral, a bond or other form of insured guarantee, deposited securities, or cash. Utah Code Ann. § 40-8-14(3). Surety requirements are coordinated with other similar requirements made effective on the operator by landowners and other governmental agencies. Utah Code Ann. §40-18-14(4)

A surety is forfeited if the operator fails or refuses to carry out the necessary reclamation as outlined in the approved notice of intention. The forfeited surety is to be used only to reclaim the land for which it was posted. Utah Code Ann. § 40-8-14(7), Utah Admin. R647-4-114.

INSPECTION [Proposed 43 CFR 3809.600]

The MLRA authorizes inspections to ensure compliance with the terms of the MLRA, at all reasonable times, on affected land and all related properties included in a notice of intention. Utah Code Ann. § 40-8-17(2). DOGM must conduct an inspection of the property within 30 days of a notice of termination or extended suspension of surface mining operations. Utah Code Ann. § 40-8-21(3). DEQ possesses similar inspection authorities under the Utah Water Quality Act, Utah Code Ann. § 19-5-113, and the Utah Air Conservation Act. Utah Code Ann. § 19-2-108(6). State notification and approval from the Board of Oil, Gas and Mining is required for shutting down mining operations. Mining operations may have to be reclaimed after 5 years of continued suspension and must be reclaimed after 10 years.

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ENFORCEMENT ORDERS [*Proposed 43 CFR 3809.601*]

The MLRA authorizes DOGM to hold an adjudicative proceeding “whenever it appears that any person, owner, or operator is violating any provision of [the MLRA], or any rule or order made under the authority” of the MLRA. Utah Code Ann. § 40-8-3(3)(a). If a violation is found, the MLRA authorizes abatement or compliance orders. Utah Code Ann. § 40-8-8(3)(c)(i). An emergency order may be issued if an immediate and significant danger of waste or other danger to the public health, safety, or welfare exists. Utah Admin. R647-5-106-18. Final orders are appealable to the Utah Supreme Court. Utah Code Ann. § 78-2-2(3)(e)(iv). DEQ also can issue administrative orders, including cessation of operation and penalties, under the Utah Water Quality Act, Utah Code Ann. § 19-5-104(1)(g), 19-5-111, 19-5-115, and the Utah Air Conservation Act. Utah Code Ann. § 19-2-110(1)(a).

ENFORCEMENT -- PERMIT SUSPENSION OR REVOCATION [*Proposed 43 CFR 3809.602*]

DOGM may withdraw an approved notice of intention to conduct surface mining operations if (1) an operator substantially fails to perform reclamation or conduct mining operations so that the approved reclamation plan can be accomplished, (2) an operator fails to provide and maintain the required surety, or (3) mining operations are continuously shut down for a period in excess of five years, unless the extended period is accepted upon the operator’s application. Utah Code Ann. § 40-8-16(2). If an approved notice of intention is withdrawn, all mining operations included within the notice must be suspended in accordance with procedures and a schedule approved by DOGM. Utah Code Ann. § 40-8-16(4). UPDES and ground water discharge permits also can be suspended by DEQ for violations of the statutory or regulatory provisions of the Utah Water Quality Act or permit conditions. Utah Code Ann. § 19-5-109, R317-6-6.7.

ENFORCEMENT – SUITS FOR INJUNCTIONS AND/OR DAMAGES [*Proposed 43 CFR 3809.604*]

If a violation of the MLRA is found in an administrative proceeding, a civil action can be brought to restrain the violator from continuing the violation. Utah Code Ann. § 40-8-8(3)(c)(ii). A court may issue temporary restraining orders, temporary injunctions, and permanent injunctions. Utah Code Ann. § 40-8-8(3)(d). DEQ also can seek injunctive relief under the Utah Water Quality Act, Utah Code Ann. § 19-5-115, and the Utah Air Conservation Act. Utah Code Ann. § 19-2-116. If an operator fails or refuses to conduct reclamation as outlined in the approved notice of intention, the Division’s costs and expenses to reclaim together with costs of collection including attorney’s fees, may be recovered in a civil action against the operator. Utah Admin. R647-4-114.1. The MLRA does not authorize actions for natural resources damages. However, the DEQ has filed complaints for natural resource damages in federal court under sections 107 and 113 of CERCLA, 42 U.S.C. §§9607, 9613.

CRIMINAL PENALTIES [*Proposed 43 CFR 3809.700*]

The MLRA authorizes criminal misdemeanor penalties up to \$10,000 for each violation for willful or knowing violations or omissions. Utah Code Ann. § 40-8-9(1)(a). In the case of an emergency order, Utah Admin. R647-5-106.18, the MLRA authorizes fines of \$10,000 per day for willful failure to comply. Utah Code Ann. § 40-8-9(1)(b). Criminal penalties up to \$50,000 per day of violation or six months imprisonment are authorized by the Utah Water Quality Act, Utah Code Ann. § 19-5-115, and the Utah Air Conservation Act authorizes criminal penalties of up to \$50,000 per day of violation. Utah Code Ann. § 19-2-115.

CIVIL PENALTIES [*Proposed 43 CFR 3809.702*]

The MLRA authorizes civil penalties for failing to comply with the terms of any injunction or order issued by a court. Penalties for civil contempt, not to exceed \$1,000 per day for each day of contempt, may be imposed in addition to fines imposed for violations of the MLRA. Utah Code Ann. § 40-8-8(3)(e). Civil penalties up to

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\$10,000 per day of violation also are authorized by the Utah Water Quality Act, Utah Code Ann. § 19-5-115, and the Utah Air Conservation Act. Utah Code Ann. § 19-2-115.

CITIZEN SUITS [No provision in proposed rule]

Citizen suits are not authorized by the MLRA or Utah environmental laws. Citizens may request that the Water Quality Board issue a declaratory order by submitting a petition to the Board. Utah Code Ann. § 63-46b-21, Utah Admin. R317-1-8.4. The federal Clean Water Act authorizes citizen suits against persons who violate provisions of the Clean Water Act or state administrative orders that implement that Act.

WASHINGTON

In Washington, mining activities are regulated by the Department of Natural Resources (WADNR), which regulates surface mining operations and reclamation, and the Department of Ecology (WADOE) which regulates air, ground water and surface water quality, and solid and hazardous wastes. Wash. Rev. Code § 43.21A. The WADNR administers the Washington Surface Mined Land Reclamation Act (SMLRA). Wash. Rev. Code tit. 78, ch. 44. The SMLRA requires all surface mining operations to obtain a reclamation permit from the WADNR. Wash. Rev. Code § 78.44.081. A reclamation permit cannot be issued without an approved reclamation plan, Wash. Rev. Code § 78.44.091, and the submission of a performance security conditioned upon the faithful performance of the operating and reclamation requirements of the SMLRA. Wash. Rev. Code § 78.44.087. Reclamation activities are to be conducted concurrent with surface mining and each segment of a mine must be reclaimed within two years of the completion of surface mining on that segment. Wash. Rev. Code §§ 78.44.111, 131. In addition to the requirements imposed by the SMLRA, mining operations must comply with the Washington Water Pollution Control Law, Wash. Rev. Code tit. 90, ch. 48, Wash. Admin. Code tit. 173, ch. 216, 220, 225, 240, and the Washington Clean Air Act, Wash. Rev. Code tit. 70, ch. 94, Wash. Admin. Code tit. 173, ch. 400, 401, 460, 470, administered by the WADOE. The WADOE is the “lead state agency” for mining operations which include a metallic mineral processing plant. Wash. Admin. Code § 197-11-938(12).

AIR QUALITY [Proposed 43 CFR 3809.420(b)(1)]

All mining operations must comply with the Washington Clean Air Act, Wash. Rev. Code tit. 70, ch. 94, and implementing regulations, Wash. Admin. Code tit. 173, ch. 400-495, as administered by the WADOE. Mining operations must obtain new source construction approval from the WADOE, Wash. Rev. Code ch. 43.21A, 70.94, Wash. Admin. Code ch. 173-400, 173-460, and may need to comply with the prevention of significant deterioration air quality program. Wash. Rev. Code ch. 43.21A, 70.94, Wash. Admin. Code ch. 173-400-141. Surface mining operations must “take reasonable precautions to prevent fugitive dust from becoming airborne and shall maintain and operate the source to minimize emissions.” Wash. Admin. Code § 173-400-040(8)(a). Air quality requirements are part of Washington’s State Implementation Plan (SIP) required by the federal Clean Air Act. 42 U.S.C. § 7410.

WATER [Proposed 43 CFR 3809.420(b)(2)]

If surface mining occurs on flood plains or in river or stream channels, a reclamation plan must include a hydrogeologic evaluation which outlines measures that protect against, or mitigate, avulsion and erosion. Wash. Rev. Code § 78.44.091(1)(i). A hydrologic analysis also is required for mining which impacts ground water. Wash. Rev. Code § 78.44.091(1)(j). If mining exposes natural materials that may create polluting conditions, the final ground surface must be graded so that surface water drains away from these materials. Wash. Rev. Code § 78.44.141(4)(g). Detailed hydrologic information is required for the issuance of permits by the WADOE pursuant to the Washington Water Pollution Control Law.

SURFACE WATER [Proposed 43 CFR 3809.420(b)(2)(i)]

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Mining operations with point source discharges to surface waters must obtain a National Pollutant Discharge Elimination System (NPDES) permit from the WADOE. Wash. Rev. Code § 90.48.260, Wash. Admin. Code § 173-220. An applicant for an NPDES permit must submit information on water supply volumes, water use, waste water flow, characteristics and disposal methods, planned improvements, storm water treatment, plant operation, materials and chemicals used, production, and other information required by the WADOE. Surface water monitoring is required for all surface mining operations with an NPDES permit. Wash. Admin. Code § 173.220.210. Permitted discharges from a surface mining operation must meet surface water quality standards, Wash. Admin. Code § 173.204A.160(3), and comply with the State's antidegradation policy. Wash. Admin. Code § 173.201A.070. The SMLRA requires that reclamation activities establish self-sustaining vegetation and conditions of slope stability, surface water quality, and appearance before release of the performance bond. Wash. Rev. Code § 78.44.141(7).

ACID MINE DRAINAGE [*Proposed 43 CFR 3809.420(b)(2)(i)(B) and (ii)(B)*]

All metals mining and milling operations are required to accurately identify the acid generating properties of the waste rock and to develop a strategy for encapsulating the potentially toxic material from the environment. The applicant must develop a plan for approval by WADNR and the WADOE that contains the identification of the acid generating properties, together with the encapsulation strategy and a reclamation plan in order to prevent the release of heavy metals and acid drainage to the environment. Wash. Rev. Code § 78.56.100. If surface mining exposes materials which may generate pollution, including acid-forming materials, an operator must grade the final ground surface so that surface water drains away from these materials and take other actions required by the WADNR. Wash. Rev. Code § 78.44.141(4)(g).

GROUND WATER [*Proposed 43 CFR 3809.420(b)(2)(ii)*]

All mining operations with the potential to degrade ground water must obtain a waste discharge permit from the WADOE. Wash. Rev. Code § 90.48.160. The waste water discharge permit will establish, on a site-specific basis, design requirements, performance standards, and monitoring criteria to protect ground water quality at a mine site. Wash. Admin. Code §§ 173.216.110, 125. Permitted discharges from surface mining operations must preserve or protect beneficial uses for ground water, Wash. Admin. Code § 173.216.110(1)(d), and comply with the State's antidegradation policy. Wash. Admin. Code § 173.200.030.

WETLANDS AND RIPARIAN AREAS [*Proposed 43 CFR 3809.420(b)(3)*]

Any placement of soils or other fill materials in "waters of the United States," including dry washes, isolated waters and wetlands, must be permitted by the U.S. Corps of Engineers pursuant to Section 404 of the Clean Water Act. 33 U.S.C. § 1344. In reviewing the permit application, the Corps applies guidelines for disposal of fill materials promulgated by the Environmental Protection Agency. 40 C.F.R. pt. 230. The guidelines require that the Corps look at alternatives to the proposed fill activity before approving the permit application. Before the permit can be issued, Washington must issue a document certifying that the permit limitations will be consistent with state water quality standards. 33 U.S.C. § 1341.

At reclamation, the SMLRA requires that drainages be "graded and contain adequate energy dissipation devices so that essentially natural conditions of water velocity, volume, and turbidity are reestablished within six months of reclamation." Wash. Rev. Code § 78.44.141(5). In addition, ditches and other artificial drainages must be constructed at reclamation "to control surface water, erosion, and siltation and to direct runoff to a safe outlet" and diversion ditches must be graded to limit erosion and siltation. Wash. Rev. Code § 78.44.141(5).

SOIL AND GROWTH MATERIAL [*Proposed 43 CFR 3809.420(b)(4)*]

Appendix D: Mining Regulatory Programs in the Western United States

Reclamation plans must detail measures an operator will use to conserve topsoil. Wash. Rev. Code § 78.44.091(1)(k). The SMLRA minimum reclamation standards require mine operators to “carefully stockpile all topsoil on the site for use in reclamation” before surface mining begins. Miners may not sell topsoil or mix topsoil needed for reclamation with “sterile soils.” Wash. Rev. Code § 78.44.141(1). Topsoil must be restored as needed to promote effective revegetation and stabilize slopes and mine floors. Wash. Rev. Code § 78.44.141(4)(f).

REVEGETATION [Proposed 43 CFR 3809.420(b)(5)]

The basic objective of reclamation is “to reestablish on a continuing basis the vegetative cover, slope stability, water conditions, and safety conditions” consistent with the post-mining use of the disturbed land. Wash. Rev. Code § 78.44.131. Revegetation is required “to stabilize slopes, generate new topsoil, reduce erosion and turbidity, mask rectilinear contours, and restore the scenic value” of the disturbed land. Wash. Rev. Code § 78.44.141(7). Revegetation must reestablish self-sustaining vegetation and conditions of slope stability, surface water quality, and appearance before release of a reclamation permit or performance bond. Wash. Rev. Code § 78.44.141(7)(f). Revegetation must begin during the first proper growing season after restoration of slopes and generally must include “diverse evergreen and deciduous trees, shrubs, grasses, and deep-rooted ground cover.” Wash. Rev. Code § 78.44.141(7)(a), (c). The WADNR can require an operator to use “irrigation, fertilization and importation of clay or humus-bearing soils to establish effective vegetation.” Wash. Rev. Code § 78.44.141(7)(e).

FISH AND WILDLIFE [Proposed 43 CFR 3809.420(b)(6)]

The Washington Department of Wildlife reviews all applications for a reclamation permit and site-specific wildlife protection requirements will be included in a reclamation permit issued under SMLRA.

ROADS AND STRUCTURES [Proposed 43 CFR 3809.420(c)(1)]

The SMLRA does not specify requirements for the removal of structures from a mine site but such requirements will be contained in an operating or reclamation permit.

DRILL HOLES [Proposed 43 CFR 3809.420(c)(2)]

The SMLRA does not specify requirements for sealing of exploration wells but such requirements will be contained in an operating or reclamation permit.

WASTE ROCK, TAILINGS AND LEACH PADS [Proposed 43 CFR 3809.420(c)(5)]

The SMLRA specifies reclamation setbacks for unconsolidated deposits and consolidated materials within mines permitted after June 30, 1993. Wash. Rev. Code § 78.44.121. A “reclamation setback” is defined as “those lands along the margins of surface mines wherein minerals and overburden shall be preserved in sufficient volumes to accomplish reclamation.” Wash. Rev. Code § 78.44.031(12). Waste piles must be graded to comply with the SMLRA minimum reclamation standards for different types of surface mined slopes intended to stabilize the disturbed land and blend the reclaimed land with the surrounding area. Wash. Rev. Code § 78.44.141(4). Natural and other drainage channels must be kept free of “equipment, wastes, stockpiles, and overburden.” Wash. Rev. Code § 78.44.141(5).

STABILITY, GRADING AND EROSION CONTROL [Proposed 43 CFR 3809.420(c)(6)]

Surface mining operations must “take reasonable precautions to prevent fugitive dust from becoming airborne and shall maintain and operate the source to minimize emissions.” Wash. Admin. Code § 173-400-040(8)(a). The basic objective of reclamation is “to reestablish on a continuing basis the vegetative cover, slope stability, water conditions, and safety conditions” consistent with the post-mining land use. Wash. Rev. Code § 78.44.131.

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Reclamation plans must contain information on slope stability. Wash. Rev. Code § 78.44.091(1)(k). The SMLRA specifies minimum reclamation standards for different types of surface mined slopes. Such standards are intended to stabilize the disturbed land and blend the reclaimed land with the surrounding area. Wash. Rev. Code § 78.44.141(4). Topsoil must be restored as needed to promote effective revegetation and stabilize slopes. Wash. Rev. Code § 78.44.141(7).

Reclamation plans must contain information on post-mining erosion and drainage control. Wash. Rev. Code § 78.44.091(1)(k). If surface mining exposes materials which may generate pollution, including acid-forming materials, an operator must grade the final ground surface so that surface water drains away from these materials and take other actions required by the WADNR. Wash. Rev. Code § 78.44.141(4)(g).

Reclamation plans must contain information on control of fill material, Wash. Rev. Code § 78.44.091(1)(k), and include maps showing contours and specifications for surface gradient restoration appropriate to the post-mining land use. Wash. Rev. Code § 78.44.091(2)(c). The floors of mines must “generally grade gently into post-mining drainages” to prevent erosion. Wash. Rev. Code § 78.44.141(4)(e). All grading must be done with non-noxious, noncombustible, and relatively incompactible solids. Wash. Rev. Code § 78.44.141(4)(h). Final reclaimed slopes must be left roughly graded, preserving equipment tracks, depressions, and small mounds “to trap clay-bearing soil and promote natural vegetation.” Wash. Rev. Code § 78.44.141(4)(i).

FINANCIAL GUARANTEE [Proposed 43 CFR 3809.500 – 599]

WADNR will not issue a reclamation permit until a performance security has been deposited with the department. The performance security may be bank letters of credit, cash deposits, negotiable securities, assignment of bank accounts, assignments of interests in real property or a corporate surety bond. The amount of the performance security is determined by WADNR and is based on the estimated costs of completing reclamation according to the approved reclamation plan. Wash. Rev. Code § 78.44.087, Wash. Admin. Code §§ 332-18-120, 130, 140. WADNR may increase or decrease the amount of the performance security at any time to compensate for alterations in the conditions that affect the costs of reclamation. Wash. Rev., Code § 78.44.087(5). If an operator abandons a surface mine prior to completing reclamation, the WADNR may conduct reclamation with the costs of such reclamation to be deducted from the performance bond posted by the operator. Wash. Rev. Code § 78.44.240.

INSPECTION [Proposed 43 CFR 3809.600]

The WADNR may inspect a mine site at any time to determine compliance with the SMLRA, implementing regulations thereunder, and reclamation permits. Wash. Rev. Code § 78.44.161, Wash. Admin. Code § 332-18-050. The WADOE also may inspect mining operations at all reasonable times under the Water Pollution Control Law, Wash. Rev. Code § 90.48.090, and the Washington Clean Air Act. Wash. Admin. Code § 173-400-105(3).

ENFORCEMENT ORDERS [Proposed 43 CFR 3809.601]

The WADNR may issue an order to rectify deficiencies for surface mining in any manner not consistent with the SMLRA, implementing regulations, an approved reclamation plan, or a reclamation permit. Wash. Rev. Code § 78.44.190, Wash. Admin. Code § 332-18-05001. If this noncompliance creates an immediate danger to the public health, safety, welfare, or environment, the WADNR may issue an emergency order to suspend surface mining. Wash. Rev. Code § 78.44.200. The WADNR also may issue an order to suspend surface mining for failure to comply with an order to rectify deficiencies. Wash. Rev. Code § 78.44.210. The WADNR orders may include administrative penalties up to \$10,000. Wash. Rev. Code § 78.44.250. The WADOE can issue administrative orders to enforce the Water Pollution Control Law, Wash. Rev. Code § 90.48.120(2), and the Washington Clean Air Act. Wash. Rev. Code § 70.94.141(3), 331.

ENFORCEMENT -- PERMIT SUSPENSION OR REVOCATION [Proposed 43 CFR 3809.602]

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The WADNR may order suspension of surface mining if operators fail to comply with an administrative order to rectify deficiencies. Wash. Rev. Code § 78.44.210. The WADNR may cancel a reclamation permit upon determining that a surface mine has been abandoned without completion of reclamation. Wash. Rev. Code § 78.44.230. In the event of such abandonment, the WADNR may conduct reclamation with costs paid from the posted performance bond. Wash. Rev. Code § 78.44.240. The WADOE can suspend or revoke permits issued pursuant to the authority of the Water Pollution Control Law and the Washington Clean Air Act.

ENFORCEMENT -- SUITS FOR INJUNCTIONS AND/OR DAMAGES [*Proposed 43 CFR 3809.604*]

The SMLRA authorizes legal actions to enjoin surface mining operations which continue in violation of an WADNR suspension order. Wash. Rev. Code § 78.44.210. The WADOE can seek injunctive relief for violations of the Water Pollution Control Law, Wash. Rev. Code § 90.48.037, and the Washington Clean Air Act. Wash. Rev. Code § 70.94.425. The SMLRA does not authorize damage actions. The Water Pollution Control Act authorizes the assessment of natural resource damages for deaths or injuries to fish, animals, vegetation, or other resources resulting from violations of the Act, including significant degradation of water quality. Wash. Rev. Code § 90.48.142.

CRIMINAL PENALTIES [*Proposed 43 CFR 3809.700*]

Operating without a valid reclamation permit is a gross misdemeanor. Wash. Rev. Code § 78.44.260. Criminal penalties authorized by the Water Pollution Control Law, Wash. Rev. Code § 90.48.140, and the Washington Clean Air Act. Wash. Rev. Code § 70.94.430, include fines up to \$10,000 and/or imprisonment up to one year.

CIVIL PENALTIES [*Proposed 43 CFR 3809.702*]

The SMLRA authorizes civil penalties up to \$10,000 for failing to comply with a WADNR order or the SMLRA. Wash. Rev. Code § 78.44.250, Wash. Admin. Code §§ 332-18-05003, 05004. Civil penalties up to \$10,000 per day per violation also are authorized by the Water Pollution Control Law, Wash. Rev. Code § 90.48.144, and the Washington Clean Air Act. Wash. Rev. Code § 70.94.431.

CITIZEN SUITS [No provision in proposed rule]

Citizen suits are not authorized by the SMLRA, the Water Pollution Control Law, or the Washington Clean Air Act. The federal Clean Water Act authorizes citizen suits against persons who violate provisions of the Clean Water Act or state administrative orders that implement that Act.

WYOMING

Mining operations, including reclamation, are regulated pursuant to the Wyoming Environmental Quality Act (WEQA) by the Department of Environmental Quality (DEQ). Wyo. Stat. Tit. 35, ch. 11. WEQA is a comprehensive environmental statute that regulates hazardous waste, solid waste, water quality, air quality, and mining reclamation. Mining operations must obtain a mining permit from the DEQ, Land Quality Division (LQD).⁸ Wyo. Stat. § 35-11-405. A mining permit cannot be issued without surface landowner consent and an

⁸ WEQA defines “reclamation” as: the process of reclaiming an area of land affected by mining to use for grazing, agricultural, recreational, wildlife purposes or any other purpose of equal or greater value. The process may require contouring, terracing, grading, resoiling, revegetation, compaction and stabilization, settling ponds, water impoundments, diversion ditches, and other water treatment facilities in order to eliminate water diminution to the extent that existing water sources are adversely affected, pollution, soil and wind erosion, or flooding resulting from mining or any other activity to accomplish the reclamation of the land affected to a useful purpose.

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approved mining and reclamation plan. Wyo. Stat. §§ 35-11-406(b)(xii), 35-11-405. All surface mining and reclamation activities must be conducted in conformity with a permittee's approved plan. Wyo. Stat. § 35-11-415(b)(ii). Performance bonds must be posted with LQD before commencing mining. Wyo. Stat. § 35-11-417. Reclamation must begin as soon as possible after mining begins and continue concurrently. LQD Rules ch. 111, § 2(k). Mining operations also must comply with the water quality control provisions of WEQA as administered by the DEQ Water Quality Division (WQD), Wyo. Stat. §§ 35-11-301 - 311, and the air quality control provisions of WEQA as administered by the DEQ Air Quality Division (AQD). Wyo. Stat. § 35-11-201 - 212.

AIR QUALITY [Proposed 43 CFR 3809.420(b)(1)]

Mining operations must comply with the air quality control provisions of WEQA as administered by the Air Quality Division (AQD). Wyo. Stat. § 35-11-201 - 212, AQD Rules. AQD issues construction and operating permits for mining facilities which emit air pollutants, including fugitive dust. AQD Rules ch. I, § 21. The Wyoming air program includes ambient air quality standards for particulate matter, AQD Rules ch. I, § 3, and contains measures to control particulate emissions. AQD Rules ch. I, § 14. Air quality requirements are part of Wyoming's State Implementation Plan (SIP) required by the federal Clean Air Act. 42 U.S.C. § 7410.

WATER [Proposed 43 CFR 3809.420(b)(2)]

An applicant for a mining permit must provide information on surface and ground waters and immediate drainage areas. LQD Rules ch. 11, § 2(a)(i)(G), (H). Water flowing through or by mining operations must meet water quality standards. LQD Rules ch. 111, § 2(f)(vi), WQD Rules ch. I, VIII. Throughout mining and reclamation operations and for a five-year period after termination of the operation, an operator must prevent water pollution on affected land by "plantings and revegetation, the construction of drainage systems and treatment facilities...and the casing, sealing of boreholes, shafts, and wells" consistent with water quality standards. Wyo. Stat. § 35-11-415(b)(viii).

SURFACE WATER [Proposed 43 CFR 3809.420(b)(2)(i)]

Mining operations with point source discharges to surface water must obtain a National Pollutant Discharge Elimination System permit from the Water Quality Division (WQD) of DEQ. Wyo. Stat. § 35-11-302(a)(v), WQD Rules ch. XVIII. Throughout mining and reclamation operations and for a five-year period after termination of the operation, an operator must prevent water pollution on affected land by "plantings and revegetation, the construction of drainage systems and treatment facilities...and the casing, sealing of boreholes, shafts, and wells" consistent with water quality standards. Wyo. Stat. § 35-11-415(b)(viii).

GROUND WATER [Proposed 43 CFR 3809.420(b)(2)(ii)]

Mining operations must comply with State water quality standards that are prescribed to protect ground water "from pollution which may result from surface mining operations." WQD Rules ch. VIII, § 4(a)(iv). Water flowing through or by a mining operation must meet ground water quality standards. LQD Rules ch. 111, § 2(f)(vi), WQD Rules ch. VIII. Throughout mining and reclamation operations and for a five-year period after termination of the operation, an operator must prevent ground water pollution on affected land by "plantings and revegetation, the construction of drainage systems and treatment facilities...and the casing, sealing, of boreholes, shafts, and wells" consistent with water quality standards. Wyo. Stat. § 35-11-415(b)(viii).

ACID MINE DRAINAGE [Proposed 43 CFR 3809.420(b)(2)(i)(B) and (ii)(B)]

Wyo. Stat. § 35-11-103(e)(i).

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All topsoil removed from a permitted area must be protected from acid or toxic materials while it is stockpiled. Wyo. Stat. § 35-11-406(b)(viii), LQD-Non-Coal Rules Ch. III, Sect. 2(c). An operator may be required to have analyses made of spoil material in order to determine if it will be a source of water pollution through reaction with leaching by surface water. If it is determined that this condition may exist, the operator must describe proposed procedures for eliminating this condition in the reclamation plan. All overburden and spoil material that is determined to be toxic or acid-forming, unless such materials occur naturally on the land surface, must be properly disposed of during the mining operation. LQD-Non-Coal Rules Ch. III, Sect. 2(c)(iv). If an operator encounters unanticipated acid-forming materials during mining operations that are not addressed in the operator's mining or reclamation plan, the operator must notify the LQD Administrator no later than five days after making the discovery. LQD-Non-Coal Rules Ch. III, Sect. 2(1).

A reclamation plan must include a plan for ensuring that all acid-forming materials uncovered during or created by the mining process are promptly treated or disposed of during the mining process in a manner designated to prevent pollution of surface or subsurface water or threats to human or animal health and safety. Wyo. Stat. § 35-11-406(b)(ix).

WETLANDS AND RIPARIAN AREAS [Proposed 43 CFR 3809.420(b)(3)]

Any placement of soils or other fill materials in "waters of the United States," including dry washes, isolated waters and wetlands, must be permitted by the U.S. Corps of Engineers pursuant to Section 404 of the Clean Water Act. 33 U.S.C. § 1344. In reviewing the permit application, the Corps applies guidelines for disposal of fill materials promulgated by the Environmental Protection Agency. 40 C.F.R. pt. 230. The guidelines require that the Corps look at alternatives to the proposed fill activity before approving the permit application. Before the permit can be issued, Wyoming must issue a document certifying that the permit limitations will be consistent with state water quality standards. 33 U.S.C. § 1341.

Surface water must be diverted around a mining operation to "control water pollution; control unnecessary erosion; protect the on-going operation; [and] protect the water rights of down-stream users." LQD Rules ch. 111, § 2(e)(i). All overburden, spoil material, and refuse material must be located to avoid blocking drainages and flood plains in order to minimize loss and spread of the material by water erosion. LQD Rules ch. 111, § 2(c)(iv)(B).

Spoil, topsoil, or other unconsolidated material may not be pushed into, or placed below the flood level of, a stream except during the approved construction of the diversion of the stream. LQD Rules ch. 111, § 2(f)(i). The banks of a diverted stream must be protected by vegetation and, where necessary, rock, riprap or similar measures to minimize erosion and degradation of water quality. LQD Rules ch. 111, § 2(f)(iii), (iv). Mining on the flood plain of a stream is prohibited if such mining would cause the uncontrolled diversion of the stream during periods of high water. LQD Rules ch. 111, § 2(f)(v).

SOIL AND GROWTH MATERIAL [Proposed 43 CFR 3809.420(b)(4)]

All topsoil must be removed from all areas to be affected by surface mining operations. LQD Rules ch. 111, § 2(c)(i). Operators must protect "removed and segregated topsoil from wind and water erosion, and from acid or toxic materials, and preserve in a useable condition for sustaining vegetation when restored in reclamation" or do the same for suitable subsoil. Wyo. Stat. § 35-11-415(b)(iii), LQD Rules ch. 111, § 2(c)(i). If topsoil will not be used promptly, it must be stockpiled on stable areas to minimize wind and water erosion and unnecessary compaction, including the use of vegetative cover. LQD Rules ch. 111 § 2(c)(i)(B). If topsoil has been stockpiled for more than one year, LQD may require the operator to conduct nutrient analyses to determine if soil amendments are necessary. LQD Rules ch. 111, § 2(c)(i)(C). Subsoil must be handled like topsoil unless the subsoil is not suitable as a plant-growth medium or is not needed. LQD Rules ch. 111, § 2(c)(ii). If insufficient topsoil or subsoil is available, an operator may use suitable overburden as a topsoil substitute. LQD Rules ch. 111, § 2(c)(iii). All topsoil must be removed from areas to be used for piling spoil material before beginning the stockpiling of such material. To reclaim tailings impoundments, operators must remove and store all topsoil

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present within the tailings basin and the topsoil must be replaced and revegetated at reclamation. LQD Rules ch. 111, § 2(h)(ii). Topsoil, or suitable substitute, must be distributed at an approximate uniform depth on the surface of all affected lands consistent with the post-mining land use. LQD Rules ch. 111, 2(c)(i)(E).

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REVEGETATION [Proposed 43 CFR 3809.420(b)(5)]

Revegetation of all affected lands must be consistent with the reclamation plan and the future use of the land. LQD Rules ch. 111, § 2(d)(i). Operators must plant native or superior self-regenerating vegetation on disturbed lands. Wyo. Stat. § 35-11-415(b)(vii). After grading, contouring, and the replacement of topsoil, initial revegetative efforts should facilitate the “retention of moisture” and the “control of erosion.” LQD Rules ch. 111, § 2(d)(iii). Seeding of affected lands must be conducted during the first normal period for favorable planting conditions after final preparation, and any rills or gullies that would preclude successful establishment of vegetation or post-mining land use must be removed or stabilized. LQD Rules ch. 111, § 2(d)(iv). Seed types will depend on climatic and soil conditions prevailing in the permit area and the future use of the land, and species planted in permanent cover must be self-renewing. LQD Rules ch. 111, § 2(d)(iv). Introduced, naturalized, or non-indigenous native plant species may be used if they support the approved post-mining land use. LQD Rules ch. 111, § 2(d)(v).

LQD will deem revegetation to be complete when: (1) the vegetative cover of the affected land is shown to be capable of renewing itself under natural conditions prevailing at the site; (2) the vegetative cover and total ground cover are at least equal to the cover on the area before mining; (3) the productivity is at least equal to the productivity on the area before mining; (4) the species diversity and composition are suitable for the approved post-mining land use; (5) the revegetated area is capable of withstanding grazing pressure at least comparable to that which the land could have sustained prior to mining unless grazing is prohibited; and (6) the foregoing requirements are met for at least two consecutive years of the bonding period. LQD Rules ch. 111, § 2(d)(vi). Operators must protect young vegetative growth from being destroyed by livestock with fences or other approved techniques for at least two years or until the vegetation is capable of renewing itself. LQD Rules ch. 111, § 2(d)(viii). LQD can retain a portion of a performance bond for at least five years to assure proper revegetation of a reclaimed area. Wyo. Stat. § 35-11-423(a), LQD Rules ch. 111, § 2(d)(vi).

FISH AND WILDLIFE [Proposed 43 CFR 3809.420(b)(6)]

Mine operators must restore wildlife habitat on affected land “in a manner commensurate with or superior to habitat conditions which existed before the land became affected.” LQD Rules ch. III, § 2(a)(ii). An application for a mining permit must contain information on indigenous wildlife in the permit area. LQD Rules ch. II, §§ 2(a)(i)(E)(I). If critical or important habitat or migration route disruption is likely, the Game and Fish Department must determine the types and numbers of wildlife to be displaced. LQD Rules ch. II, § 2(a)(i)(E)(II). Violations of the WEQA, or any rule or regulation promulgated thereunder, that cause the death of fish, aquatic life or game or bird life makes an operator liable to pay the state for the reasonable value of the wildlife destroyed, in addition to other penalties provided by the WEQA. Wyo. Stat. § 35-11-903; Wyo. ADC, ch. II, § 2 (definitions).

ROADS AND STRUCTURES [Proposed 43 CFR 3809.420(c)(1)]

Roads and railroad spurs must include drainage control structures to control surface water runoff and minimize erosion, sedimentation, and flooding, and culverts must be installed at prominent drain ways. LQD Rules ch. 111, § 2(i)(iii), (iv). All buildings and structures must be removed, unless retention of the buildings and structures will benefit future use of the reclaimed land. (LQD Rules ch. 111, § 2(j).

DRILL HOLES [Proposed 43 CFR 3809.420(c)(2)]

All drill holes must be capped, sealed or plugged pursuant to the standards contained in WEQA in order to prevent impacting water quality. Wyo. Stat. § 35-11-404, LQD Rules ch. VIII, § 2(a). Each drill site must be restored to its original condition, including any lands disturbed by the drilling. LQD Rules ch. VIII, § 2(b). Any person conducting exploratory drilling must post a performance bond with LQD that cannot be released until LQD has inspected and evaluated the hole completion and surface restoration. LQD Rules ch. VIII, § 3, 4(a). Performance bonds will be forfeited if a driller fails to adequately fill a drill hole and restore affected lands. LQD Rules ch. VIII, § 4(b). All shafts and adits to underground mine workings must be properly sealed at closure.

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LQD Rules ch. IV, § 2(a)(ii). Failure to comply with these requirements may impose criminal liability. Wyo. Stat. § 35-11-404(k). In addition, throughout mining and reclamation operations and for a five-year period after termination of the operation, an operator must prevent surface and ground water pollution on affected land by “the casing, sealing, of boreholes, shafts, and wells.” Wyo. Stat. § 35-11-415(b)(viii).

ACID-FORMING, TOXIC, OR OTHER DELETERIOUS MATERIALS. [Proposed 43 CFR 3809.420(c)(3)]

All overburden and spoil material that is determined to be toxic or acid-forming, unless such materials occur naturally on the land surface, must be properly disposed of during the mining operation. LQD-Non-Coal Rules Ch. III, Sect. 2(c)(iv).

WASTE ROCK, TAILINGS AND LEACH PADS [Proposed 43 CFR 3809.420(c)(5)]

Operators must “cover, bury, impound, contain, or otherwise dispose” of toxic acid-forming material or any material hazardous to health or safety or which threatens surface or ground water. Wyo. Stat. § 35-11-415(b)(iv). All overburden, spoil material and refuse material must be segregated from the topsoil and subsoil; stockpiled in a manner to facilitate the earliest reclamation consistent with the approved reclamation plan; and located so as to avoid blocking drainages and flood plains, thereby minimizing loss and spread of the material due to water erosion. LQD Rules ch. 111, § 2(c)(iv)(A), (B). Permanent overburden, spoil, or refuse piles must be graded and contoured so that the piles are stabilized against wind and water erosion, a permanent drainage system must be established, and the piles must be revegetated. LQD Rules ch. 111, § 2(c)(iv)(B)(11). All topsoil must be removed from areas to be used for piling spoil material before beginning the stockpiling of such material. LQD Rules ch. 111, § 2(c)(iv)(C). The operator may be required to analyze spoil material to determine if it will be the source of water pollution, and, if so, the operator must take efforts to eliminate this condition. LQD Rules ch. 111, § 2(c)(iv)(D). All overburden and spoil material that is determined to be toxic or acid-forming or that will prevent adequate reestablishment of vegetation must be properly disposed of during the mining operation. LQD Rules ch. 111, § 2(c)(iv)(E). To reclaim tailings impoundments, operators must remove and store all topsoil present within the tailings basin, and the topsoil must be replaced and revegetated at reclamation. LQD Rules ch. 111, § 2(h)(ii). All overburden and spoil material that is determined to be toxic or acid-forming, unless such materials occur naturally on the land surface, must be properly disposed of during the mining operation. LQD-Non-Coal Rules Ch. III, Sect. 2(c)(iv).

STABILITY, GRADING AND EROSION CONTROL [Proposed 43 CFR 3809.420(c)(6)]

Reclamation may require compaction and stabilization of affected lands to eliminate soil or wind erosion, including fugitive dust, which results from mining operations. Wyo. Stat. § 35-11-103(e)(i). Slopes of all areas must be designed so that they will be stabilized against wind and water erosion. LQD Rules ch. 111, § 2(c)(iv)(B)(11). Stabilization means “to control movement of spoil, spoil piles, or areas of disturbed earth by modifying the geometry of the mass, adding control structures, or otherwise modifying physical or chemical properties.” LQD Rules ch. 1, § 2(bg).

Permanent overburden, spoil, or refuse piles must be graded and contoured so that the piles are stabilized against wind and water erosion, a permanent drainage system must be established, and the piles must be revegetated. LQD Rules ch. 111, § 2(c)(iv)(B)(11). Any rills or gullies that would preclude successful establishment of vegetation or achievement of post-mining land use must be removed or stabilized. LQD Rules ch. 111, § 2(d)(iv). Permanent diversion structures must be erosionally stable. LQD Rules ch. 111, 2(e)(iv).

At reclamation, disturbed land must be contoured in a manner consistent with future land use, including backfilling, grading, and replacing topsoil. Wyo. Stat. § 35-11-415(b)(v), (vi), LQD Rules ch. 111, § 2(b). Pits that are not approved for permanent water impoundments must be “backfilled, graded, compacted, and contoured to the extent necessary to return the land to the use specified,” and provision for such must be included in the

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approved reclamation plan. LQD Rules ch. 111, § 2(b)(ii), (iii). Contouring means “grading or backfilling and grading the land affected and reclaiming it to the proposed future use with adequate provisions for drainage.” Wyo. Stat. § 35-11-103(e)(iii).

FINANCIAL GUARANTEE [Proposed 43 CFR 3809.500 – 599]

A mining operator must post a bond to assure faithful performance of his duties under the WEQA. Wyo. Stat. § 35-11-417(a). The initial bond must be in an amount equal to the estimated cost of reclaiming the affected land disturbed and restoring any groundwater disturbed by situ mining during the first year of operation. Wyo. Stat. § 35-11-417(c)(i). Renewal bonds must be in an amount equal to the estimated cost of reclaiming the land to be disturbed during that renewal period, and the estimated cost of completing reclamation on unreleased lands and groundwater disturbed during prior periods. Wyo. Stat. § 35-11-417(c)(ii). Upon completion of the reclamation plan, 25 percent of the bond, or not less than \$10,000, will be retained by the DEQ for a period of at least five years to assure proper revegetation and restoration of groundwater. Wyo. Stat. § 35-11-417(e). An operator may deposit cash, federally insured certificates of deposit, or government securities in lieu of a bond. Wyo. Stat. § 35-11-418. A performance bond can be forfeited for violation of WEQA. Wyo. Stat. § 35-11-421. If the amount of a forfeited performance bond is inadequate to cover the costs of final reclamation, legal action can be brought to recover the remaining costs. Wyo. Stat. § 35-11-422.

INSPECTION [Proposed 43 CFR 3809.600]

LQD must inspect a mining site at least once a year, in conjunction with the permittee’s annual report, for purposes of establishing the amount of the performance bond for the next year. Wyo. Stat. § 35-11-411. A performance bond cannot be released until inspection of a reclaimed site. Wyo. Stat. § 35-11-423(c).

ENFORCEMENT ORDERS [Proposed 43 CFR 3809.601]

WEQA authorizes cease and desist orders for any violations of the statutory or regulatory provisions of WEQA or permits issued thereunder, including a mining permit. Wyo. Stat. § 35-11-701(c)(i). After an administrative hearing, the WEQA authorizes issuance of orders for the prevention, abatement, or control of violations of the WEQA, or rules, regulations, or permits issued pursuant to the WEQA. Wyo. Stat. § 35-11-701(c)(iii). The Director of the DEQ may issue emergency orders to discontinue actions if the director finds that a condition of air, water, or land pollution exists and that it creates an emergency requiring immediate action to protect human or animal health or safety. Wyo. Stat. § 35-11-115(a).

ENFORCEMENT -- PERMIT SUSPENSION OR REVOCATION [Proposed 43 CFR 3809.602]

The Director of DEQ is authorized to suspend and revoke mining permits. Wyo. Stat. § 35-11-109(a)(xiii), § 35-11-409(a), § 35-11-412.

ENFORCEMENT -- SUITS FOR INJUNCTIONS AND/OR DAMAGES [Proposed 43 CFR 3809.604]

A court can issue an injunction to enjoin continuing violations of WEQA statutory or regulatory provisions, permits, or orders. Wyo. Stat. § 35-11-901(a). If the Director of the DEQ has evidence that any air, water, or land pollution source presents an immediate and substantial danger to human or animal health and safety, he may institute a civil action for immediate injunctive relief to halt any activity causing the danger. Wyo. Stat. § 35-11-115(b). A court can assess damages for violations of WEQA statutory or regulatory provisions, permits, or orders. Wyo. Stat. § 35-11-90(b). In addition, natural resource damages are assessed for violations of the WEQA which cause the “death of fish, aquatic life or game or bird life.” Wyo. Stat. § 35-11-903. Other suits for damages are governed by common law. The state may sue to recover natural resource damages under section 107(f) of the Comprehensive Environmental Response, Compensation and Liability Act. 42 U.S.C. § 9607(f).

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CRIMINAL PENALTIES [*Proposed 43 CFR 3809.700*]

WEQA authorizes criminal penalties, including fines up to \$25,000 per day of violation and up to a year in prison, or both, for willful and knowing violations of WEQA statutory or regulatory provisions, permits, or orders. For multiple violations, penalties may be assessed up to the maximum amount for each day of each separate violation. Subsequent convictions can incur up to \$50,000 per day of violation, imprisonment for up to two years, or both. Wyo. Stat. § 35-11-901(j).

CIVIL PENALTIES [*Proposed 43 CFR 3809.702*]

Civil penalties of up to \$10,000 per violation per day can be assessed for violations of WEQA statutory or regulatory provisions, permits, or orders. Wyo. Stat. § 35-11-901(a). Any person who causes the death of fish, aquatic life or game or bird life by violations to the WEQA statutory or regulatory provisions, in addition to other penalties provided by the act, is liable to pay to the state an additional sum for the reasonable value of the wildlife destroyed. Wyo. Stat. § 35-11-903.

CITIZEN SUITS [*No provision in proposed rule*]

WEQA does not authorize citizen suits for violations of its water, air or surface mining provisions. The federal Clean Water Act authorizes citizen suits against persons who violate provisions of the Clean Water Act or state administrative orders that implement that Act.

