APPENDIX I. SUMMARY OF EFFECTS OF THE LAND EXCHANGE

COMPARISON OF 36 CFR 228 REGULATIONS WITH OTHER RELATED STATE (ARIZONA) AND FEDERAL ENVIRONMENTAL REGULATIONS

In virtually all cases, some level of regulatory requirements apply to mining operations, regardless of whether they are taking place on private lands or National Forest System lands (see table I-1). U.S. Department of Agriculture Forest Service (herein called Forest Service) Title 36 Code of Federal Regulations (CFR) Part 228 surface management regulations (columns 1 and 2 in the table) apply only to Federal lands administered by the Forest Service. Other applicable laws, regulations, and rules (column 3) apply to both Federal and private lands, except for State mined land reclamation rules which apply only to private lands.

Unless otherwise indicated in the table, surface resource management regulations are taken from 36 CFR 228. Aquifer Protection Permit (APP) laws and regulations are taken from Arizona Revised Statutes (ARS) 49-241 through 49-252 and Arizona Administrative Code (AAC) R18-9-101 through R18-9-403. Arizona State Mine Inspector laws and regulations are taken from Arizona State reclamation statutes at ARS 27-901, et seq., and rules at R11-2-201, et seq. Other regulations and rules are indicated in table I-1.

Forest Service Regulations 36 CFR 228 Subpart A – Locatable Minerals	Description	Other Applicable Laws, Statutes, Regulations, and Rules that are comparable to 36 CFR 228 Subpart A – Locatable Minerals
36 CFR 228.4	Description of Operations. In a notice of intent submitted to the appropriate District Ranger, sufficient description of the proposed area of activity, route(s) of access, equipment, devices, or practices proposed for use during operations including, where applicable—	None
36 CFR 228.4(c)(2) 36 CFR 228.4(c)(3)	A map or sketch showing information sufficient to locate the proposed area of operations on the ground, existing and/or proposed roads or access routes to be used in connection with the operations as set forth in §228.12, and the approximate location and size of areas where surface resources will be disturbed. Information sufficient to describe or identify the type of operations proposed and how they would be conducted, the type and standard of existing and proposed roads or access routes, the means of transportation used or to be used as set forth in §228.12, the period during which the proposed activity will take place, and measures to be taken to meet the requirements for environmental protection in §228.8.	APP R18-9-A.202.A Technical Requirements Mined Land Reclamation R11-2-501. Mining unit reclamation plan content. Clean Water Act 33 CFR 320 through 332 40 CFR 122
36 CFR 228.8(a)	Air quality. Operator shall comply with applicable Federal and State air quality standards, including the requirements of the Clean Air Act, as amended (42 USC 1857 et seq.).	Clean Air Act: Certification by ADEQ; ARS 49-401 et seq.; R18-2-101 et seq.
36 CFR 228.8(b)	Water quality. Operator shall comply with applicable Federal and State water quality standards, including regulations issued pursuant to the Federal Water Pollution Control Act, as amended (33 U.S.C. 1151 et seq.).	APP R18-9-A.202.A Technical Requirements Clean Water Act 33 CFR 320 through 332 40 CFR 122 AZPDES (Arizona delegated program) R18-9-B901 et seg.

Table I-1. Comparison of 36 CFR 228 with	Other Applicable Laws, Statutes, Regulations, and Rules
	statutos, regulations, and rate

Forest Service Regulations 36 CFR 228 Subpart A – Locatable Minerals	Description	Other Applicable Laws, Statutes, Regulations, and Rules that are comparable to 36 CFR 228 Subpart A – Locatable Minerals
36 CFR 228.8(c)	Solid wastes. Operator shall comply with applicable	APP
	Federal and State standards for the disposal and treatment of solid wastes. All garbage, refuse, or	R18-9-A.202.A
	waste, shall either be removed from National Forest lands or disposed of or treated so as to minimize, so far as is practicable, its impact on the environment and the forest surface resources. All tailings, dumpage, deleterious materials, or substances and other waste produced by operations shall be deployed, arranged, disposed of, or treated so as to minimize adverse impact upon the environment and forest surface resources.	Technical Requirements
		Clean Water Act
		33 CFR 320 through 332
		40 CFR 122
		AZPDES (Arizona delegated program) R18-9-B901 et seq.
36 CFR 228.8(d)	Scenic values. Operator shall, to the extent	None
	practicable, harmonize operations with scenic values through such measures as the design and location of operating facilities, including roads and other means of access, vegetative screening of operations, and construction of structures and improvements which blend with the landscape.	[On most public lands there are no State or other Federal requirements for the protection of scenic values that are comparable to 36 CFR 228.8(d). However, lands having special management designations, such as Wilderness, National Monument, Wild and Scenic River, State Park, and the like are usually bound by particular restrictions on human development and other activities that would tend to alter natural scenic values.]
36 CFR 228.8(e)	<i>Fisheries and wildlife habitat.</i> In addition to compliance with water quality and solid waste disposal standards required by this section, operator shall take all practicable measures to maintain and protect fisheries and wildlife habitat which may be affected by the operations.	ARS 27-971. Submission and contents of reclamation plan.
36 CFR 228.8(f)	<i>Roads.</i> Operator shall construct and maintain all roads so as to assure adequate drainage and to minimize or, where practicable, eliminate damage to soil, water, and other resource values. Unless otherwise approved by the authorized officer, roads no longer needed for operations:	Mined Land Reclamation
		R11-2-603. Mining unit reclamation plan content.
	(1) Shall be closed to normal vehicular	
	traffic,	
	(2) Bridges and culverts shall be removed,	
	(3) Cross drains, dips, or water bars shall be constructed, and	
	(4) The road surface shall be shaped to as near a natural contour as practicable and be stabilized.	
36 CFR 228.8(g)	Reclamation. Upon exhaustion of the mineral deposit or at the earliest practicable time during operations, or within 1 year of the conclusion of operations, unless a longer time is allowed by the authorized officer, operator shall, where practicable, reclaim the surface disturbed in operations by taking such measures as will prevent or control on-site and off-site damage to the environment and forest surface resources including:	Mined Land Reclamation R11-2-201 through R11-2-207 General regulatory provisions for plan documents. Mined Land Reclamation R11-2-602. Erosion control and topographic contouring.
	(1) Control of erosion and landslides;	
	(2) Control of water runoff;	
	(3) Isolation, removal or control of toxic materials;	
	(4) Reshaping and revegetation of disturbed areas, where reasonably practicable; and	
	(5) Rehabilitation of fisheries and wildlife habitat.	

Forest Service Regulations 36 CFR 228 Subpart A – Locatable Minerals	Description	Other Applicable Laws, Statutes, Regulations, and Rules that are comparable to 36 CFR 228 Subpart A – Locatable Minerals
36 CFR 228.9	Maintenance during operations, public safety. During all operations, operator shall maintain his structures, equipment, and other facilities in a safe, neat, and workmanlike manner. Hazardous sites or conditions resulting from operations shall be marked by signs, fenced, or otherwise identified to protect the public in accordance with Federal and State laws and regulations.	Mined Land Reclamation
		R11-2-601. Public safety standards.
		ARS 27-318. State requirements to cover, fence, fill, or otherwise secure areas around active or inactive/abandoned mining operations and to post warning signs.
36 CFR 228.10	Cessation of operations, removal of structures and equipment. Unless otherwise agreed to by the authorized officer, operator shall remove within a reasonable time following cessation of operations all structures, equipment, and other facilities and clean up the site of operations. Other than seasonally, where operations have ceased temporarily, an operator shall file a statement with the District Ranger which includes:	Mined Land Reclamation ARS 27-971. Submission and contents of reclamation plan. R11-2-501. Mining unit reclamation plan content.
	(a) Verification of intent to maintain the structures, equipment and other facilities,	
	(b) The expected reopening date, and	
	(c) An estimate of extended duration of operations. A statement shall be filed every year in the event operations are not reactivated. Operator shall maintain the operating site, structures, equipment, and other facilities in a neat and safe condition during nonoperating periods.	
36 CFR 228.11	Prevention and control of fire. Operator shall comply with all applicable Federal and State fire laws and regulations and shall take all reasonable measures to prevent and suppress fires on the area of operations and shall require his employees, contractors, and subcontractors to do likewise.	Mined Land Reclamation ARS 27-311. Fire prevention and protection.
36 CFR 228.12	Access. An operator is entitled to access in connection with operations, but no road, trail, bridge, landing area for aircraft, or the like, shall be constructed or improved, nor shall any other means of access, including but not limited to off-road vehicles, be used until the operator has received approval of an operating plan in writing from the authorized officer when required by §228.4(a). Proposals for construction, improvement, or use of such access as part of a plan of operations shall include a description of the type and standard of the proposed means of access, a map showing the proposed route of access, and a description of the means of such access as part of a plan of operations shall specify the location of the access route, design standards, means of transportation, and other conditions reasonably necessary to protect the environment and forest surface resources, including measures to protect scenic values and to ensure against erosion and water or air pollution.	Mined Land Reclamation R11-2-501. Mining unit reclamation plan content. R11-2-603. Roads.

Forest Service Regulations 36 CFR 228 Subpart A – Locatable Minerals	Description	Other Applicable Laws, Statutes, Regulations, and Rules that are comparable to 36 CFR 228 Subpart A – Locatable Minerals
36 CFR 228.13	Bonds. (a) Any operator required to file a plan of operations shall, when required by the authorized officer, furnish a bond conditioned upon compliance with §228.8(g), prior to approval of such plan of operations. In lieu of a bond, the operator may deposit into a Federal depository, as directed by the Forest Service, and maintain therein, cash in an amount equal to the required dollar amount of the bond or negotiable securities of the United States having market value at the time of deposit of not less than the required dollar amount of the bond. A blanket bond covering nationwide or statewide operations may be furnished if the terms and conditions thereof are sufficient to comply with the regulations in this part.	Mined Land Reclamation ARS 27-991 through 27-997. Financial assurance. R11-2-801 through R11-2-822. Financial assurance.
	(b) In determining the amount of the bond, consideration will be given to the estimated cost of stabilizing, rehabilitating, and reclaiming the area of operations.	
	(c) In the event that an approved plan of operations is modified in accordance with §228.4 (d) and (e), the authorized officer will review the initial bond for adequacy and, if necessary, will adjust the bond to conform to the operations plan as modified.	
	(d) When reclamation has been completed in accordance with §228.8(g), the authorized officer will notify the operator that performance under the bond has been completed, provided, however, that when the Forest Service has accepted as completed any portion of the reclamation, the authorized officer shall notify the operator of such acceptance and reduce proportionally the amount of bond thereafter to be required with respect to the remaining reclamation.	
36 CFR 228.14	Appeals. Any operator aggrieved by a decision of the authorized officer in connection with the regulations in this part (i.e., 36 CFR part 228) may file an appeal under the provisions of 36 CFR part 251, subpart C.	Mined Land Reclamation ARS 27-933. Denials; appeals.

Abbreviations: ADEQ = Arizona Department of Environmental Quality, APP = Aquifer Protection Permit, ARS = Arizona Revised Statutes, AZPDES = Arizona Pollutant Discharge Elimination System, CFR = Code of Federal Regulations, R = Arizona Administrative Code Rule.