Alaska Surface Coal Mining Program

April 2009



State of Alaska Department of Natural Resources Division of Mining, Land and Water

Regulations Governing

Coal Mining in Alaska

11 AAC 90(Adopted by reference)

Pursuant to the Alaska Surface Coal Mining Control and Reclamation Act AS 27.21

Effective: April 24, 2009

Alaska Department of Natural Resources Division of Mining, Land and Water 550 W. 7th Ave, Suite 1070 Anchorage, Alaska 99501 (907) 269-8600

SURFACE COAL MINING TABLE OF CONTENTS*

ARTICLE 1. ADOPTION BY REFERENCE

Section

01. Adoption by reference

ARTICLE 2. GENERAL PERMITTING REQUIREMENTS.

Section

- 002. Responsibilities
- 003. Repealed
- 005. Existing structures
- 007. Compliance with permits
- 009. Other permits
- 011. Permit fees

ARTICLE 3. GENERAL PERMIT APPLICATION INFORMATION REQUIREMENTS. Section

- 021. General application requirements
 - 023. Identification of interests and compliance information
 - 025. Authority to enter and ownership information
 - 027. Areas unsuitable for mining
 - 029. Permit term information
 - 031. Other licenses and permits
 - 033. Liability insurance

ARTICLE 4. ENVIRONMENTAL RESOURCE INFORMATION REQUIREMENTS. Section

- 041. Cultural and historic information
 - 043. Hydrology and geology
 - 045. Geology description
 - 047. Ground water information
 - 049. Surface water information
 - 051. Alternative water supply information
 - 053. Climatological information
 - 055. Vegetation information
 - 057. Fish and wildlife information
 - 059. Soil resources information
 - 061. Land use information
 - 063. General map requirements
 - 065. Cross sections, maps, and planviews

ARTICLE 5. RECLAMATION AND OPERATION PLAN.

Section

- 071. Operation plan
- 073. Existing structures
- 075. Blasting plan
- 077. Operation maps, planviews, and cross sections
- 079. Air pollution control plan
- 081. Fish and wildlife protection plan
- 083. Reclamation plan general requirements

- 085. Plan for protection of hydrologic balance
- 087. Post mining reclamation plan
- 089. Plan for ponds, impoundments, dams, and embankments
- 091. Protection of public parks and historic places
- 093. Relocation or use of public roads
- 095. Excess spoil and underground development waste
- 097. Transportation facilities
- 099. Return of coal mine waste and excess spoil to abandoned underground workings
- 101. Subsidence control plan

ARTICLE 6. PROCESSING OF PERMIT APPLICATIONS. Section

- 111. Completeness review
- 113. Public notice
- 115. Public participation
- 117. Administrative processing of applications
- 119. Transfer, sale, or assignment of permit rights
- 121. Areas where mining may be limited
- 123. Valid existing rights
- 125. Commissioner's findings
- 127. Permit conditions
- 129. Permit revisions and renewals
- 131. Review of decisions
- 133. Review of outstanding permits

ARTICLE 7. PERMITTING FOR SPECIAL CATEGORIES OF MINING. Section

- 141. Mountaintop removal mining
- 143. Steep slope mining
- 145. Variances from contour restoration requirements for steep slopes
- 147. Variances for combined surface and underground mining
- 149. Operations near alluvial valley floors
- 151. In situ processing
- 153. Experimental practices mining
- 155. Facilities outside permit area
- 157. Important farmlands

ARTICLE 8. EXPLORATION.

Section

- 161. Exploration that does not substantially disturb the natural land surface
- 163. Exploration that substantially disturbs the natural land surface or occurs in an area designated unsuitable for surface coal mining.
- 165. Administrative processing of coal exploration notices and applications
- 167. Coal exploration bonding and performance standards

ARTICLE 9. SMALL OPERATOR ASSISTANCE PROGRAM.

Section

- 171. Program services
- 173. Eligibility for assistance
- 175. Filing for assistance
- 177. Application approval and notice

- 179. Data requirements
- 181. Qualified laboratories
- 183. Assistance funding
- 185. Applicant liability

ARTICLE 10. BONDING.

Section

- 201. Requirement to file a bond
- 203. Period of bond liability
- 205. Determination and adjustment of bond amount
- 207. Requirements for specific types of bonds
- 209. Bond replacement
- 211. Bond release procedure and criteria
- 213. Bond forfeiture

ARTICLE 11. PERFORMANCE STANDARDS. Section

- 301. Signs and markers
- 303. Capping, casing, and sealing of drilled holes
- 305. Temporary sealing of drilled holes
- 311. Removal of topsoil
- 313. Topsoil storage
- 315. Topsoil redistribution
- 317. Topsoil nutrients and soil amendments
- 321. Hydrologic balance
- 323. Water quality standards
- 325. Diversions and conveyance of flow
- 327. Stream channel diversion
- 329. Sediment control measures
- 331. Siltation structures
- 333. Discharge structures
- 335. Acid-forming and toxic-forming spoil
- 336. Impoundment design and construction
- 337. Impoundment Inspection
- 338. Permanent Impoundment criteria
- 339. Ground water protection
- 341. Underground mine entry and access discharges
- 343. Protection of ground water recharge capacity
- 345. Surface and ground water monitoring
- 347. Transfer of wells
- 349. Discharge of water into a mine
- 351. Postmining rehabilitation
- 353. Stream buffer zones
- 361. Coal recovery
- 371. Use of explosives
- 373. Preblasting survey
- 375. Public notice of blasting
- 377. Blasting signs, warnings, and access control
- 379. Control of adverse effects of blasting
- 381. Seismographic measurements
- 383. Records of blasting

- 391. Disposal of excess spoil or coal mine waste
- 393. Protection of underground mining
- 395. Coal mine waste, general requirements
- 397. Disposal area inspections
- 399. Hazardous coal processing waste, water control measures
- 401. Coal mine waste, refuse piles
- 403. Coal mine waste, fires
- 405. Burned waste removal
- 407. Coal mine waste, dams and embankments
- 409. Return to underground workings (repealed)
- 411. Disposal of noncoal wastes
- 421. Air resources protection
- 423. Protection of fish and wildlife
- 431. Slides and other damage
- 433. Pipelines
- 435. Contemporaneous reclamation (repealed)
- 441. Timing requirements for backfilling and grading
- 443. Backfilling and grading
- 444. Backfilling and grading: thick and thin overburden
- 445. Covering coal and toxic material
- 447. Backfilling and grading: auger mining
- 449. Stabilizing rills and gullies
- 451. Revegetation
- 453. Revegetation: timing
- 455. Revegetation: mulching
- 457. Standards for revegetation success
- 461. Subsidence control
- 463. Subsidence control public notice
- 471. Cessation of operations
- 481. Postmining land use
- 491. Construction and maintenance of roads, transportation and support facilities, and utility installations
- 501. Alluvial valley floor requirements

ARTICLE 12. INSPECTION AND ENFORCEMENT.

Section

- 601. Inspections
- 603. Right of entry
- 605. Investigative records
- 607. Citizens requests for inspections
- 609. Review of adequacy and completeness of inspections
- 611. Review of decision
- 613. Cessation orders
- 615. Notices of violation
- 617. Suspension or revocation of permits
- 619. Service of notices
- 621. Informal conference
- 623. Inability to comply
- 625. Penalty assessment and computation
- 627. Procedures for assessment
- 629. Procedures for assessment conference

- 631. Request for hearing
- 633. Final assessment and payment of penalty
- 635. When an individual civil penalty may be assessed.
- 637. Amount of individual civil penalty
- 639. Procedure for assessment of individual civil penalty
- 641. Payment of penalty

ARTICLE 13. EXEMPTION FOR COAL EXTRACTION INCIDENTAL TO THE EXTRACTION OF OTHER MINERALS.

Section

- 652. Application requirements for incidental mining exemption and procedures
- 654. Contents of application for incidental mining exemption
- 656. Public availability of information
- 658. Requirement for incidental mining exemption
- 660. Conditions of incidental mining exemption and right of inspection and entry
- 662. Stockpiling of minerals
- 664. Revocation of incidental mining exemption and enforcement
- 666. Reporting requirements
- 669. Definitions applicable to incidental mining exemption

ARTICLE 14. PROCESS FOR IDENTIFYING LAND UNSUITABLE FOR MINING. Section

- 701. Petition filing
- 703. Initial processing of petitions
- 705. Notification and request for information
- 707. Data base and inventory system
- 709. Hearing requirement
- 711. Decision
- 713. Maps and records
- 715. Land exempt from designation

ARTICLE 15. CONFLICT OF INTEREST.

Section

- 751. Report of financial interest
- 753. Contents of statement
- 755. Gifts and gratuities
- 757. Resolution of prohibited interests
- 759. Appeal procedures

ARTICLE 16. TRAINING, EXAMINATION, AND CERTIFICATION OF BLASTERS. Section

- 771. Blaster certification required
- 773. Training and experience
- 775. Application
- 777. Examination content and procedure
- 779. Certification
- 781. Certification renewal
- 783. Certification by credentials
- 785. Suspension and revocation

ARTICLE 17. ABANDONED MINES.

Section

- 800. Alaska abandoned mined land reclamation fund
- 808. Fund objectives
- 816. Noncoal reclamation
- 824. Impact assistance
- 832. Emergency reclamation
- 840. Rights of entry
- 848. Land acquisition
- 856. Procedures of land acquisition
- 864. Management of acquired land
- 872. Land disposal
- 880. Liens and appraisals
- 888. Imposition of liens
- 896. Satisfaction of liens

ARTICLE 18. GENERAL PROVISIONS.

Section

- 901. Applicability
- 903. Intervention
- 905. Notice of civil actions
- 907. Public participation
- 909. Costs and expenses
- 911. Definitions

*This Table of Contents is provided as a service and is not part of official regulations adopted by reference in 11 AAC Chapter 90.

Chapter 90 Surface Coal Mining

1. Adoption by Reference (11 AAC 90.001)

2. General Permitting Requirements (11 AAC 90.002 - 11 AAC 90.011)

3. General Permit Application Information Requirements (11 AAC 90.021 - 11 AAC 90.033)

4. Environmental Resource Information Requirements (11 AAC 90.041 - 11 AAC 90.065)

5. Reclamation and Operation Plan (11 AAC 90.071 - 11 AAC 90.101)

6. Processing of Permit Applications (11 AAC 90.111 - 11 AAC 90.133)

7. Permitting for Special Categories of Mining (11 AAC 90.141 - 11 AAC 90.157)

8. Exploration

(11 AAC 90.161 - 11 AAC 90.167)

9. Small Operator Assistance Program (11 AAC 90.171 - 11 AAC 90.185)

10. Bonding

(11 AAC 90.201 - 11 AAC 90.213)

11. Performance Standards

(11 AAC 90.301 - 11 AAC 90.501)

12. Inspection and Enforcement

(11 AAC 90.601 - 11 AAC 90.641)

13. Exemption for Coal Extraction Incidental to the Extraction of Other Minerals (11 AAC 90.652 - 11 AAC 90.669)

14. Process for Identifying Land Unsuitable for Mining (11 AAC 90.701 - 11 AAC 90.715)

15. Conflict of Interest

(11 AAC 90.751 - 11 AAC 90.759)

16. Training, Examination, and Certification of Blasters (11 AAC 90.771 - 11 AAC 90.785)

17. Abandoned Mines

(11 AAC 90.800 - 11 AAC 90.896)

18. General Provisions

(11 AAC 90.901 - 11 AAC 90.911)

ARTICLE 1

ADOPTION BY REFERENCE.

- **11 AAC 90.001. Adoption by reference.** 11 AAC 90.002 11 AAC 90.911, as amended as of April 24, 2009, are adopted by reference without printing them in full in the Alaska Administrative Code.
 - (b) The following federal requirements are adopted by reference:
 - (1) 30 C.F.R. 77.214 (refuse piles; general), revised as of July 1, 2008;
- (2) 30 C.F.R. 77.215 (refuse piles; construction requirements), revised as of July 1, 2008;
- (3) 40 C.F.R. Part 136 (guidelines establishing test procedures for the analysis of pollutants), revised as of July 1, 2008;
- (4) 40 C.F.R. Part 434 (coal mining point source category BPT, BAT, BCT limitations and new source performance standards), revised as of July 1, 2007.
 - (c) The following publications are adopted by reference:
- (1) American Association of State Highway and Transportation Officials (AASHTO), Specification T99-74, 12th edition, July 1978;
- (2) Standard Methods for the Examination of Water and Wastewater, 21st edition 2005, American Public Health Association;
- (3) United States Department of Agriculture, Natural Resources Conservation Service, Conservation Engineering Division, *Earth Dams and Reservoirs*, Technical Release 60, 210-VI-TR60, July 2005. (Eff. 5/2/83, Register 84; am 12/18/83, Register 88; am 3/30/84, Register 89; am 1/1/86, Register 96; am 9/28/86, Register 99; am 11/18/94, Register 132; am 7/29/98, Register 147; am 4/24/09, Register 190)

Authority: AS 27.21.030

Editor's note: The sections adopted by reference by 11 AAC 90.001(a) have been filed by the lieutenant governor. Copies of those sections are available from the Division of Mining, Land and Water, Department of Natural Resources. The history note for 11 AAC 90.001 reflects amendments to the entire chapter, including 11 AAC 90.002 - 11 AAC 90.911, even though those sections are not printed in full in the Alaska Administrative Code. Under the authority of AS 44.62.125(b)(6) and 44.62.180(1), the Department of Law has corrected the original effective date of 11 AAC 90.001, and therefore of the entire chapter, to read 5/2/83. That is the effective date specifically

prescribed for these regulations by sections 5 and 6, ch. 29, SLA 1982, but 12/31/82 was mistakenly used when this regulation was first distributed in Register 84.

A copy of the American Association of State Highway and Transportation Officials, Specification T99-74, adopted by reference in 11 AAC 90.001(c), is available for viewing at the Anchorage office of the Department of Natural Resources, Division of Mining, Land and Water, or may be purchased directly from the American Association of State Highway and Transportation Officials, 444 North Capitol Street, N.W., Suite 249, Washington, D.C. 20001; telephone: (800) 231-3475; Internet address: https://bookstore/transportation.org.

A copy of the Standard Methods for the Examination of Water and Wastewater, 21st edition, adopted by reference in 11 AAC 90.001(c), is available for viewing at the Anchorage office of the Department of Natural Resources, Division of Mining, Land and Water, or may be purchased directly from the American Public Health Association, 800 I Street, NW, Washington, D.C. 20001; telephone (202) 777-2742; fax (202) 777-2534; Internet address www.apha.org.

A copy of the United States Department of Agriculture, Natural Resources Conservation Service, Conservation Engineering Division, *Earth Dams and Reservoirs*, adopted by reference in 11 AAC 90.001(c), is available for viewing at the Anchorage office of the Department of Natural Resources, Division of Mining, Land and Water, or may be downloaded directly from the Natural Resources Conservation Service at http://directives.sc.egov.usda.gov/.

ARTICLE 2.

GENERAL PERMITTING REQUIREMENTS.

Section

- 002. Responsibilities
- 003. Repealed
- 005. Existing structures
- 007. Compliance with permits
- 009. Other permits
- 011. Permit fees

11 AAC 90.002. RESPONSIBILITIES. (a) A person may not conduct exploration activities or surface coal mining and reclamation operations without a permit from the commissioner.

- (b) A person who seeks to conduct coal exploration shall comply with the requirements of 11 AAC 90.161 11 AAC 90.167. A person who, while conducting coal exploration, extracts coal for commercial use or sale during exploration shall comply with (c) of this section unless the commissioner determines that the commercial use or sale is to test coal for an operation for which a permit application will be submitted.
- (c) A person who seeks to engage in surface coal mining and reclamation operations shall obtain a permit for those operations in accordance with 11 AAC 90.005 11 AAC 90.157. (Eff. 5/2/83, Register 84; am 7/29/98, Register 147)

Authority: AS 27.21.030 AS 27.21.060 AS 27.21.200

11 AAC 90.003. Repealed. (Eff. 5/2/83, Register 84; repealed 7/29/98, Register 147)

- 11 AAC 90.005. EXISTING STRUCTURES. (a) Each structure used in connection with an exploration or surface coal mining and reclamation operation must comply with the requirements of 11 AAC 90.301 11 AAC 90.501, except that
- (1) an existing structure which meets the performance standards, but not the design requirements, of 11 AAC 90.301 11 AAC 90.501 is exempt from meeting those design requirements if the commissioner makes the findings required in 11 AAC 90.125(a) and the structure does not come under 11 AAC 90.125(b);
- (2) if the performance standard of 30 CFR Subchapter B is at least as stringent as the comparable performance standard of 11 AAC 90.301 -11 AAC 90.501, the commissioner will, in his or her discretion, exempt, as part of the permit application process, an existing structure which meets the performance standards of 30 CFR Subchapter B from the design requirements of 11 AAC 90.301 11 AAC 90.501 if the commissioner makes the findings required in 11 AAC 90.125(a) and the structure does not come under 11 AAC 90.125(b);
- (3) an existing structure which meets a performance standard of 30 CFR Subchapter B, which is less stringent than the comparable performance standards of 11 AAC 90.301 11 AAC 90.501, or which does not meet a performance standard of 11 AAC 90.301 11 AAC 90.501 for which there is no equivalent performance standards in 30 CFR Subchapter B, must be modified or reconstructed under a compliance plan as required by 11 AAC 90.073(b) and according to the findings required by 11 AAC 90.125; and
- (4) an existing structure which does not meet the performance standards of 30 CFR Subchapter B, and which the applicant proposes to use in the operation or exploration activity, must be modified or reconstructed to meet the performance and design standards of 11 AAC 90.301 11 AAC 90.501 before issuance of the permit.

Register 190, July 2009

NATURAL RESOURCES

(b) The exemptions provided in (a)(1) and (2) of this section do not apply to the requirements for existing and new waste piles used either temporarily or permanently as dams or embankments or the requirements to restore the approximate original contour of the land. (Eff. 5/2/83, Register 84)

Authority: AS 27.21.030 AS 27.21.210 AS 27.21.220

11 AAC 90.007. COMPLIANCE WITH PERMITS. All persons shall conduct exploration activities and surface coal mining and reclamation operations under permits and approvals issued under this chapter and shall comply with the terms and conditions of the permit or exploration approval, the requirements of the Act, and this chapter. (Eff. 5/2/83, Register 84)

Authority: AS 27.21.030 AS 27.21.200 AS 27.21.210

- 11 AAC 90.009. OTHER PERMITS. (a) Nothing in this chapter relieves any person from the obligation to comply with other laws and regulations of any federal, state, or local government agency.
- (b) The commissioner will coordinate permitting requirements of this chapter with those of other government agencies by consulting with appropriate government agencies before requiring information from the applicant or imposing performance standards which relate to another agency's responsibilities. (Eff. 5/2/83, Register 84)

Authority: AS 27.21.030

- 11 AAC 90.011. PERMIT FEES. Each application must be accompanied by a non-refundable fee in an amount that is determined by the commissioner. The fee is determined as the sum of
 - (1) the cost of all public notices required under 11 AAC 90.113; and
- (2) the applicable fees described in 11 AAC 05.010(a)(11) . (Eff. 5/2/83, Register 84; am 1/1/86, Register 96; am 7/29/98, Register 147)

Authority: AS 27.21.030 AS 27.21.090

ARTICLE 3.

GENERAL PERMIT APPLICATION INFORMATION REQUIREMENTS.

Section

- 021. General application requirements
- 023. Identification of interests and compliance information
- 025. Authority to enter and ownership information
- 027. Areas unsuitable for mining
- 029. Permit term information
- 031. Other licenses and permits
- 033. Liability insurance
- 11 AAC 90.021. GENERAL APPLICATION REQUIREMENTS. (a) An application for a permit must be filed in the format required by the commissioner. The application must be complete and include, at a minimum, all of the applicable information required by 11 AAC 90.023 11 AAC 90.101 and 11 AAC 90.141 11 AAC 90.157.
- (b) Information must be current, presented clearly and concisely, and supported by appropriate references to technical and other written material available to the commissioner.
- (c) An application for a permit must include all assumptions, analyses, descriptions, designs, maps, cross sections, and other information necessary to demonstrate that the proposed operation will meet all the applicable requirements of 11 AAC 90.141 11 AAC 90.157 and 11 AAC 90.301 11 AAC 90.501.
- (d) All technical data must be accompanied by the names of persons or organizations that collected and analyzed the data, dates of collection and analysis of the data, and descriptions of the methodology used to collect and analyze the data.
- (e) Each application must state the name, address, and position of officials of each private or academic research organization or government agency consulted by the applicant in preparation of the application for information on land uses, soils, geology, vegetation, fish and wildlife, water quantity and quality, air quality, and archeological, cultural and historic features.
 - (f) Maps must be presented in a consolidated format and include
- (1) maps of the permit area at a scale of 1:6,000 or larger; maps of the remainder of the adjacent or general area must be on a topographic map of the U.S. Geological Survey of the 1:63,360 scale series enlarged at least 2 ½ times; and

- (2) an identification among each of the phases during which operations were or will be conducted within the area to be affected during the projected life of the mine; at a minimum, distinctions must be clearly shown among those operations which occurred
 - (A) before August 3, 1977;
 - (B) after August 3, 1977, and before May 3, 1978;
- (C) after May 3, 1978, and before approval of the Alaska state program; and
 - (D) after the estimated date of permit issuance.
- (g) Each application must be verified under oath by the applicant that the information contained in the application is true and correct to the best of the applicant's information and belief. (Eff. 5/2/83, Register 84; am 11/18/94, Register 132)

Authority: AS 27.21.030 AS 27.21.060 AS 27.21.110 AS 27.21.180

- 11 AAC 90.023. IDENTIFICATION OF INTERESTS AND COMPLIANCE INFORMATION. (a) Each application must contain the names, addresses, and, if known, the telephone numbers of
- (1) the permit applicant, operator, and the operation's resident agent for service of process;
- (2) every owner, lessee, and purchaser of record under a real estate contract of the area to be affected by surface operations and facilities or of the coal to be mined; and
- (3) every owner of record of the surface and mineral estates adjacent to the proposed permit area.
- (b) For businesses other than single proprietorships identified under (a) of this section, the application must contain the following information, where applicable:
- (1) names, addresses, and telephone numbers of every officer, partner, director or other person performing a function similar to a director, and, for the applicant only, any person owning 10 percent or more of any class of voting stock; and
- (2) names under which the applicant, partner, or principal shareholders previously conducted an operation in the United States within the five years preceding the date of application.

- (c) Each application must contain a statement of any current or previous coal mining permits in the United States held by the applicant after 1970 and by any person identified in (b)(2) of this section, and of any pending application to conduct operations in the United States and the regulatory authority for each operation.
- (d) Each application must contain the name of the proposed mine and the Mine Safety and Health Administration identification numbers for the mine.
- (e) Each application must describe all land, interests in land, options, or pending bids on interests held or made by the applicant for land which is contiguous to the area to be covered by the permit.
 - (f) Each application must contain
- (1) a statement of whether the applicant, operator, or any subsidiary, affiliate, or other business controlled by or under common control with the applicant or operator has
- (A) had a federal or state mining permit suspended or revoked in the last five years, or
- (B) forfeited a mining bond or similar security deposited in lieu of bond;
- (2) a statement of the facts involved in any suspension, revocation or forfeiture, including
- (A) identification number and date of issuance of the permit or date and amount of bond or similar security,
- (B) identification of the authority that suspended or revoked a permit or forfeited a bond and the stated reasons for that action,
- (C) the current status of the permit, bond, or similar security involved,
- (D) the date, location, and type of any administrative or judicial proceedings initiated concerning the suspension, revocation, or forfeiture, and
 - (E) the current status of these proceedings;
 - (3) the information required under AS 27.21.180(e), including
- (A) the date of citation of the violation and identity of the issuing authority,
 - (B) a brief description of the particular alleged violation,

Register 190, July 2009 NATURAL RESOURCES

- (C) the date, location, and type of any administrative or judicial proceedings initiated concerning the violation,
- (D) the current status of the proceedings and of the violation notice, and
- (E) the action, if any, taken by the applicant to abate the violation. (Eff. 5/2/83, Register 84)

Authority: AS 27.21.030 AS 27.21.110

- 11 AAC 90.025. AUTHORITY TO ENTER AND OWNERSHIP INFORMATION. (a) Each application must contain the name, address, and, if known, the telephone number of:
- (1) every owner, lessee, and purchaser of record under a real estate contract of the area to be affected by surface operations, facilities, or of the coal to be mined; and
- (2) every owner of record of the surface and mineral estates that are contiguous to the proposed permit area.
- (b) Each application must describe the legal authority for the applicant's right to enter the permit area to begin operations and must state whether the right is the subject of pending litigation. The description of the legal authority must identify relevant documents by type, date of execution, and the specific land to which they pertain.
- (c) If the private mineral estate to be surface mined has been severed from the private surface estate, the applicant shall also provide at least one of the proofs required by AS 27.21.180(c)(6). (Eff. 5/2/83, Register 84; am 7/29/98, Register 147)

- 11 AAC 90.027. AREAS UNSUITABLE FOR MINING. (a) Each application must state whether the proposed permit area is within an area designated unsuitable under AS 27.21.260 or under study for designation in an administrative proceeding.
- (b) If an applicant claims exemption under AS 27.21.260(g), the application must contain information supporting the applicant's assertion that it made substantial legal and financial commitments before January 4, 1977, concerning the proposed operation.
- (c) If an applicant proposes to conduct operations within 300 feet of an occupied dwelling, the application must comply with 11 AAC 90.121(c). (Eff. 5/2/83, Register 84)

Register 190, July 2009 NATURAL RESOURCES

Authority: AS 27.21.030 AS 27.21.180

- 11 AAC 90.029. PERMIT TERM INFORMATION. (a) Each application must describe the size, sequence, and timing of areas for which it is anticipated that individual permits will be requested over the total life of the proposed operation and the horizontal and vertical extent of proposed underground mine workings for each phase of mining and over the total life of the permit.
- (b) If the applicant requests a permit term in excess of five years, the application must contain the information required under AS 27.21.070(a). (Eff. 5/2/83, Register 84)

Authority: AS 27.21.030 AS 27.21.110

- 11 AAC 90.031. OTHER LICENSES AND PERMITS. Each application must identify all other licenses and permits needed by the applicant to conduct the proposed operations by
 - (1) type of permit or license;
 - (2) name and address of issuing authority;
- (3) identification numbers of applications for those permits or licenses or, if issued, the identification numbers of the permits or licenses; and
- (4) if a decision has been made, the date of approval or disapproval by each issuing authority. (Eff. 5/2/83, Register 84)

- 11 AAC 90.033. LIABILITY INSURANCE. (a) Each application must include a certification from an insurance company authorized to do business in Alaska that the applicant has a public liability insurance policy in force for the proposed operation. The policy must provide for personal injury and property damage protection in an amount adequate to compensate any persons injured or property damaged as a result of the operation, including the use of explosives, and entitled to compensation under state law. Minimum insurance coverage for bodily injury and property damage is \$300,000 for each occurrence and \$1,000,000 aggregate.
- (b) The policy must be maintained in full force during the life of the permit and any renewal of it, including completion of all reclamation operations under this chapter. The policy must include a rider requiring that the insurer notify the commissioner whenever substantive changes are made in the policy, including any termination or failure to renew. If the insurer decides to terminate the policy, it must notify the commissioner and the operator, in writing, of that decision at least 90 days before the

policy is to terminate. If the operator notifies the insurer of his decision to terminate the policy, of if the operator fails to renew the policy, the insurer must promptly notify the commissioner, in writing, of that action. (Eff. 5/2/83, Register 84)

Authority: AS 27.21.030 AS 27.21.110

ARTICLE 4.

ENVIRONMENTAL RESOURCE INFORMATION REQUIREMENTS.

Section

- 041. Cultural and historic information
- 043. Hydrology and geology
- 045. Geology description
- 047. Ground water information
- 049. Surface water information
- 051. Alternative water supply information
- 053. Climatological information
- 055. Vegetation information
- 057. Fish and wildlife information
- 059. Soil resources information
- 061. Land use information
- 063. General map requirements
- 065. Cross sections, maps, and planviews

11 AAC 90.041 CULTURAL AND HISTORIC INFORMATION. (a) Each application must describe cultural and historic resources listed or eligible for listing on the National Register of Historic Places and known archeological features within the permit area and adjacent area. The description must be based on all available information, including data from state and local archeological, historical, and cultural preservation agencies.

(b) The commissioner will, in the commissioner's discretion require the applicant to identify and evaluate important cultural, historical, and archaeological resources that may be eligible for listing on the National Register of Historic Places, by collecting additional information, conducting field investigations, or performing other appropriate analyses. (Eff. 5/2/83, Register 84; am 11/18/94, Register 132)

Authority: AS 27.21.030 AS 27.21.110

- 11 AAC 90.043. HYDROLOGY AND GEOLOGY. (a) Each application must describe the geology, hydrology, and water quality and quantity of all land within the permit area, adjacent area, and the general area. The description must include information on the characteristics of all surface and ground water within the general area and any other water that will flow into or receive discharge of water from the general area.
- (b) All water quality analyses performed to meet the requirements of this section, 11 AAC 90.047, or 11 AAC 90.049 [,] must be conducted according to the methodology in *Standard Methods for the Examination of Water and Wastewater*, 21st edition, adopted by reference in 11 AAC 90.001(c), or the methodology in 40 C.F.R. Part 136 and 40 C.F.R. Part 434, adopted by reference in 11 AAC 90.001(b).
- (c) Information on hydrology, water quality and quantity, and geology related to hydrology of the area outside the proposed permit area and within the general area will be provided by the commissioner to the extent that the data are available from an appropriate federal or state agency. The permit will not be approved without this information unless the commissioner determines that the information is not necessary to determine the impact the proposed operation will have on environmental and other resources within the permit area and general area. (Eff. 5/2/83, Register 84; am 11/18/94, Register 132)

(Eff. 5/2/83, Register 84; am 11/18/94, Register 132; am 4/24/09, Register 190)

- 11 AAC 90.045. GEOLOGY DESCRIPTION. (a) Each application must include a description of the geology within the proposed permit area and the adjacent area. Except as provided in (c) of this section, the description of the geology must cover the area, down to and including the deeper of either the stratum immediately below the lowest coal seam to be mined that may be adversely affected by surface mining activities and underground mining activities. The description must include
 - (1) the areal and structural geology of the permit area and adjacent areas;

- (2) characteristics or features that influence the required reclamation; and
- (3) characteristics or features that influence the occurrence, availability, movement, quantity, and quality of potentially impacted surface and ground water.
- (b) Except as provided in (d) of this section, the application must include analyses of samples collected from test borings or drill cores from the proposed permit area down to and including the deeper of either the stratum immediately below the lowest coal seam to be mined, or any aquifer below the lowest coal seam to be mined that may be adversely affected by surface mining activities and underground mining activities. Each analysis must include
 - (1) the location of subsurface water, if encountered;
- (2) drill logs showing the lithologic characteristics and thickness of each stratum and each coal seam;
- (3) the physical properties of each stratum, including clay content, texture, overall swell, and erodibility;
- (4) a chemical analysis of each stratum to identify, at a minimum, those strata that contain potentially acid-forming, toxic-forming, or alkalinity-producing materials:
- (5) chemical analyses of the coal seam for acid-forming or toxic-forming materials, including an analysis of the total sulfur content; and
 - (6) engineering properties of clays, clay shale, or other soft rock, if any,
- (A) in the stratum immediately below the lowest coal seam to be mined; and
- (B) for standard room and pillar mining operations, in the stratum immediately above and below each coal seam to be mined.
- (c) The commissioner will require the applicant to collect and analyze samples from test borings or drill cores to greater depths than required under (b) of this section within the proposed permit area or adjacent areas, if the commissioner determines it necessary in order to evaluate the impact of the proposed activities on the hydrologic balance.
- (d) An applicant may request that a requirement of (b) of this section be waived. The commissioner will grant the request only if the commissioner is satisfied that, and makes a written determination that, the requirement is unnecessary because other equivalent information is available and is sufficient to meet the requirements of (b) of this section. (Eff. 5/2/83, Register 84; am 11/18/94, Register 132; am 7/29/98, Register 147; am 4/24/09, Register 190)

Authority: AS 27.21.030 AS 27.21.110

11 AAC 90.047. GROUND WATER INFORMATION. (a) An application must contain a description of the ground water hydrology for the proposed permit area and adjacent area, including, at a minimum,

- (1) the depth below the surface and the horizontal extent of the water table and aquifers;
 - (2) the lithology and thickness of the aquifers;
 - (3) known uses of the water in the aquifers and water table;
 - (4) the quality of any subsurface water encountered; and
 - (5) the contributions of ground water to base flow in perennial streams.
- (b) An application must contain additional information which describes the recharge, storage, and discharge characteristics of aquifers and the quality and quantity of ground water, as required by the commissioner. (Eff. 5/2/83, Register 84)

- 11 AAC 90.049. SURFACE WATER INFORMATION. An application must contain information about surface water, including the name of the watershed that will receive water discharges, the location of all surface water bodies, the location of any water discharge into any surface body of water, and descriptions of surface drainage systems sufficient to identify, in detail, the seasonal variations in water quantity and quality within the proposed permit area and adjacent area, including
- (1) minimum, maximum, and average discharge conditions that identify critical low flow and peak discharge rates of streams; and
- (2) water quality data to identify the characteristics of surface water that is in or discharging into, or that will receive flows from, surface or ground water from the permit area; the data must show:
 - (A) total dissolved solids in milligrams per liter;
 - (B) total suspended solids in milligrams per liter;
 - (C) alkalinity;
 - (D) pH in standard units;
 - (E) total iron in milligrams per liter;

Register 190, July 2009 NATURAL RESOURCES

(F) total manganese in milligrams per liter;

(G) acidity information if there is potential for acid drainage from the proposed mining operation; and

(H) other information that the commissioner may require. (Eff. 5/2/83, Register 84; am 7/29/98, Register 147)

Authority: AS 27.21.030 AS 27.21.110

11 AAC 90.051. ALTERNATIVE WATER SUPPLY INFORMATION. An application must identify the extent to which the proposed operations may proximately result in contamination, diminution, or interruption of a source of water within the proposed permit area or adjacent area for domestic, agricultural, industrial, fish and wildlife habitat, or other legitimate use, and how the operator will comply with AS 27.21.930(b) if the water source is impaired. (Eff. 5/2/83, Register 84)

Authority: AS 27.21.030 AS 27.21.110 AS 27.21.930

- 11 AAC 90.053. CLIMATOLOGICAL INFORMATION. When requested by the commissioner, an application must contain a description of climatological factors of the proposed permit area, including, but not limited to,
- (1) the average annual and seasonal precipitation including average snow depth accumulation and water content;
 - (2) the average direction and velocity of prevailing winds; and
 - (3) seasonal temperature ranges. (Eff. 5/2/83, Register 84)

- 11 AAC 90.055. VEGETATION INFORMATION. (a) An application must contain a map that delineates existing vegetative types and a description of the plant communities within the proposed permit area and within any proposed reference area. This description must include information and quantitative measurements adequate to predict the potential for successful propagation, regeneration, and reestablishment of vegetation.
- (b) Sufficient adjacent area must be included in the description to allow evaluation of vegetation as important habitat for fish and wildlife species identified by the commissioner. (Eff. 5/2/83, Register 84)

Register 190, July 2009 NATURAL RESOURCES

Authority: AS 27.21.030 AS 27.21.110

11 AAC 90.057. Fish and wildlife information. (a) Each application must include a description of the fish and wildlife resources, fish and wildlife habitats, and human uses of the fish and wildlife resources within the proposed permit area and adjacent areas where effects on those resources, habitats, and uses may reasonably be expected to occur.

- (b) The commissioner, in consultation with those state and federal agencies that have responsibility for fish and wildlife management, will determine the scope and level of detail required in the application so that the information is sufficient to design the fish and wildlife protection plan required by 11 AAC 90.081.
- (c) Upon request, the commissioner will provide the resource information required under (a) of this section and the protection and enhancement plan required under 11 AAC 90.081 to the United States Department of the Interior, United States Fish and Wildlife Service regional or field office for review. The information will be provided within 10 days after receipt of the request from the United States Fish and Wildlife Service. (Eff. 4/24/09, Register 190)

Authority: AS 27.21.030 AS 27.21.110

- 11 AAC 90.059. SOIL RESOURCES INFORMATION. (a) An application must contain the following soil information for the proposed permit area:
 - (1) a map delineating different soils;
 - (2) soil identification;
 - (3) soil description, including analyses of each soil type to be affected; and
 - (4) present and potential productivity of existing soils.
- (b) When an applicant proposes to use selected overburden materials as a supplement or substitute for topsoil, the application must provide results of the analyses, trials, and tests required under 11 AAC 90.311. (Eff. 5/2/83, Register 84)

- 11 AAC 90.061. LAND USE INFORMATION. (a) An application must describe the condition, capability, and productivity of the land proposed to be affected by surface operations or facilities, including
 - (1) a map and supporting narrative of the uses of the land existing at the

time of the filing of the application; if the premining use of the land changed within five years before the anticipated date of beginning operations, the historic use of the land must also be described;

- (2)an analysis of the land use description under this section in conjunction with other information required under 11 AAC 90.041 11 AAC 90.065, including, but not limited to.
- (A) soil and foundation characteristics, topography, vegetative cover and hydrology; and
- (B) the productivity before mining, expressed as average yield of food, fiber, forage, fish and wildlife, or wood products from the land obtained under high levels of management as determined by yield data or estimates for similar sites based on current data from appropriate federal or state agencies.
- (b) The application must state whether the proposed permit area has been previously mined and, if so, the following information, if available:
 - (1) the type of mining method used;
 - (2) the coal seam or other mineral strata mined;
 - (3) the extent of coal or other minerals removed;
 - (4) the approximate dates of past mining; and
 - (5) the uses of the land preceding mining.
- (c) The application must contain a description of the existing land use classifications or zoning, if any, of the proposed permit area and adjacent area. (Eff. 5/2/83, Register 84)

- 11 AAC 90.063. GENERAL MAP REQUIREMENTS. An application must include maps showing
- (1) all boundaries of land and names of owners of record of both surface and mineral estates included in or adjacent to the proposed permit area;
- (2) the boundaries of land within the proposed permit area upon which the applicant has the legal right to enter and begin operations;
- (3) the boundaries of all areas proposed to be affected over the estimated total life of the operation, with a description of size, sequence, and timing of the mining of areas for which it is anticipated that additional permits will be sought;

- (4) the location and current use of all buildings on or within 1,000 feet of the proposed permit area;
- (5) the location of surface and subsurface man-made features within, passing through, or passing over the proposed permit area;
- (6) the location and boundaries of any proposed reference areas used under 11 AAC 90.457 for determining the success of revegetation;
- (7) the location of water supply intakes for current users of surface water flowing into, out of, and within a hydrologic area defined by the commissioner, and the surface water which will receive discharges from affected area in the permit area;
- (8) each public road located in or within 100 feet of the proposed permit area;
- (9)the boundaries of any public park and locations of any cultural or historic resources listed or eligible for listing in the National Register of Historic Places and known archeological sites within the permit or adjacent area;
- (10) each cemetery or burial grounds located in or within 100 feet of the proposed permit area;
- (11) any land within the proposed permit and adjacent area which is within the boundaries of any units of the National System of Trails or the Wild and Scenic Rivers System, including study rivers designated under section 5(a) of the Wild and Scenic Rivers Act; and
- (12) other relevant information required by the commissioner to determine whether the applicant will comply with this chapter. (Eff. 5/2/83, Register 84)

- 11 AAC 90.065. CROSS SECTIONS, MAPS, AND PLANVIEWS. (a) An application must include cross sections, maps, and planviews showing
 - (1) elevations and locations of test borings and core samplings;
- (2) elevations and locations of monitoring stations used to gather data for water quality and quantity, fish and wildlife, and air quality, if required, in preparation of the application;
- (3) nature, depth, and thickness of the coal seams to be mined, any coal or rider seams above the seam to be mined, each stratum of the overburden, and the stratum immediately below the lowest coal seam to be mined:

(4) all coal crop lines and the attitude of the coal to be mined within the proposed permit

area;

- (5) location and extent of known workings of active, inactive, or abandoned underground mines, including mine openings to the surface within the proposed permit area and adjacent area;
- (6) location and extent of any subsurface water encountered within the proposed permit area and adjacent area, including, but not limited to, for underground operations, areal and vertical distribution of aquifers and portrayal of seasonal differences of head in different aquifers on cross sections and contour maps;
- (7) location of surface water bodies such as streams, lakes, ponds, springs, constructed or natural drains, and irrigation ditches within the proposed permit area and adjacent area;
- (8) location and extent of existing or previously surface-mined areas within the permit area;
- (9) location and dimensions of existing areas of spoil, waste, coal development waste and noncoal waste disposal, dams, embankments, other impoundments, and water treatment and air pollution control facilities within the proposed permit area;
- (10) location, and depth, if available, of gas and oil wells and water wells within the proposed permit area and adjacent area;
- (11) sufficient slope measurements to adequately represent the existing land surface configuration of the proposed area to be affected by surface operations and facilities, measured and recorded according to
- (A) an angle of inclination along the prevailing slope extending 100 linear feet above and below or beyond the coal outcrop or the area to be disturbed or, where this is impractical, at locations specified by the commissioner,
- (B) measurement extending at least 100 feet beyond the limits of mining disturbances, or any other distance determined by the commissioner to be representative of the premining configuration of the land in previously mined areas, and
- (C) slope measurements, taking into account natural variations in slope to provide accurate representation of the range of natural slopes and reflect geomorphic differences of the area to be disturbed.
- (b) Maps, planviews, and cross sections required by this section must be prepared by or under the direction of and certified by, a geologist, registered professional land surveyor, or registered professional engineer, and must be updated as

Register 190, July 2009 NATURAL RESOURCES

required by the commissioner. (Eff. 5/2/83, Register 84; am 9/28/86, Register 99)

Authority: AS 27.21.030 AS 27.21.110

ARTICLE 5.

RECLAMATION AND OPERATION PLAN.

Section

- 071. Operation plan
- 073. Existing structures
- 075. Blasting plan
- 077. Operation maps, planviews, and cross sections
- 079. Air pollution control plan
- 081. Fish and wildlife protection plan
- 083. Reclamation plan general requirements
- 085. Plan for protection of hydrologic balance
- 087. Post mining reclamation plan
- 089. Plan for ponds, impoundments, dams, and embankments
- 091. Protection of public parks and historic places
- 093. Relocation or use of public roads
- 095. Excess spoil and underground development waste
- 097. Transportation facilities
- 099. Return of coal mine waste and excess spoil to abandoned underground workings
- 101. Subsidence control plan

11 AAC 90.071. OPERATION PLAN. Each application must contain a description of the operations proposed to be conducted during the life of the mine including, at a minimum,

- (1) the type and method of coal mining procedures and proposed engineering techniques, anticipated annual and total production of coal, and the major equipment to be used; and
- (2) the construction, modification, use, maintenance, and removal of the facilities unless retention of the facilities is approved under 11 AAC 90.481, including
 - (A) dams, embankments, and other impoundments;
- (B) overburden and topsoil handling and storage areas and structures:
- (C) coal removal, handling, storage, cleaning, and transportation areas and structures;
- (D) spoil, coal mine waste, and non-coal waste removal, handling, storage, transportation, and disposal areas and structures;
 - (E) mine facilities; and
- (F) water and air pollution control facilities. (Eff. 5/2/83, Register 84; am 11/18/94, Register 132)

- 11 AAC 90.073. EXISTING STRUCTURES. (a) Each application must contain a description of each existing structure proposed to be used in connection with the operation, including
 - (1) location;
 - (2) plans of the structure which show its current condition;
- (3) approximate dates on which construction of the existing structure was begun and completed; and
- (4) a showing of whether the structure meets the requirements of 11 AAC 90.301 11 AAC 90.501 or, if the structure does not meet these requirements, a showing of whether the structure meets the standards of 30 CFR Subchapter B.
- (b) Each application must contain a compliance plan for each existing structure proposed to be modified or reconstructed for use in connection with the operation, including
- (1) design specifications which meet the requirements of 11 AAC 90.301 11 AAC 90.501;

- (2) a construction schedule;
- (3) provisions for monitoring the structure during and after modification or reconstruction to ensure that the requirements of 11 AAC 90.301 11 AAC 90.501 are met; and
- (4) a showing that the reasonably foreseeable risk of harm to the environment or to public health or safety is not significant during the period of modification or reconstruction. (Eff. 5/2/83, Register 84)

Authority: AS 27.21.030 AS 27.21.110

- 11 AAC 90.075. BLASTING PLAN. Each application for a surface mining operation must contain a blasting plan explaining how the applicant intends to comply with the requirements of 11 AAC 90.371 11 AAC 90.383, including descriptions of the
- (1) types and approximate amounts of explosives to be used for each type of blasting operation to be conducted;
- (2) procedures and plans for recording and retention of information during blasting for
- (A) drilling patterns, including size, number, depths, and spacing of holes,
 - (B) charge and packing of holes,
 - (C) types of fuses and detonation controls, and
 - (D) sequence and timing of firing holes;
 - (3) blasting warning and site access control equipment and procedures;
- (4) types, capabilities, sensitivities, and locations of any blast monitoring equipment and procedures proposed to be used;
- (5) plans for recording and reporting to the commissioner the results of preblasting surveys; and
- (6) procedures to be followed for unscheduled blasts under 11 AAC 90.375(d). (Eff. 5/2/83, Register 84)

Authority: AS 27.21.030 AS 27.21.110

11 AAC 90.077. OPERATION MAPS, PLANVIEWS, AND CROSS SECTIONS.

- (a) Each application must contain maps and planviews, and cross sections where appropriate, showing the land proposed to be affected throughout the life of the operation and any change in a facility or feature to be caused by the proposed operations.
 - (b) The following must be shown for the proposed permit area:
 - (1) buildings, utility corridors, and facilities to be used;
- (2) the area of land to be affected and the sequence of mining and reclamation:
- (3) each area of land for which a performance bond or other equivalent guarantee will be posted under AS 27.21.160;
 - (4) each coal storage, cleaning, and loading area;
 - (5) each topsoil, spoil, coal mine waste, and non-coal waste storage area;
- (6) each water diversion, collection, conveyance, treatment, storage, and discharge facility to be used;
 - (7) each air pollution collection and control facility;
- (8) each source of waste and each waste disposal facility relating to coal processing or surface or ground water pollution control;
- (9) each facility to be used to protect and enhance fish and wildlife and related environmental values:
 - (10) each explosive storage and handling facility; and
- (11) the location of each siltation structure, water impoundment, coal mine waste disposal area, and coal mine waste dam and embankment, in accordance with 11 AAC 90.089, and fill area for the disposal of excess spoil in accordance with 11 AAC 90.095.
- (c) The following additional information is required for underground mining operations:
- (1) a profile of the anticipated final surface configuration to be achieved for the affected area, at cross sections specified by the commissioner;
 - (2) location of each water and subsidence monitoring point; and
- (3) location of each facility that will remain as a permanent feature after the completion of underground mining activities.
 - (d) Each Map, planview, and cross section required under (b) (4), (5), (6), (10),

and (11) of this section must be prepared by, or under the direction of and certified by, a geologist, registered professional land surveyor, or registered professional engineer; however, a map, planview, or cross section for a siltation structure, underground development waste, coal processing waste, or excess spoil disposal facility must be prepared and certified by a registered professional engineer. (Eff. 5/2/83, Register 84; am 9/28/86, Register 99; 11/18/94, Register 132)

Authority: AS 27.21.030 AS 27.21.110

11 AAC 90.079. AIR POLLUTION CONTROL PLAN. Each application must include an air pollution control plan showing how all surface area will be stabilized and protected to comply with applicable federal and state air quality regulations and, if required by the commissioner, an air quality monitoring program to provide sufficient data to evaluate the effectiveness of the air pollution control practices to be used. (Eff. 5/2/83, Register 84)

- 11 AAC 90.081. FISH AND WILDLIFE PROTECTION PLAN. (a) Each application must include a plan to prevent or minimize disturbance and adverse impacts on fish, wildlife, and related environmental values in accordance with 11 AAC 90.423, including impact control measures, management techniques, and monitoring methods to protect, enhance, or mitigate the following, if they can reasonably be expected to be affected by the proposed activities:
- (1) threatened or endangered species of plants or animals listed or proposed by the secretary under the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 1543) and their critical habitats;
- (2) important species, as determined by the commissioner, including fish and game of economic, recreational, or subsistence importance; eagles, migratory birds, other animals protected by state or federal law, and their habitats; and
 - (3) habitats of unusually high value for fish or wildlife.
- (b) Except as provided in (c) of this section, the plan must include protective measures to be used during the active mining phase of the operation, and enhancement measures to be used during the reclamation and postmining phases of the operation to develop aquatic and terrestrial habitats.
- (c) If the plan does not include enhancement measures, it must contain a statement explaining why enhancement is not practicable. (Eff. 5/2/83, Register 84; am 11/18/94, Register 132)

- 11 AAC 90.083. RECLAMATION PLAN GENERAL REQUIREMENTS. (a) Each application must contain a plan for reclamation of the proposed permit area showing how the applicant will comply with 11 AAC 90.301 11 AAC 90.501. The plan must include, at a minimum, all information required under 11 AAC 90.083 11 AAC 90.101.
- (b) Each plan must contain the following information for the proposed permit area:
- (1) a detailed timetable for the completion of each major step in the reclamation plan;
- (2) a detailed estimate, with supporting calculations, of the cost of reclamation of the proposed operations required to be covered by a performance bond under 11 AAC 90.201;
- (3) a plan for backfilling, soil stabilization, compacting, and grading, with contour maps or cross-sections that show the anticipated final surface configuration of the proposed permit area, in accordance with 11 AAC 90.441 11 AAC 90.449;
- (4) a plan for removal, storage, and redistribution of topsoil, subsoil, and other material to meet the requirements of 11 AAC 90.311 11 AAC 90.317;
- (5) a plan for revegetation as required in 11 AAC 90.451 11 AAC 90.456, including, but not limited to, descriptions of the
 - (A) schedule of revegetation;
- (B) species and amounts per acre of seeds and seedlings to be used:
 - (C) methods to be used in planting and seeding;
 - (D) mulching techniques;
 - (E) irrigation, if appropriate;
 - (F) pest and disease control measures, if any;
- (G) measures proposed to be used to determine the success of revegetation as required in 11 AAC 90.457; and
- (H) a soil testing plan for evaluation of the results of topsoil handling and reclamation procedures related to revegetation;
 - (6) a description of the measures to be used to maximize the use and

conservation of the coal resource as required in 11 AAC 90.361;

- (7) a description of measures to be employed to ensure that all debris, acid-forming and toxic-forming materials, and materials constituting a fire hazard are disposed of in accordance with 11 AAC 90.409 and 11 AAC 90.445 and a description of the contingency plans which have been developed to preclude sustained combustion of these materials;
- (8) a description, including appropriate cross sections and maps, of the measures to be used to seal or manage mine openings and to plug, case, or manage exploration holes, other bore holes, wells, and other openings within the proposed permit area, in accordance with 11 AAC 90.303 11 AAC 90.305;
- (9) a description of steps to be taken to comply with the requirements of 42 U.S.C. 7401 7671q (Clean Air Act), 33 U.S.C. 1251 1376 (federal Clean Water Act), and other applicable air and water quality laws and regulations and health and safety standards;
- (10) where applicable, a description of the measures to be used to comply with 11 AAC 90.393;
- (11) a description, including maps and cross sections, that show how stream channel diversions will comply with 11 AAC 90.325 11 AAC 90.327 and;
- (12) a description and schedule of plans to remove and reclaim each road not retained under the approved postmining land use. (Eff. 5/2/83, Register 84; am 7/29/98, Register 147)
- 11 AAC 90.085. PLAN FOR PROTECTION OF HYDROLOGIC BALANCE. (a) Each application must include a determination of the probable hydrologic consequences of the proposed operation on the quantity and quality of water in surface and ground water systems under seasonal flow conditions for the permit area and adjacent areas. The determination must
- (1) be based on hydrologic, geologic, and other information required under 11 AAC 90.043 11 AAC 90.051, and may include data statistically representative of the site;
- (2) be supported by any supplemental hydrologic or geologic information required by the commissioner if necessary to evaluate any potential adverse impact on the hydrologic balance on or off the proposed permit area or to plan a remedial or reclamation activity;
 - (3) include an assessment of the impact of the proposed operation on
 - (A) sediment yield from the disturbed area;
 - (B) acidity, total suspended and dissolved solids, and other water

quality parameters specified by the commissioner;

- (C) streamflow, including flooding;
- (D) surface and ground water availability; and
- (E) other characteristics required by the commissioner; and
- (4) include findings on whether adverse impacts to the hydrologic balance may occur and whether surface or ground water supplies may be contaminated by the presence of acid-forming or toxic-forming materials.
- (5) include findings on whether the underground mining activities conducted after October 24, 1992 may result in contamination, diminution, or interruption of a water supply that is protected under 11 AAC 90.321(e) and in existence at the time the permit application is submitted.
- (b) Each application must include a detailed description, with appropriate maps and cross section drawings, of the measures to be taken during and after the proposed operation, in accordance with 11 AAC 90.301 11 AAC 90.501, to ensure the protection of
- (1) the quality of surface and ground water systems, both on the permit areas and adjacent areas, from the adverse effect of the proposed operation;
 - (2) the rights of present users of surface and ground water;
- (3) the quantity of surface and ground water both on the permit and adjacent area from adverse effects of the proposed operations, or measures to provide alternative sources of water in accordance with AS 27.21.930 where the protection of quantity cannot be ensured; and
- (4) surface and ground water quality by locating openings for underground mines in accordance with 11 AAC 90.341.
 - (c) The description in (b) of this section must include:
- (1) a plan for the control, under 11 AAC 90.301 11 AAC 90.501, of surface and ground water drainage into, through, and out of the proposed permit area.
- (2) a plan for the treatment, if required under 11 AAC 90.301 11 AAC 90.501, of surface and ground water drainage from the area to be disturbed by the proposed operation, and proposed quantitative limits on pollutants in discharge subject to 11 AAC 90.323, according to the more stringent provisions of
 - (A) 11 AAC 90.301 11 AAC 90.501; or
 - (B) other applicable state and federal laws and regulations;

- (3) a plan for the restoration of the approximate recharge capacity of the permit area and adjacent area in accordance with 11 AAC 90.343;
- (4) a plan for implementing appropriate preventative and remedial measures, if the determination of probable hydrologic consequences under (a) of this section identifies any potentially adverse hydrologic consequences of the operation; and
- (5) a plan for the collection, recording, and reporting of ground and surface water quality and quantity data according to 11 AAC 90.345 including
 - (A) quantity and quality parameters to be monitored;
 - (B) sampling frequency;
 - (C) site locations; and
- (D) interpretation of the data to define any impacts of the operation on the hydrologic balance.
- (d) Each plan for underground mining must contain a detailed description, with appropriate drawings, of permanent entry seals and down-slope barriers designed to ensure stability under anticipated hydraulic heads developed while promoting mine inundation after mine closure for the proposed permit area. (e) The applicant may submit any data and analysis that the applicant considers relevant to the cumulative hydrologic impacts assessment that the commissioner makes under AS 27.21.180(c) for the cumulative impact area. (Eff. 5/2/83, Register 84; am 11/18/94, Register 132; am 4/24/09, Register 190)

Authority: AS 27.21.030 AS 27.21.180 AS 27.21.930

AS 27.21.110

11 AAC 90.087. POST MINING RECLAMATION PLAN. (a) Each plan must contain a detailed description of the proposed use, following reclamation, of the land to be affected by surface operations or facilities, including a discussion of the utility and capacity of the reclaimed land to support a variety of

alternative uses and the relationship of the proposed use to existing land use policies and plans. This description must explain

- (1) how the proposed postmining land use is to be achieved, including all materials needed for approval of any alternative use and support activities under 11 AAC 90.481; and
- (2) the consideration which has been given to making the proposed operation consistent with surface owner plans and applicable state and local land use plans and programs.

(b) The description must be accompanied by comments concerning the proposed use by the legal or equitable owner of record of the surface of the proposed permit area and state and local government agencies which would have to initiate, implement, approve, or authorize the proposed land use following reclamation. (Eff. 5/2/83, Register 84)

Authority: AS 27.21.030 AS 27.21.110

11 AAC 90.089. PLAN FOR PONDS, IMPOUNDMENTS, DAMS, AND EMBANKMENTS. (a) Each application must include a plan for each proposed siltation structure, water impoundment, and coal mine waste dam or embankment within the proposed permit area and must

- (1) be prepared and certified by a qualified registered professional engineer or other qualified specialist under the direction of a registered professional engineer; in this paragraph, "qualified" means experienced or trained in the design and construction of impoundments;
 - (2) contain a description and cross section of the structure;
- (3) contain preliminary hydrologic and geologic information required to assess the hydrologic impact of the structure;
- (4) contain a survey describing the potential effect on the structure from subsidence of the subsurface strata resulting from past underground mining operations if underground mining has occurred; and
- (5) contain a certification which includes a schedule of when any detailed design plans that are not submitted with the general plan will be submitted to the commissioner; the detailed design plan must be approved by the commissioner, in writing, before construction begins.
 - (b) Each detailed design plan must
- (1) be prepared by or under the direction of, and certified by, a registered professional engineer;
- (2) include any geotechnical investigation, design, and construction requirements for the structure;
- (3) describe the operation and maintenance requirements for each structure; and
- (4) describe the timetable and plans to remove each structure, if appropriate.

- (c) Each plan for coal mine waste dams and embankments must contain the results of a geotechnical investigation of the proposed dam or embankment foundation area to determine the structural competence of the foundation which will support the proposed dam or embankment structure and the impounded material. The geotechnical investigation must be planned and supervised by an engineering geologist or registered professional engineer according to the following:
- (1) the number, location, and depth of borings and test pits must be determined using current prudent engineering practice for the size of the dam or embankment, quantity of material to be impounded, and subsurface conditions;
- (2) the character of overburden and bedrock, the proposed abutment site, and any adverse geotechnical conditions which may affect the particular dam, embankment, or reservoir site must be considered;
- (3) all springs, seepage, and ground water flow observed or anticipated during wet periods in the area of the proposed dam or embankment must be identified on each plan; and
- (4) consideration must be given to the possibility of mudflows, rock debris falls, or other landslides into the dam, embankment, or impounded material.
- (d) If the structure is 20 feet or higher or impounds more than 20 acre-feet, each plan under this section must include a stability analysis of each structure, including, but not limited to, strength parameters, pore pressures, and long-term seepage conditions. The plan must also contain a description of each engineering design assumption and calculation with a discussion of each alternative considered in selecting the specific design parameters and construction methods. (Eff. 5/2/83, Register 84; am 11/18/94, Register 132; am 4/24/09, Register 190)

11 AAC 90.091. PROTECTION OF PUBLIC PARKS AND HISTORIC PLACES. For any public park or historic place that may be adversely affected by the proposed operations, each plan must describe the measures to be used to prevent or minimize these impacts as required under 11 AAC 90.121(a). (Eff. 5/2/83, Register 84)

Authority: AS 27.21.030 AS 27.21.110

11 AAC 90.093. RELOCATION OR USE OF PUBLIC ROADS. Each application must describe, with appropriate maps and cross sections, the measures to be used to ensure that the interests of the public and land owners affected are protected if the applicant seeks to have the commissioner approve relocating a public road, or mining activities within 100 feet of the right-of-way line of any public road, except where mine

Register 190, July 2009 NA

NATURAL RESOURCES

access or haul roads join that right-of-way. (Eff. 5/2/83, Register 84)

Authority: AS 27.21.030 AS 27.21.110

11 AAC 90.095. EXCESS SPOIL AND UNDERGROUND DEVELOPMENT WASTE. (a) Each application must contain descriptions, including appropriate maps and cross section drawings, of the proposed disposal site and design of the spoil disposal structures according to 11 AAC 90.391. These plans must describe the design, construction, operation, maintenance, and removal, if appropriate, of the site and structures.

- (b) Each application must contain the results of a geotechnical investigation of the proposed disposal site, including
- (1) the character of bedrock and any adverse geologic conditions in the disposal area;
- (2) a survey identifying all springs, seepage, and ground water flow observed or anticipated during wet periods in the area of the disposal site;
- (3) a survey of the potential effects of subsidence of the subsurface strata due to past and future mining operations;
- (4) a geotechnical description of the rock materials to be utilized in the construction of those disposal structures containing rock chimney cores or underlain by a rock drainage blanket; and
- (5) a stability analysis including, but not limited to, strength parameters, pore pressures and long-term seepage conditions, accompanied by a description of all engineering design assumptions and calculations and the alternatives considered in selecting the specific design specifications and methods.
- (c) If, under 11 AAC 90.391, rock-toe buttresses or key-way cuts are required, the application must include
- (1) the number, location, and depth of borings or test pits which must be determined considering the size of the spoil disposal structure and subsurface conditions: and
- (2) engineering specifications utilized to design the rock-toe buttress or key-way cuts determined in accordance with (b)(5) of this section. (Eff. 5/2/83, Register 84)

11 AAC 90.097. TRANSPORTATION FACILITIES. Each application must contain a detailed description of each road, conveyor, or rail system that is to be constructed, used, or maintained within the proposed permit area. The description must be accompanied by a map, appropriate cross sections, and the specifications for each road width, road gradient, road surface, road cut, fill embankment, culvert, bridge, drainage ditch, low water crossing, temporary stream ford, and drainage structure. (Eff. 5/2/83, Register 84; am 7/29/98, Register 147)

Authority: AS 27.21.030 AS 27.21.110

11 AAC 90.099. RETURN OF COAL MINE WASTE AND EXCESS SPOIL TO ABANDONED UNDERGROUND WORKINGS. (a) Each underground mining plan must describe the design, operation, and maintenance of any proposed facility to return coal mine waste and excess spoil to underground workings, including flow diagrams and any other drawings and maps required by the commissioner. The permit application must also include any plans required to be submitted to the federal Mine Safety and Health Administration for approval under 30 C.F.R. 817.81(f).

(b) Each plan must describe

- (1) the source and quality of waste to be stowed, area to be backfilled, percent of the mine void to be filled, method of constructing underground retaining walls, influence of the backfilling operation on active underground mine operations, surface area to be supported by the backfill, and the anticipated occurrence of surface effects following backfilling;
- (2) the source of the hydraulic transport mediums, method of dewatering the placed backfill, retainment of water underground, treatment of water if released to surface streams, and the effect on the hydrologic regime; and
- (3) each permanent monitoring well to be located in the backfilled area, the stratum underlying the mined coal, and gradient from the backfilled area.
- (c) The requirements of this section also apply to pneumatic backfilling operations, except where the operations are exempted by the commissioner from requirements specifying hydrologic monitoring. (Eff. 5/2/83, Register 84; am 11/18/94, Register 132; am 7/29/98, Register 147)

Authority: AS 27.21.030 AS 27.21.110

11 AAC 90.101. Subsidence control plan. (a) Each application proposing underground mining activities must include a pre-subsidence survey that shows whether structures, renewable resource land, or water supplies protected under 11 AAC 90.321(e) exist within the permit area or adjacent areas. The pre-subsidence survey must include

NATURAL RESOURCES

- (1) a map of the permit area and adjacent areas at a scale of 1:12,000, or a larger scale as the commissioner determines necessary; the map must show
- (A) the location and type of structures and renewable resource land; and
- (B) the location and type of protected water supplies that could be contaminated, diminished, or interrupted;
- (2) a description, including quantity and quality, of any structures, renewable resource land, or protected water supplies found within the permit area or adjacent areas; and
 - (3) a narrative indicating whether subsidence, if it occurred, could
- (A) cause material damage to structures or renewable resource land;
- (B) diminish the value or reasonably foreseeable use of structures or renewable resource land; or
 - (C) contaminate, diminish, or interrupt protected water supplies.
- (b) The application must include a subsidence control plan if the narrative under (a)(3) of this section shows or the commissioner determines that subsidence could
 - (1) cause material damage to structures or renewable resource land;
- (2) diminish the value or reasonably foreseeable use of structures or renewable resource land; or
 - (3) contaminate, diminish, or interrupt protected water supplies.
 - (c) The subsidence control plan required under (b) of this section must contain
- (1) a description of whether coal is to be removed by means of longwall mining, room-and-pillar removal, hydraulic mining, or another method; the description must include the size, sequence, and timing of the development of underground workings;
- (2) a map of the underground workings that describes the location and extent of the areas in which planned-subsidence mining methods will be used and that identifies all areas where the measures described in (4), (5), and (7) of this subsection will be taken to prevent or minimize subsidence and subsidence-related damage, and, when applicable, to correct subsidence-related material damage;
 - (3) a description of the physical conditions, including depth of cover,

seam thickness, and lithology of overlaying strata, that may affect the likelihood or extent of subsidence and subsidence-related damage;

- (4) a description of the monitoring, if any, needed to determine the commencement and degree of subsidence so that, when appropriate, other measures can be taken to prevent, reduce, or correct material damage in accordance with 11 AAC 90.461(d);
- (5) except for those areas where planned-subsidence mining methods are projected to be used, a detailed description of the subsidence control measures that will be taken to prevent or minimize subsidence and subsidence-related damage; those measures include
 - (A) backstowing or backfilling of voids;
 - (B) leaving support pillars of coal;
- (C) leaving areas in which no coal is removed, including a description of the overlying area to be protected by leaving coal in place; and
- (D) measures on the surface to prevent or minimize material damage to or diminution in value of the surface;
- (6) a description of the anticipated effects of planned-subsidence mining methods, if those methods are projected to be used;
- (7) a description of the measures to be taken in accordance with 11 AAC 90.321(e) (f) and 11 AAC 90.461(d) (/) to replace adversely affected protected water supplies or to mitigate or remedy any subsidence-related material damage to the land and protected structures; and
- (8) other information specified by the commissioner as necessary to demonstrate that the operation will be conducted in accordance with 11 AAC 90.461.
 - (d) In this section, "material damage" means
- (1) a functional impairment of surface lands, features, structures, or facilities;
- (2) a physical change that has a significant adverse impact on the affected land's capability to support any current or reasonably foreseeable uses or causes significant loss in production or income;
- (3) a significant change in the condition, appearance, or utility of any structure or facility from its pre-subsidence condition. (Eff. 4/24/09, Register 190)

ARTICLE 6.

PROCESSING OF PERMIT APPLICATIONS.

Section

- 111. Completeness review
- 113. Public notice
- 115. Public participation
- 117. Administrative processing of applications
- 119. Transfer, sale, or assignment of permit rights
- 121. Areas where mining may be limited
- 123. Valid existing rights
- 125. Commissioner's findings
- 127. Permit conditions
- 129. Permit revisions and renewals
- 131. Review of decisions
- 133. Review of outstanding permits

11 AAC 90.111. COMPLETENESS REVIEW. The commissioner will determine whether an application for a permit, renewal of a permit, or major revision of a permit is complete within 90 days after the date of receipt of the application. A complete application is one which contains all information required under 11 AAC 90.021 - 11 AAC 90.101. If the application is not complete, the commissioner will notify the applicant, in writing, of all information required to render the application complete. (Eff. 5/2/83, Register 84)

Authority: AS 27.21.030 AS 27.21.180

11 AAC 90.113. PUBLIC NOTICE. At the time an application for a permit, renewal of a permit, or major revision of a permit is determined to be complete, the commissioner will make the application available in accordance with 11 AAC 90.907(b)

and provide notice as provided in 11 AAC 90.907(d), including a newspaper advertisement at least once a week for four consecutive weeks. The commissioner will also provide notice to the persons identified under 11 AAC 90.023(a)(2) and (3). The notices will contain the information required under 11 AAC 90.907(e) and

- (1) if the applicant seeks a permit to mine within 100 feet of the outside right-of-way of a public road or to relocate a public road and the public notice and hearing have not already occurred in accordance with 11 AAC 90.121(d), a concise statement describing the public road, the particular part to be relocated, where the relocation is to occur, and the duration of the relocation; and
- (2) a description of any variances from the requirements of 11 AAC 90.301- 11 AAC 90.501 sought in the application. (Eff. 5/2/83, Register 84)

- 11 AAC 90.115. PUBLIC PARTICIPATION. (a) A person requesting an informal conference shall briefly summarize the issues to be raised at the conference.
- (b) Except as provided in (5) of this subsection, if an informal conference is requested, the commissioner will hold it within a reasonable time following receipt of the request. The conference will be conducted according to the following procedure:
- (1) the conference will be held in the district office of the department of natural resources closest to the locality of the proposed operation:
- (2) the date, time, and location will be advertised in the manner provided under 11 AAC 90.113(a) at least two weeks before the scheduled conference;
- (3) if requested a reasonable time before the conference, the commissioner will, in his or her discretion, arrange with the applicant to grant parties to the conference access to the proposed permit area for the purpose of gathering information relevant to the conference;
- (4) the requirements of AS 44.62 will not apply to the conduct of the informal conference;
- (5) the conference will be conducted by a representative of the commissioner who will, in his or her discretion, accept oral or written statements and any other relevant information from any party to the conference;
- (6) an electronic or stenographic record will be made of the conference and the record will be maintained and will be accessible to the public until final release of the applicant's performance bond or other equivalent guarantee under 11 AAC 90.211;

Register 190, July 2009 NATURAL RESOURCES

- (7) if all parties requesting the informal conference withdraw their request, the conference may be canceled; and
- (8) the informal conference may be used as the public hearing required under 11 AAC 90.121(d) on proposed uses or relocation of public roads. (Eff. 5/2/83, Register 84)

Authority: AS 27.21.030 AS 27.21.140

- 11 AAC 90.117. ADMINISTRATIVE PROCESSING OF APPLICATIONS. (a) The commissioner will make a decision on the application in accordance with 11 AAC 90.907(h).
- (b) If the commissioner approves an application because the applicant has appealed a violation under AS 27.21.180(e)(2), and the final administrative or judicial hearing authority either denies a stay of its decision or affirms the violation, then the commissioner will immediately order a cessation of the operation. The order will remain in effect until the permittee submits proof that the violation has been or is being corrected in accordance with AS 27.21.180(e).
- (c) In addition to meeting the requirements of 11 AAC 90.907(h), the commissioner will send a copy of the decision to OSM and publish a summary of the decision in the newspapers which carried the original notice of the filing of the application. For permit renewal, the commissioner will send copies of the decision to the applicant, each person who filed comments on the renewal, and each party to any informal conference on the renewal. All notices under this subsection will specifically identify any extensions of time granted under AS 27.21.070. (Eff. 5/2/83, Register 84)

Authority: AS 27.21.030 AS 27.21.080 AS 27.21.140 AS 27.21.180 AS 27.21.190

- 11 AAC 90.119. TRANSFER, SALE, OR ASSIGNMENT OF PERMIT RIGHTS. (a) No transfer, sale, or assignment of permit rights under this chapter is allowed without the written approval of the commissioner. A proposed successor in interest may continue the permittee's operation until the successor's application is granted or denied if the successor meets the requirements of AS 27.21.190(d) and agrees, in writing, to comply with the approved permit in all respects until the transfer application and any application for a new or revised permit is granted or denied.
- (b) A person seeking to succeed by transfer, sale, or assignment to the rights granted by a permit shall provide the commissioner with an application for approval of the proposed transfer, sale, or assignment which includes any revised information required by 11 AAC 90.023 11 AAC 90.031. If the proposed successor wishes to make any changes in the approved permittee's operations or reclamation plans, the

insurance, bond, or equivalent guarantee, or the approved permit area, then the proposed successor shall apply for a new permit or a major revision to the existing permit instead of seeking approval for the transfer, sale, or assignment under this section.

- (c) The commissioner will provide notice in accordance with 11 AAC 90.907. Any person whose interests may be adversely affected by granting the approval, including an official of any federal, state, or local government agency, may submit written comments on the application to the commissioner within 30 days after notice has been given.
- (d) The commissioner will, in the commissioner's discretion, approve the transfer, sale, or assignment of permit rights upon a written finding that the applicant meets the criteria of 11 AAC 90.125 and has satisfied the bonding requirements of AS 27.21.160.
- (e) The successor shall immediately notify the commissioner of the consummation of the transfer, sale, or assignment of permit rights. (Eff. 5/2/83, Register 84; am 11/18/94, Register 132)

- 11 AAC 90.121. AREAS WHERE MINING MAY BE LIMITED. (a) Subject to valid existing rights, the commissioner will prohibit operations in accordance with AS 27.21.260(d), subject to (b) (d) of this section.
- (b) For operations under AS 27.21.260(d)(2), the commissioner will transmit a copy of the complete application to the agency that has jurisdiction over the park or site and will not approve the application unless it is approved by that agency.
- (c) The commissioner will not approve an application for an operation on land within 300 feet, measured horizontally, from any occupied dwelling unless the applicant submits with the application a written, signed, waiver from the owner of the dwelling, stating that the owner had the legal right to deny mining and knowingly waived that right. The waiver acts as consent to conduct the operation within a closer distance to the dwelling as specified in the waiver. A waiver obtained before August 3, 1977, is valid. A waiver obtained from a previous owner remains effective for a subsequent owner who had actual or constructive knowledge of the existing waiver at the time of purchase. A subsequent purchaser is considered to have constructive knowledge if the waiver has been recorded in the public property records under state law. The waiver must be separate from a lease or deed unless
 - (1) the lease or deed contains an explicit waiver; and
 - (2) a copy of the lease or deed is included with the permit application.
 - (d) The commissioner will, in his or her discretion, approve relocation of a public

road or operations on land within 100 feet, measured horizontally, of the outside rightof-way of any public road, except where mine access roads or haulage roads join the right-of-way, if the commissioner

- (1) requires the applicant to obtain any necessary approval of the governmental authority with jurisdiction over the public road;
- (2) provides opportunity, after appropriate notice, for a public hearing in the locality of the proposed operations for the purpose of determining whether the interests of the public and affected landowners will be protected; and
- (3) makes a written finding within 30 days after hearing, or at the end of the public comment period if no hearing is held, that the interests of the public and affected landowners will be protected.
- (e) If the commissioner is unable to determine whether the proposed operation is located within land identified in AS 27.21.260(d), the commissioner will transmit a copy of the relevant portions of the application to the appropriate federal, state, or municipal agency or Native corporation or village for a determination of the relevant boundaries or distances, with a request that it respond, in writing, within 30 days after receipt of the request. The commissioner will presume that the proposed operation is not located within the boundaries of this land if no response is returned within 30 days. This presumption is not conclusive if the commissioner is notified during the review of the application that the proposed operation is within a protected area.(Eff. 5/2/83, Register 84; am 11/18/94, Register 132)

- 11 AAC 90.123. VALID EXISTING RIGHTS. (a) In the Act and this chapter, except for mine access or haulage roads, "valid existing rights" means property rights in existence on August 3, 1977 that were created by a legally binding conveyance, lease, contract, or other instrument that authorizes the applicant to produce coal and the applicant either
- (1) had been validly issued or exercised a good faith effort to obtain, on or before August 3, 1977, all state and federal permits necessary to conduct operations on the land; or
- (2) can demonstrate that the coal is both needed for, and immediately adjacent to, an ongoing operation for which all permits were obtained before August 3, 1977.
- (b) A determination that coal is needed for an ongoing operation will be based on a finding that additional production originating on adjacent land is necessary to preclude a financial hardship on the operation measured by standard accounting and financial procedures if

- (1) a fair rate of return on invested capital cannot be achieved on existing permitted land;
- (2) a less than fair rate of return on invested capital is attributable to the provisions of this chapter; and
- (3) the operator can establish that the adjacent unpermitted land is part of the operator's mining plan.
 - (c) For mine access or haulage roads, "valid existing rights" means
- (1) a recorded right of way, recorded easement, or a permit for the road recorded by August 3, 1977; or
 - (2) any other road in existence on August 3, 1977.
- (d) The applicant may establish a valid existing right by demonstrating that the operation existed at the time a structure, road, cemetery, or other activity protected in AS 27.21.260(d) came into existence.
- (e) "Valid existing rights" does not mean the mere expectation of a right to conduct surface coal mining operations or the right to conduct underground coal mining. (Eff. 5/2/83, Register 84)

- 11 AAC 90.125. COMMISSIONER'S FINDINGS. (a) The commissioner will not approve an application for a permit or major revision of a permit unless the application affirmatively demonstrates and the commissioner finds, in writing, on the basis of information set out in the application or information otherwise available that is documented in the approval, that
 - (1) the conditions specified in AS 27.21.180(c) have been met;
- (2) neither the applicant nor the operator is in violation of the conditions specified in AS 27.21.180(f);
- (3) the applicant has assured that disturbances to the hydrologic balance will be minimized, the water rights of present users will be protected, and, in those cases where rights cannot be protected, alternative water sources of similar quantity and quality will be provided;
- (4) the applicant has obtained a negative determination of alluvial valley floors or satisfied the requirements of 11 AAC 90.149;
 - (5) the proposed postmining land use of the permit area has been

approved by the commissioner under 11 AAC 90.481;

- (6) the operation will not affect the continued existence of known threatened or endangered species or result in the destruction or adverse modification of their critical habitat as determined under the Endangered Species Act of 1973 (16 U.S.C. 1531, et seg.);
- (7) an existing structure proposed for use in the operation meets the requirements of 11 AAC 90.005;
- (8) all specific approvals required under 11 AAC 90.301 11 AAC 90.501 have been made;
- (9) the commissioner has determined the amount of bond necessary under 11 AAC 90.205;
 - (10) for auger mining,
 - (A) adverse water quality impacts will be prevented or corrected;
- (B) prohibition of augering is not necessary to maximize the utilization, recoverability, or conservation of coal;
- (C) effects from augering operations would not prevent reclamation from being performed in accordance with this chapter; and
- (D) subsidence resulting from auger mining will not disturb or damage power lines, pipelines, buildings, roads, or other facilities; and
- (11) the applicant has submitted proof that all reclamation fees required by 30 C.F.R. Part 870 have been paid.
- (12) the potential effects of the operation on property listed or eligible for listing on the National Register of Historic Places has been considered in accordance with 11 AAC 90.091 and 11 AAC 90.121(a);
- (13) for a re-mining operation that the applicant proposes to reclaim according to standards in 11 AAC 90.443(e) or 11 AAC 90.457(c)(5), the site is a previously mined area as defined in this chapter.
- (b) If the commissioner finds that existing structures cannot be reconstructed or modified without causing significant harm to the environment or to the public health or safety, the applicant will be required to abandon the existing structure on a schedule approved by the commissioner in compliance with 11 AAC 90.471. The structure may not be used for or to facilitate operations after the effective date of issuance of the permit. (Eff. 5/2/83, Register 84; am 11/18/94, Register 132)

- 11 AAC 90.127. PERMIT CONDITIONS. Each permit issued by the commissioner will contain the following conditions:
- (1) the permittee shall conduct operations only on that land which is approved for the term of the permit and that is subject to the performance bond or other equivalent guarantee in effect under 11 AAC 90.201;
- (2) the permittee shall conduct all operations only as described in the complete application, except to the extent that the commissioner otherwise directs in the application decision;
- (3) the permittee shall comply with the performance standards of 11 AAC 90.301 11 AAC 90.501:
- (4) the permittee shall allow an authorized representative of the commissioner or the secretary the right of entry specified in 11 AAC 90.601 11 AAC 90.603;
- (5) the permittee shall take all possible steps to minimize any adverse impact to the environment or public health and safety resulting from noncompliance with any term or condition of the permit, including
- (A) any accelerated or additional monitoring necessary to determine the nature, extent, and result of any noncompliance;
- (B) immediate implementation of measures necessary to comply; and
- (C) warning, as soon as possible after learning of the noncompliance, any person whose health and safety is in imminent danger due to the noncompliance; and
- (6) the permittee shall pay all reclamation fees required by 30 C.F.R. 870 for all coal produced under this permit. (Eff. 5/2/83, Register 84; am 11/18/94, Register 132)

- 11 AAC 90.129. PERMIT REVISIONS AND RENEWALS. (a) The procedure for permit revision is as follows:
- (1) permittee shall apply for revision of the permit whenever there is any change in the approved permit, including the liability insurance, performance bond, or other equivalent guarantee, or when required under 11 AAC 90.133;

NATURAL RESOURCES

- (2) a permit revision will be considered major when the revision constitutes a significant departure from the original permit, such as a change in permit area or the method of conducting mining or reclamation operations which would significantly change the effect of the operation on persons or the environment;
- (3) an application for revision of a permit must be filed with the commissioner
- (A) at least 180 days before the permittee expects to revise operations for major revisions; or
- (B) at least 30 days before the permittee expects to revise operations for minor revisions;
- (4) an application for a major revision will be processed in accordance with 11 AAC 90.111 11 AAC 90.127 and 11 AAC 90.131;
- (5) the commissioner will review an application for a minor revision and, within 30 days after receipt of the application, notify the applicant, in writing, that
 - (A) the application is granted, conditioned, modified, or denied;
- (B) the application is incomplete, in which case the applicant shall file a complete application which will be processed in accordance with this section; or
- (C) the requested revision is a major revision, which will be processed in accordance with 11 AAC 90.111 11 AAC 90.127;
- (6) an application for revision of a permit must be complete and include a description of all changes from the approved permit;
- (7) any extension of the area covered by a permit, except for an incidental boundary revision, must be made by application for a new permit; and
- (8) the commissioner will review each application for revision of a permit to determine whether the operator must submit a new or updated determination of the probable hydrologic consequences of the operation under 11 AAC 90.085.
 - (b) Procedures for permit renewals are as follows:
- (1) a valid, existing permit issued under AS 27.21.180 carries with it the right of successive renewal upon expiration;
- (2) successive renewal of a permit is available only for those areas that were specifically approved in the existing permit;
- (3) an application for renewal must be complete and include, at a minimum,

- (A) the name and address of the permittee, the term of the renewal requested, the permit number, and a description of any changes proposed from the approved permit; and
- (B) evidence that liability insurance under 11 AAC 90.033 will be provided by the applicant for the proposed period of renewal; and
- (4) before granting the permit renewal, the commissioner will require the filing of any additional performance bond needed to comply with the requirements of 11 AAC 90.201. (Eff. 5/2/83, Register 84; am 11/18/94, Register 132)

Authority: AS 27.21.030

AS 27.21.060

AS 27.21.080

AS 27.21.190

- 11 AAC 90.131. REVIEW OF DECISIONS. (a) A hearing to review a decision of the commissioner under AS 27.21.150 will be conducted in accordance with AS 44.62 except as otherwise specified in the Act and this chapter. No person who presided at an informal conference under 11 AAC 90.115 may preside at the hearing or participate in the decision following the hearing or administrative appeal.
- (b) Any temporary relief sought under AS 27.21.150(b) may not include the issuance of a permit where a permit has been denied, in whole or in part, by the commissioner.
- (c) Ex parte contacts between representatives of the parties and the commissioner are prohibited after appeal of a decision under 11 AAC 90.119, 11 AAC 90.125 or 11 AAC 90.129.
- (d) Within 30 days after the close of the record, the commissioner will issue and furnish the applicant and each person who participated in the hearing with the written findings of fact, conclusions of law, and order with respect to appeal of the decision.
- (e) The burden of proof at the hearing will be on the party seeking to reverse the decision of the commissioner.
- (f) Any applicant or any person with an interest which is or may be adversely affected and who has participated in the administrative hearings as an objector may appeal to a court of competent jurisdiction under AS 44.62.560 if
- (1) the applicant or person is aggrieved by the decision of the commissioner in the administrative hearing; or
- (2) the commissioner fails to act within the time limits specified in the Act or this chapter. (Eff. 5/2/83, Register 84)

Authority: AS 27.21.030

AS 27.21.150

AS 27.21.190

11 AAC 90.133. REVIEW OF OUTSTANDING PERMITS. The commissioner will review outstanding permits no later than the permit midterm or every five years, whichever is more frequent. After review of a permit, the commissioner will, in his or her discretion, order reasonable revisions in accordance with AS 27.21.190(e). The commissioner will send a copy of the decision to the permittee. Any order requiring revision is reviewable in accordance with 11 AAC 90.131. (Eff. 5/2/83, Register 84)

Authority: AS 27.21.030 AS 27.21.190

ARTICLE 7.

PERMITTING FOR SPECIAL CATEGORIES OF MINING.

Section

- 141. Mountaintop removal mining
- 143. Steep slope mining
- 145. Variances from contour restoration requirements for steep slopes
- 147. Variances for combined surface and underground mining
- 149. Operations near alluvial valley floors
- 151. In situ processing
- 153. Experimental practices mining
- 155. Facilities outside permit area
- 157. Important farmlands
- 11 AAC 90.141. MOUNTAINTOP REMOVAL MINING. (a) Notwithstanding the requirements of 11 AAC 90.441 11 AAC 90.445 which require disturbed land to be restored to its approximate original contour, the commissioner will, in the commissioner's discretion, issue a permit for mountaintop removal mining upon a written finding that the requirements of this chapter and the following provisions will be satisfied:
- (1) after it is mined, the land is expected to be used for industrial, commercial, agricultural, residential, or public purposes including recreation; the applicant must demonstrate that this use will constitute an equal or better economic or

public use compared to the premining use of the land and that the requirements of 11 AAC 90.481 will be met; the commissioner will

- (A) make a finding of compatibility under this subsection only after consultation with all appropriate land use planning agencies; and
- (B) provide the governing body in whose jurisdiction the land is located and any state or federal agency determined to have an interest in the proposed use 30 days to review and comment on the proposed use.
- (2) An outcrop barrier of sufficient width, consisting of the toe of the lowest coal seam and its associated overburden, will be retained to prevent slides and erosion; however, the commissioner will, in his or her discretion, waive this requirement if the proposed mine site was mined before May 3, 1978, and the toe of the lowest seam was removed; a barrier adjacent to a head-of-hollow fill may be removed after the fill attains the elevation of the barrier if the fill provides the same stability as retention of the barrier.
- (3) Unless engineering data substantiates that a minimum static safety factor of 1.5 will be attained, the final graded slopes on the mined area will be less than lv:5h and will create a level plateau or gently rolling configuration and the outslopes of the plateau will not exceed lv:2h.
- (4) The resulting level or gently rolling contour will be graded to drain inward from the outslope except at specified points where it drains over the outslope in stable and protected channels; the drainage will not be through or over a valley or head-of-hollow fill.
- (5) Natural watercourses below the lowest coal seam mined will not be endangered.
- (6) All waste and acid-forming or toxic-forming materials, including the strata immediately below the coal seam, will be covered with non-toxic spoil to prevent pollution and achieve the approved postmining land use.
- (7) Spoil will be placed on the mountaintop bench as necessary to achieve the approved postmining land use; all excess spoil material not retained on the mountaintop will be placed I-n accordance with the provisions of 11 AAC 90.345 and 11 AAC 90.391.
- (b) The commissioner will issue the permit under (a) of this section with all conditions necessary to ensure its provisions are met. (Eff. 5/2/83, Register 84; am 11/18/94, Register 132)

- 11 AAC 90.143. STEEP SLOPE MINING. (a) This section applies to all steep slope operations except
- (1) operations on flat or gently rolling terrain on which an occasional steep slope is encountered;
- (2) operations authorized by a permit under the provisions of 11 AAC 90.141; or
 - (3) operations authorized by a variance under 11 AAC 90.145.
- (b)The commissioner will not issue a permit for operations covered by this section except upon a written finding that the operator will meet the requirements of this chapter to
- (1) prevent spoil, waste materials including waste mineral matter, debris including debris from clearing and grubbing of haul road construction, and abandoned or disabled equipment from being placed or allowed to remain on the downslope;
- (2) completely cover the highwall with compacted spoil and grade the disturbed area to comply with the provisions of 11 AAC 90.441 11 AAC 90.449; the operator shall demonstrate, using standard geotechnical analysis, that the minimum static factor of safety for the stability of all portions of the reclaimed land is at least 1.3;
- (3) not disturb land above the highwall unless the disturbance facilitates compliance with the requirements of this section;
- (4) dispose of material in excess of that required under (2) of this section in accordance with the provisions of 11 AAC 90.391;
- (5) not bury woody materials in the backfilled area unless the method proposed for burial will not deteriorate the stable condition of the backfilled area required under (2) of this subsection; however, woody materials may be chipped and distributed over the surface of the backfill as mulch if authorized by the commissioner; and
- (6) will not construct unlined or unprotected drainage channels on backfills unless determined by the commissioner to be stable and not subject to erosion.
- (c) In multiple-seam steep slope affected areas, spoil not required to reclaim and restore the permit area may be placed on a pre-existing bench if authorized by the commissioner and if the following requirements are met:
- (1) All excess spoil must be hauled, placed, and retained on the solid bench.
- (2) The spoil must be graded to the least slope possible to eliminate the existing highwall to the extent possible with the available spoil.

Register 190, July 2009 NATURAL RESOURCES

(3) The bench on which the spoil is to be placed must have been created and abandoned due to coal mining before August 3, 1977. (Eff. 5/2/83, Register 84)

Authority: AS 27.21.030 AS 27.21.210 AS 27.21.220

11 AAC 90.145. VARIANCES FROM CONTOUR RESTORATION REQUIREMENTS FOR STEEP SLOPES. (a) The commissioner will, in his or her discretion, issue a permit for nonmountaintop removal steep slope operations incorporating a variance from the requirement of 11 AAC 90.143(b)(2) upon a written finding that all other requirements of this chapter and the following requirements will be met:

(1) for watersheds

- (A) that there will be no increase in water pollution in postmining, as compared to premining, water quality from the permit area and no increase in flood hazards within the watershed containing the permit area;
- (B) that the total volume of flows from the proposed permit area will not vary during any season of the year in a way that adversely affects the ecology of any surface water or any existing or planned use of surface or ground water; and
 - (C) that all applicable state water quality regulations will be met;
- (2) the owner of the surface of the land within the permit area has knowingly requested, in writing, that a variance be granted; the request must be made separately from any surface owner consent given for the operations under 11 AAC 90.025 and must show an understanding that the variance could not be granted without the surface owner's request;
- (3) the highwall will be completely backfilled with spoil material in a manner which results in a static factor of safety of at least 1.3 using standard geotechnical analyses;
- (4) land above the highwall may be disturbed only as authorized by the commissioner to facilitate compliance with this section and if the commissioner finds that the disturbance is necessary to
 - (A) blend the solid highwall and the backfilled material;
 - (B) control surface runoff; or
 - (C) provide access to the area above the highwall;
- (5) the operations are conducted in accordance with the provisions of 11 AAC 90.143, except as specified in this section; and

- (6) only the amount of spoil that is necessary to achieve the postmining land use, ensure the stability of spoil retained on the bench, and meet all other requirements of this chapter is placed off the mine bench; all spoil not retained on the bench will be placed in accordance with the provisions of 11 AAC 90.391 or 11 AAC 90.441 11 AAC 90.443.
- (b) All applicable requirements of this section will be incorporated as conditions to any permit containing this variance. (Eff. 5/2/83, Register 84)

Authority: AS 27.21.030 AS 27.21.210 AS 27.21.220

- 11 AAC 90.147. VARIANCES FOR COMBINED SURFACE AND UNDERGROUND MINING. (a) This section applies to any person who conducts or intends to conduct combined surface and underground operations where a delay is requested to allow underground operations to be conducted before reclamation of the surface operation is completed to ensure both maximum practical recovery of coal and to avoid multiple future disturbances of surface land or water.
- (b) The commissioner will, in his or her discretion, issue a permit incorporating a variance under this section if the operator submits complete applications for both the surface and underground operations which demonstrate that the operations will comply with the requirements of this chapter and if the commissioner finds, in writing, that the following provisions will be met:
- (1) the proposed underground mining operations are necessary or desirable to assure maximum practical recovery of the coal and will avoid multiple future disturbance of surface land or water:
- (2) all other permits necessary for the underground operation have been issued;
- (3) the surface area proposed for the variance has been shown by the applicant to be necessary for implementing the proposed underground operation;
- (4) no substantial adverse environmental damage, either on-site or offsite, will result from the delay in reclamation required under this chapter;
 - (5) the operations will comply with 11 AAC 90.393;
 - (6) off-site storage of spoil will comply with 11 AAC 90.391; and
 - (7) the permit for the surface operation
- (A) delineates the particular surface area for which a variance is authorized; and

- (B) identifies the requirements of this chapter which are to be complied with in lieu of the otherwise applicable provisions of 11 AAC 90.301 11 AAC 90.501 and contains a schedule for compliance with these provisions.
- (c) All applicable requirements of this section will be incorporated as conditions to any permit containing this variance. (Eff. 5/2/83, Register 84)

- 11 AAC 90.149. OPERATIONS NEAR ALLUVIAL VALLEY FLOORS. (a) This section applies to proposed operations in, adjacent to, or under a valley holding a stream in the arid or semi-arid areas of the state.
- (b) Before applying for a permit, each person subject to (a) of this section shall either affirmatively demonstrate, based on available data, the presence of an alluvial valley floor or submit to the commissioner the results of field investigations of the proposed permit area and adjacent area. The field investigations must include sufficiently detailed geologic, hydrologic, land use, soils, and vegetation studies, on area designated by the commissioner after consultation with the applicant, to enable the commissioner to determine whether an alluvial valley floor is likely to exist in the proposed permit area or adjacent area and to determine whether an area requires more study before the commissioner can make a final determination regarding the existence of an alluvial valley floor. Studies required under this section must include an appropriate combination of
- (1) maps of unconsolidated stream-laid deposits holding streams including, but not limited to, geologic maps of unconsolidated deposits and stream-laid deposits, maps of streams, maps delineating surface watersheds and directions of shallow ground water flows through and into the unconsolidated deposits, topographic maps showing local and regional terrace levels, and topographic maps of terraces, flood plains, and channels showing surface drainage patterns;
- (2) maps of all land included in the area in accordance with this subsection and subject to agricultural activities and showing the area in which different types of agricultural land, such as flood irrigated land, pasture land and undeveloped rangeland, exist and accompanied by measurements of vegetation in terms of productivity and type;
- (3) maps of all land that is currently or was historically flood irrigated, showing the location of each diversion structure, ditch, dam, and related reservoir, irrigated land, and topography of the land;
- (4) documentation based on ground water monitoring data, representative water quality, soil moisture measurements, and measurements of rooting depth, soil mottling, and water requirements of vegetation of whether areas identified under this subsection are subirrigated;

- (5) documentation, based on representative sampling, of whether areas identified under this subsection are flood irrigable, as determined from streamflow, water quality, water yield, soils measurements, and topographic characteristics; and
- (6) analysis of a series of aerial photographs, including color infrared imagery, which show any late summer and fall differences between upland and valley floor vegetative growth and of a scale adequate for reconnaissance identification of areas that may be alluvial valley floors.
- (c) Based on the data submitted under (b) of this section, the commissioner will determine the extent of any alluvial valley floors within the study area and whether any stream in the study area may be excluded from further consideration. The commissioner will determine that an alluvial valley floor exists if
 - (1) unconsolidated streamlaid deposits holding streams are present; and
- (2) there is sufficient water to support agricultural activities as evidenced by
- (A) the existence of flood irrigation in the area in question, or its historic use;
- (B) the capability of an area to be flood irrigated, as determined from stream flow water yield, soils, water quality, and topography; or
- (C) subirrigation of the land in question, derived from the ground water system of the valley floor; and
- (3) agricultural activities are not precluded by climate, permafrost, or other local environmental conditions.
- (d) If the proposed operation may affect an alluvial valley floor or water that supplies alluvial valley floors, the applicant shall include in the application the information required by (b) of this section unless the commissioner determines that some or all of the information is unnecessary because the particular valley floor to be affected does not have a history of farming, is not subirrigated, or does not have a deficiency of water. The complete application must include any detailed surveys and baseline data required by the commissioner to determine:
- (1) the essential hydrologic functions of the alluvial valley floor that might be affected by the mining and reclamation process, including information that evaluates the factors contributing to the functions of collecting and storing waters, regulating the flow of surface and ground water, and water availability;
 - (2) the significance of the area to be affected to agricultural activities;
- (3) whether the operation will cause, or present an unacceptable risk of causing, material damage to the quantity or quality of surface or ground water that

supplies the alluvial valley floor;

- (4) the effectiveness of proposed reclamation with respect to the requirements of this chapter; and
- (5) what specific environmental monitoring will be required to measure compliance with the provisions of 11 AAC 90.501 during and after mining and reclamation operations, including
- (A) geologic data, including geologic structure, surface geologic maps, and geologic cross sections;
- (B) soils and vegetation data, including a detailed soil survey and chemical and physical analyses of soils, a vegetation map and narrative descriptions of quantitative and qualitative surveys, and land use data, including an evaluation of crop yields;
- (C) surveys and data required under this subsection for areas designated as alluvial valley floors because of their flood irrigation characteristics must also include, at a minimum, surface hydrologic data, including stream flow, runoff, sediment yield, and water quality analyses describing seasonal variations, field geomorphic surveys, and other geomorphic studies;
- (D) surveys and data required under this subsection for areas designated as alluvial valley floors because of their subirrigation characteristics must also include, at a minimum, geohydrologic data including observation wells to measure water levels, ground water contour maps, testing to determine aquifer characteristics that affect water supplying the alluvial valley floors, well and spring inventories, water quality analyses describing seasonal variations, and physical and chemical analysis of the overburden to determine the effect of the proposed operations on water quality and quantity;
- (E) plans showing how the operation will avoid, during mining and reclamation, the interruption, discontinuance or preclusion of farming on the alluvial floors; however, these plans are not required if the premining land use was undeveloped rangeland not significant to farming and if the operation will not materially damage the quantity or quality of water in surface and ground water systems that supply alluvial valley floors;
- (F) maps showing farms that could be affected by the mining and, if any farm includes an alluvial valley floor, statements of the type and quantity of agricultural activity performed on the alluvial valley floor and its relationship to the farm's total agricultural activity, including an economic analysis; and
- (G) other data the commissioner will, in his or her discretion, require.
 - (e) The surveys required by (d) of this section must identify those geologic,

NATURAL RESOURCES

hydrologic, and biologic characteristics of the alluvial valley floor necessary to support its essential hydrologic functions, including, but not limited to,

- (1) characteristics supporting water collection, including, but not limited to,
- (A) a water balance analysis which considers rainfall, amount and rate of runoff, evapotranspiration, infiltration and ground water recharge;
- (B) the relief, slope, and density of the network of drainage channels;
- (C) the infiltration, permeability, porosity, and transmissivity of unconsolidated deposits of the valley floor that either constitute the aquifer associated with the stream or lie between the aquifer and the stream; and
- (D) other factors that affect the interchange of water between surface streams and ground water systems, including the depth to ground water flow, the direction of ground water flow, the extent to which the stream and associated alluvial ground water aquifers provide recharge to or are recharged by bedrock aquifers;
 - (2) characteristics supporting water storage, including, but not limited to,
- (A) surface roughness, slope, and vegetation of the channel, flood plain, and low terraces that retard the flow of surface water;
- (B) porosity, permeability, water-holding capacity, saturated thickness and volume of aquifers associated with streams, including alluvial aquifers, perched aquifers, and other water bearing zones found beneath valley floors; and
- (C) moisture held in soils or the plant growth medium within the alluvial valley floor and the physical and chemical properties of the subsoil that provide for sustained vegetation growth or cover during extended periods of low precipitation;
- (3) characteristics supporting the regulation of water flow, including, but not limited to,
- (A) the geometry and physical character of the valley expressed in terms of the longitudinal profile and slope of the valley and the channel;
 - (B) the sinuosity of the channel;
- (C) the cross section, slopes, and proportions of the channels, flood plains, and low terraces;
 - (D) the nature and stability of the stream banks;
- (E) the vegetation established in the channels and along the stream banks and flood plains;

- (F) the nature of surface flows as shown by the frequency and duration of flows of representative magnitude, including low flows and floods; and
- (G) the nature of interchange of water between streams, their associated alluvial aquifers, and any bedrock aquifers as shown by the rate and amount of water supplied by the stream to associated alluvial and bedrock aquifers, or recharge, and by the rates and amounts of water supplied by aquifers to the stream, or baseflow; and
- (4) characteristics which make water available, including, but not limited to, the presence of land forms, including flood plains and terraces, suitable for agricultural activities.
- (f) No application for operations on land identified under (a) of this section will be approved unless the commissioner makes the findings required under AS 27.45.180(c)(5) and also finds that any change in the land use from its premining use in, or adjacent to, alluvial valley floors will not interfere with or preclude the reestablishment of the essential hydrologic functions of the alluvial valley floor.
- (g) The significance of the impact of the proposed operations on farming will be based on the relative importance of the vegetation and water of the developed grazed or hayed alluvial valley floor area to the farm's production or any more stringent criteria established by the commissioner as suitable for site-specific protection of agricultural activities in alluvial valley floors.
- (h) Criteria for determining whether an operation will materially damage the quantity or quality of water subject to this section include, but are not limited to,
- (1) potential increases in the concentration of total dissolved solids of water supplied to an alluvial valley floor as measured by specific conductance in milliohms to levels above the threshold value at which crop yields decrease, as specified by E.V. Maas and G.J. Hoffman in "Crops Salt Tolerance--Current Assessment," Table 1, contained in The Journal of the Irrigation and Drainage Division, American Society of Civil Engineers, June, 1977, unless the applicant demonstrates compliance with (f) of this section;
- (2) potential increases in the concentration of total dissolved solids of water supplied to an alluvial valley floor in excess of those specified by Maas and Hoffman will not be allowed unless the applicant demonstrates, through testing related to the production of crops grown in the locality, that the proposed operations will not cause increases that will result in crop yield decreases;
- (3) for types of vegetation not listed in Maas and Hoffman and specified by the commissioner, criteria based upon consideration of observed correlation between total dissolved solid concentrations in water and crop yield declines, taking into account the accuracy of the correlations;
 - (4) potential increases in the average depth to water saturated zones

during the growing season located within the root zone of the alluvial valley floor that would reduce the amount of

subirrigation land compared to premining conditions;

- (5) potential decrease in surface flows that would reduce the amount of irrigable land compared to premining conditions; and
- (6) potential changes in the surface or ground water systems that reduce the area available to agriculture as a result of flooding or increased saturation of the root zone.
- (i) For the purposes of this section, a farm is one or more land units on which agricultural activities are conducted. A farm is generally considered to be the combination of land units with acreage and boundaries in existence before August 3, 1977, or, if established after August 3, 1977, with those boundaries based on enhancement of the farm's agricultural productivity and not related to surface coal mining operations. (Eff. 5/2/83, Register 84; am 7/29/98, Register 147)

Authority: AS 27.21.030 AS 27.21.210

Editor's note: A copy of the publication mentioned in 11 AAC 90.149(h) (1) - (3) is available for inspection at the Anchorage office of the Mining Section, Division of Mining, Land and Water Management, 550 W. 7th Ave, Anchorage, Alaska 99501.

- 11 AAC 90.151. IN SITU PROCESSING. (a) An application for operations utilizing in situ processing activities must contain
 - (1) the delineation of proposed holes and wells and production zone;
 - (2) specifications of drill holes and casings proposed to be used;
- (3) a plan for treatment, confinement, or disposal of all acid-forming, toxicforming, or radioactive gases, solids, or liquids constituting a fire, health, safety, or environmental hazard caused by the mining and recovery process; and
 - (4) plans for monitoring surface and ground water and air quality.
- (b) The commissioner will not issue a permit for operations utilizing in situ processing activities except upon a written finding that the operation will be conducted in compliance with all requirements of this chapter relating to underground mining activities and will comply with the following provisions:
 - (1) Disturbance to the prevailing hydrologic balance must be minimized by

- (A) avoiding discharge of fluids into holes or wells unless otherwise authorized by the commissioner;
- (B) injecting process recovery fluids only into geologic zones or intervals approved as production zones by the commissioner;
- (C) avoiding annular injection between the wall of the drill hole and the casing; and
 - (B) preventing discharge of process fluid into surface water.
- (2) All acid-forming, toxic-forming, or radioactive gases, solids, or liquids constituting a fire, health, safety, or environmental hazard and caused by the mining and recovery process must be promptly treated, confined, or disposed of in a manner that prevents contamination of ground and surface water, damage to fish, wildlife and related environmental values, and threats to the public health and safety.
 - (3) Flow of the process recovery fluid must be prevented
- (A) horizontally, beyond the affected area identified in the permit; and
 - (B) vertically, into overlying or underlying aquifers.
- (4) The quality of affected ground water in the affected area, including ground water above and below the production zone, must be restored to the approximate premining levels or better to ensure that the potential for use of the ground water is not diminished.
- (5) The quality and quantity of surface and ground water and the subsurface flow and storage characteristics must be monitored as authorized by the commissioner to measure changes in the quantity and quality of water in surface and ground water systems in the affected area.
- (6) Air quality must be monitored as approved by the commissioner according to appropriate federal and state air quality control laws and regulations. (Eff. 5/2/83, Register 84)

- 11 AAC 90.153. EXPERIMENTAL PRACTICES MINING. (a) Any experimental practices approved under AS 27.21.920 will be incorporated in the applicable exploration approval or surface coal mining and reclamation permit.
- (b) In addition to the permit requirements of 11 AAC 90.021 -11 AAC 90.101, an application for an experimental practice must contain descriptions, maps, plans, and

data which show

- (1) how the proposed experimental practice will meet the requirements of AS 27.21..920; and
- (2) the nature of the experimental practice, including a description of the requested variances from performance standards, the duration of the experimental practice, and any special monitoring which will be conducted.
- (c) The commissioner will specifically identify any experimental practices requested in the notices issued under 11 AAC 90.113.
- (d) The commissioner will not approve an application proposing an experimental practice unless the experimental practice has been approved by the secretary, and the commissioner finds, in writing, that the proposed experimental practice will meet the conditions specified in AS 27.21.920.
- (e) Upon receipt of an application for an experimental practice, the commissioner will immediately transmit a copy of the application to the secretary with a request that the secretary approve or disapprove the experimental practice application within 90 days after the date of mailing.
- (f) The commissioner will require that each person undertaking an experimental practice conduct periodic monitoring, recording, and reporting of the effects of the experimental practice during and after the operation involved, as specified by the commissioner. This monitoring must
- (1) include collection of baseline data sufficient to allow evaluation of the experimental practice;
- (2) insure the collection, analysis, and reporting of reliable data that is sufficient to enable the commissioner to evaluate the effectiveness of the experimental practice; and
- (3) include procedures to identify, at the earliest possible time, potential risk to the environment and public health and safety which may be caused by the experimental practice and the mitigation measures that will be implemented by the operator if the experimental practice fails to achieve its objectives; these procedures must include notification to the commissioner.
- (g) The commissioner will review each experimental practice at least annually. After review, the commissioner will, in his or her discretion, require modifications which are necessary to ensure that the operations fully protect the environment and the public health and safety.
- (h) Revisions to an experimental practice permit will be processed in accordance with the requirements of 11 AAC 90.129 and this section. (Eff. 5/2/83, Register 84)

Register 190, July 2009 NATURAL RESOURCES

Authority: AS 27.21.030 AS 27.21.920

11 AAC 90.155. FACILITIES OUTSIDE PERMIT AREA. A permit is required for all roads, transportation, support facilities and utility installations included in 11 AAC 90.491, whether or not these facilities are outside the permit area of any particular mine. These facilities must comply with all performance standards of this chapter determined to be applicable by the commissioner and must comply with the appropriate bonding provisions of 11 AAC 90.201 - 11 AAC 90.207. In determining which requirements of this chapter are applicable, the commissioner will consider whether any given facility may be subject to the requirements of some other government permitting authority. (Eff. 5/2/83, Register 84)

Authority: AS 27.21.030 AS 27.21.210

11 AAC 90.157. IMPORTANT FARMLANDS. The commissioner will, in his or her discretion, impose additional requirements for permit application contents, soil removal and handling, use of nutrients and amendments, erosion control, revegetation, and postmining land use to encourage development of agriculture and to assure that important farmlands are returned to premining or higher levels of productivity. (Eff. 5/2/83, Register 84)

Authority: AS 27.21.030 AS 27.21.210

ARTICLE 8.

EXPLORATION.

Section

- 161. Exploration that does not substantially disturb the natural land surface
- 163. Exploration that substantially disturbs the natural land surface or occurs in an area designated unsuitable for surface coal mining
- 165. Administrative processing of coal exploration notices and applications
- 167. Coal exploration bonding and performance standards

11 AAC 90.161. EXPLORATION THAT DOES NOT SUBSTANTIALLY DISTURB THE NATURAL LAND SURFACE. (a) A person who intends to conduct coal exploration that will not substantially disturb the natural land surface shall, at least 30 days before

beginning exploration, file a written notice of intent to explore, which includes

- (1) the name, address, and telephone number of the person seeking to explore and the person who will be present at and responsible for conducting the exploration activities;
 - (2) a statement of the period of intended exploration;
 - (3) the boundaries of the exploration activities;
- (4) a description of the exploration activities the person intends to conduct, including any major pieces of equipment to be used;
- (5) an explanation of the right of the person seeking to explore to enter and conduct exploration activities; and
- (6) a description of how the environment will be protected from the adverse impacts of the proposed exploration activities.
- (b) Within 30 days after the filing of the notice of intent, the commissioner will notify the person, in writing, if the commissioner determines that the proposed activities will substantially disturb the natural land surface or the activities threaten a designation under AS 27.21.260. If the commissioner does not require compliance with 11 AAC 90.163 or 11 AAC 90.165(c)(2) or (3), no further administrative action is required for exploration which does not substantially disturb the natural land surface. (Eff. 5/2/83, Register 84)

- 11 AAC 90.163. EXPLORATION THAT SUBSTANTIALLY DISTURBS THE NATURAL LAND SURFACE OR OCCURS IN AN AREA DESIGNATED UNSUITABLE FOR SURFACE COAL MINING. (a) A person that intends to conduct coal exploration that will substantially disturb the natural land surface or that will take place in an area designated unsuitable for surface mining under AS 27.21.260 shall file an application in the format required by 11 AAC 90.021. The application must include:
 - (1) the information required under 11 AAC 90.161(a)(1), (a)(2), and (a)(5);
 - (2) an exploration and reclamation plan of operations, that includes:
- (A) a brief description of the proposed area, cross-referenced to the map required under (4) of this subsection, including available information on the following: surface topography; geologic, surface water, and other physical features; vegetative cover; and important habitat for fish, wildlife, and plants, including any endangered or threatened species listed under the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 1543;

- (B) a description of known cultural or historic resources listed or eligible for listing on the National Register of Historic Places and known archaeological features within the proposed exploration area. The commissioner will, in the commissioner's discretion, require additional information regarding known or unknown historic or archeological resources if these resources are likely to be affected by activities under this section;
- (C) a description of the methods to be used to conduct coal exploration and reclamation, including, types and uses of equipment, drilling, blasting, road or other transportation facility construction, and earth and debris disposal areas;
- (D) an estimated timetable for each phase of exploration and reclamation;
- (E) the estimated amounts of coal to be removed and a description of the methods to be used to determine those amounts:
- (F) the documentation required under (b) and (c) of this section if the applicant proposes to remove more than 250 tons of coal; and
- (G) a description of how the exploration activities will comply with 11 AAC 90.167:
- (3) the names and addresses of all owners and leaseholders of record of the surface land and the mineral estate in the area to be explored;
- (4) a map of the 1:63,360 scale series enlarged at least 2.5 times showing, based on available information, the area to be disturbed by the proposed exploration and reclamation activities, including existing roads, structures, pipelines, and the proposed location of trenches, roads, rights-of-way and other access routes, land excavations to be conducted, water or coal exploratory holes and wells to be drilled or altered, earth or debris disposal areas, bodies of water, historic, archeological and cultural features, topographic and drainage features, and the habitats of endangered or threatened species identified in (2)(A) of this section; and
- (5) a statement as to whether coal exploration is proposed for an area designated unsuitable for mining under AS 27.21.260.
- (b) Extraction of more than 250 tons of coal under an exploration permit is allowed only with the commissioner's prior written approval, based on a demonstration by the applicant that:
- (1) coal testing is necessary for the development of a surface coal mining and reclamation operation for which a permit application will be submitted in the near future;
 - (2) any sale or commercial use of the coal is for testing purposes only; and

- (3) the amount of coal proposed to be extracted is the minimum necessary for testing.
 - (c) The demonstration required in (b) of this section must also include:
 - (1) the location where the coal will be tested;
 - (2) the name of the testing firm;
- (3) a statement from the testing firm, intended end user of the coal, or, if applicable, the agent or broker handling the transaction, that describes:
- (A) the specific tests that will be conducted and the amount of coal necessary for these tests; and
- (B) the reason for testing, including, if applicable, that the coal may differ from the user's other coal supplies.
- (4) evidence that sufficient reserves of coal are available to the applicant for future commercial use or sale to the intended end user to demonstrate that the amount of coal to be removed is a sample of a larger reserve and not the total reserve; and
- (5) an explanation of why other means of exploration are not adequate to determine the quality of the coal or the feasibility of developing a surface coal mining operation.
- (d) The commissioner's determination under 11 AAC 90.002(b) must be made in writing. The commissioner shall base the determination on a demonstration by the applicant that includes the information required under (c) of this section and:
- (1) evidence that sufficient coal reserves are available to demonstrate that the amount of coal to be removed is not the total reserve, but is a sampling of a larger reserve; and
- (2) an explanation of why other means of exploration are not adequate to determine the quality of the coal or the feasibility of developing a surface coal mining operation. (Eff. 5/2/83, Register 84; am 11/18/94, Register 132; am 7/29/98, Register 147)

11 AAC 90.165. ADMINISTRATIVE PROCESSING OF COAL EXPLORATION NOTICES AND APPLICATIONS. (a) Upon receipt of a notice under 11 AAC 90.161 or a complete application under 11 AAC 90.163, the commissioner will make the notice or application available to the public in accordance with 11 AAC 90.907(b), except for information kept confidential under AS 27.21.200(c).

- (b) Upon receipt of a complete application, the commissioner will provide notice to the public in accordance with 11 AAC 90.907(c), (d), and (e). Written comments on the application may be filed in accordance with 11 AAC 90.907(g).
- (c) If the area of proposed exploration is within an area designated unsuitable under AS 27.21.260, within 30 days after receipt of a notice or application under 11 AAC 90.161 or 11 AAC 90.163, the commissioner will notify the person intending to conduct exploration activities, in writing, that
- (1) the exploration is compatible with the values for which the area was designated unsuitable; or
- (2) the exploration threatens the values for which the area was designated unsuitable and will not be approved until the person submits a plan to conduct exploration activities in a manner that will not interfere with these values; in the written notification, the commissioner will indicate possible methods of conducting coal exploration activities which may not interfere with the values for which the area was designated unsuitable; or
- (3) the exploration is incompatible with the values for which the area was designated and is not approved.
- (d) The commissioner will determine whether an application contains all of the information required under 11 AAC 90.163 within 21 days after receipt. If the application is not complete, the commissioner will notify the applicant, in writing, of all information required to render the application complete.
- (e) Within 65 days after the determination that an application is complete, the commissioner will approve the application if the commissioner determines that the proposed activities meet the requirements of AS 27.21.200, 11 AAC 90.163, and 11 AAC 90.167. The commissioner will, in his or her discretion, condition the approval to ensure that the exploration and reclamation comply with these requirements. Exploration permits will be issued for two year terms and may be renewed. The decision will meet the requirements of 11 AAC 90.907(h).
- (f) The commissioner will provide notice in accordance with 11 AAC 90.907(h). Any person with an interest which may be adversely affected by the decision under (e) of this section may appeal the decision within 30 days. The hearing on this appeal will be conducted in accordance with the procedures of AS 27.21.150 and 11 AAC 90.131. (Eff. 5/2/83, Register 84)

11 AAC 90.167. COAL EXPLORATION BONDING AND PERFORMANCE STANDARDS. (a) Coal exploration that substantially disturbs the natural land surface and associated reclamation operations must be conducted to minimize, to the extent

practical, environmental damage. The operations must comply with this section; however, the commissioner will, in his or her discretion, waive certain requirements of this section upon a written finding that the requirement will be superseded by subsequent permitted operations. The commissioner will, in his or her discretion, impose additional performance standards to minimize environmental damage if the particular type of exploration activity requires them.

- (b) The commissioner will, in his or her discretion, require a performance bond. In determining the amount and conditions of the bond and the criteria for bond release, the commissioner will consider the relevant provisions of 11 AAC 90.201 11 AAC 90.213 and will specify the bond amount, conditions and release criteria in the decision under 11 AAC 90.165(e).
- (c) The applicant must utilize impact control measures, management techniques, and monitoring methods to protect endangered or threatened species listed under the Endangered Species Act of 1973 (16 U.S.C. Sec. 1531, et seq.), and their critical habitats; species such as eagles, migratory birds or other animals protected by state or federal law, and their habitats; and habitats of unusually high value for fish and wildlife.
- (d) The applicant must protect any cultural resources or districts, sites, buildings, structures or objects listed on the National Register of Historic Places, except to the extent approved jointly by the commissioner and the agency with jurisdiction over the protected place.
- (e) Construction of new roads, aircraft runways, and marine facilities must be limited to the minimum necessary for the approved exploration and reclamation activities. Travel must be confined to existing roads, trails, runways, and marine facilities when excessive damage to vegetation or rutting of the land surface could result.
- (f) Existing roads, trails, runways, and marine facilities may be used under the following conditions:
 - (1) All applicable federal, state, and local requirements must be met.
- (2) If the road, trail, runway or marine facility is significantly altered or its use contributes additional suspended solids to streamflow or runoff, (j) of this section applies to those portions of the activity.
- (3) After exploration and reclamation activities are completed, the road, trail, runway, or marine facility must be restored to a condition equal to or better than the pre-exploration condition.
- (g) Roads, trails, runways, and marine facilities constructed or significantly altered for the exploration and reclamation activities must comply with 11 AAC 90.491 for design, construction, maintenance, and removal. The commissioner will, in his or her discretion, require the use of rolligons and air-cushion vehicles or winter roads when necessary to minimize environmental impacts.

- (h) Excavations, artificial flat areas, or embankments created during exploration must be returned to the approximate original contour when no longer needed.
- (i) Topsoil must be removed, stored, and redistributed on disturbed areas as necessary to assure successful revegetation.
- (j) All disturbed areas must be seeded or planted to the same seasonal characteristics of growth as the original vegetation. The vegetative cover must be capable of stabilizing the soil against erosion. Revegetation must be carried out in a manner that encourages prompt vegetative cover and recovery of productivity levels compatible with the approved post-exploration land use. If both the pre-exploration and post-exploration land use is intensive agriculture, planting of crops normally grown will meet the requirements of this subsection.
- (k) Except for small and temporary diversions of overland flow of water around new roads, runways, marine facilities, drill pads, and support facilities, no ephemeral, intermittent or perennial stream may be diverted. Overland flow must be diverted in a manner that prevents erosion and complies with all other applicable federal and state laws and regulations.
- (I) Each exploration hole, borehole, well, or other exposed underground opening must comply with 11 AAC 90.303 11 AAC 90.305.
- (m) All facilities and equipment must be removed when no longer needed, unless the commissioner approves retention for a specified period to
 - (1) provide additional environmental quality data;
 - (2) reduce or control the on- and off-site effects of the activities;
- (3) facilitate future operations under an approved permit or exploration approval.
- (n) Exploration and reclamation must minimize disturbance to the prevailing hydrologic balance, including, if necessary, sedimentation control measures that comply with 11 AAC 90.329 and 11 AAC 90.331 or other measures required by the commissioner.
- (o) Known acid-forming or toxic-forming materials must be handled and disposed of in compliance with 11 AAC 90.335 and 11 AAC 90.445 or other measures required by the commissioner.
- (p) The person conducting exploration activities must have available for review on-site the approval granted under 11 AAC 90.165. (Eff. 5/2/83, Register 84)

ARTICLE 9.

SMALL OPERATOR ASSISTANCE PROGRAM.

Section

- 171. Program services
- 173. Eligibility for assistance
- 175. Filing for assistance
- 177. Application approval and notice
- 179. Data requirements
- 181. Qualified laboratories
- 183. Assistance funding
- 185. Applicant liability
- 11 AAC 90.171. PROGRAM SERVICES. To the extent possible with available funds, for eligible small operators who request assistance, the commissioner will
- (1) select and pay a qualified laboratory to determine for the operator the probable hydrologic consequences of the mining and reclamation operations both on and off the proposed permit area and prepare a statement of the results of test borings or core samplings, in accordance with 11 AAC 90.179;
- (2) collect and provide general hydrologic information on the basin or subbasin areas within which the anticipated mining will occur; the information provided will be limited to that required to relate the basin or subbasin hydrology to the hydrology of the proposed permit area. (Eff. 5/2/83, Register 84)

- **11 AAC 90.173. Eligibility for assistance.** (a) An applicant is eligible for assistance under AS 27.21.120 if the applicant
 - (1) intends to apply for a permit under AS 27.21;
- (2) establishes that the probable total, actual, and attributed production of the applicant for each year of the permit will not exceed 300,000 tons; and

- (3) has not organized or reorganized the company solely for the purpose of obtaining assistance under the small operator assistance program.
 - (b) The following production will be attributed to the applicant:
- (1) all coal produced by operations that are owned entirely by the applicant;
- (2) if the applicant is a subsidiary of another corporation, all the coal produced by the applicant's parent corporation and its subsidiaries. (Eff. 5/2/83, Register 84; am 11/18/94, Register 132; am 4/24/09, Register 190)

- 11 AAC 90.175. FILING FOR ASSISTANCE. Each application for small operator assistance must contain
 - (1) a statement of intent to file a permit application;
- (2) the names and addresses of the potential permit applicant and the potential operator;
- (3) a schedule of the estimated total production of coal from the proposed permit area and all other locations from which production is attributed to the applicant under 11 AAC 90.173(b); the schedule must include for each location
 - (A) the name of the mine;
- (B) any permit numbers and Mining Health and Safety Administration identification numbers;
- (C) the actual coal production for the year preceding the application and that portion attributed to the applicant; and
- (D) the estimated coal production for each year of the proposed permit and that portion attributed to the applicant;
 - (4) a description of
 - (A) the method of operation proposed;
 - (B) the anticipated starting and termination dates of operations;
- (C) the number of acres of land to be affected by the proposed operation; and
 - (D) the probable depth and thickness of the coal resource including

an estimate of the reserves in the permit area and the method by which they were calculated:

- (5) a U.S. Geological Survey topographic map which clearly shows
- (A) the area of land to be affected and the natural drainage above and below the affected area;
- (B) the names of property owners within the area to be affected and adjacent areas;
- (C) the location of existing structures and developed water sources within the area to be affected and on adjacent areas; and
- (D) the location of existing and proposed test borings or core samplings;
- (6) the location and extent of known workings of any underground mines; and
- (7) proof that the applicant has a legal right to enter and commence mining within the permit area and that a legal right of entry has been obtained, for land to be mined and adjacent areas which may be affected, for the commissioner to collect environmental data or install necessary instruments. (Eff. 5/2/83, Register 84; am 11/18/94, Register 132)

- 11 AAC 90.177. APPLICATION APPROVAL AND NOTICE. (a) If the applicant is eligible for small operator assistance under AS 27.21.120 and information is not readily available which would preclude issuance of a permit under this chapter to the applicant, the commissioner will
- (1) determine the minimum data requirements necessary for the proposed site;
- (2) select the services of one or more qualified laboratories to perform the required work; and
- (3) provide a copy of the contract or other appropriate work order and the final approved report to the applicant.
- (b) The commissioner will inform the applicant, in writing, if the application is denied and state the reasons for denial.
 - (c) The granting of assistance under this part will not prejudice the commissioner

toward granting a subsequent permit application. (Eff. 5/2/83, Register 84)

Authority: AS 27.21.030 AS 27.21.120

11 AAC 90.179. DATA REQUIREMENTS. (a) A determination of the probable hydrologic consequences of the mining and reclamation operations, both onsite and off-site, must be made by a qualified laboratory. For each applicant or group of applicants, the commissioner will determine the data required, which may include

- (1) the existing and projected surface and ground water seasonal flow regime, including water level and water table evaluations;
- (2) the existing and projected seasonal quality of the surface and ground water regime, including measurements and estimates of dissolved and suspended solids, pH, iron, manganese, surface and channel erosion, and other water quality parameters; and
- (3) the drilling data and a statement of the results of test borings or core samplings from the proposed permit area, including
 - (A) logs from any drill holes, including identification of each stratum and water level penetrated;
 - (B) the coal seam thickness and its chemical analysis, including
 - (i) acid-forming or toxic-forming material; and
 - (ii) sulfur content;
 - (C) the chemical analysis of potentially acid-forming or toxic-forming sections of overburden;
 - (D) the chemical analysis of the stratum lying immediately underneath the coal to be mined; and
 - (E) other information as needed on a site-specific basis to determine probable hydrologic consequences;
 - (4) data sufficient to
 - (A) develop cross-section maps and plans required by 11 AAC 90.065;
 - (B) describe cultural and historic resources and archaeological features as required by 11 AAC 90.041;
 - (C) complete preblasting surveys if required by 11 AAC 90.373;

- (D) complete the development of site-specific resources information required by 11 AAC 90.057; and
- (E) provide for the protection and enhancement of fish, wildlife, and related environmental values as required by 11 AAC 90.423; and
- (5) information and plans for any other environmental values as determined necessary by the commissioner to determine probable hydrologic consequences.(Eff. 5/2/83, Register 84; am 4/24/09, Register 190)
- (b) Data collected under this section will be made available to interested persons as provided in AS 27.21.100.

- 11 AAC 90.181. QUALIFIED LABORATORIES. (a) A laboratory may be qualified to perform services under 11 AAC 90.171 by either OSM or the commissioner. The commissioner will, in the commissioner's discretion, find a laboratory to be qualified if the laboratory can demonstrate that it
- (1) is staffed with experienced, professional personnel in the fields of hydrology, mining engineering, aquatic biology, geology, or chemistry as applicable to the work to be performed;
- (2) has adequate space for material preparation, cleaning and sterilizing of necessary equipment, stationary equipment, storage and space to accommodate periods of peak work loads;
 - (3) meets the requirements of the Occupational Safety and Health Act;
- (4) has the financial capability and business organization necessary to perform the work required;
- (5) has analytical, monitoring, and measuring equipment capable of meeting applicable standards;
- (6) has the capability of collecting field samples, and making hydrologic field measurements and analytical laboratory determinations, by acceptable hydrologic, geologic, or analytical methods, in accordance with 11 AAC 90.043 11 AAC 90.051 and 11 AAC 90.085. The commissioner will, in the commissioner's discretion, approve other appropriate methods or guidelines for data acquisition.
- (b) The qualified laboratory must be capable of performing either the determination of probable hydrologic consequences or the statement of results of test borings as described in 11 AAC 90.179(a). Subcontractors may be used to provide the

services required if they have been designated as a qualified laboratory. (Eff. 5/2/83, Register 84; am 11/18/94, Register 132)

Authority: AS 27.21.030 AS 27.21.120

11 AAC 90.183. ASSISTANCE FUNDING. If-funds are inadequate to provide small operator assistance, the commissioner will, to the extent practical, establish a formula for allocating funds among eligible operators by prorating money available downward as tonnage of coal to be mined increases, and considering such factors as the applicant's

- (1) anticipated date of filing a permit application;
- (2) anticipated date for commencing mining; and
- (3) performance history. (Eff. 5/2/83, Register 84)

Authority: AS 27.21.030 AS 27.21.120

- 11 AAC 90.185. APPLICANT LIABILITY. (a) The applicant shall reimburse the department for the cost of [LABORATORY] services rendered under 11 AAC 90.171 and 11 AAC 90.179 if the applicant
 - (1) submits false information;
- (2) fails to submit a permit application within one year after the date of receipt of the approved laboratory report;
 - (3) fails to mine after obtaining a permit;
- (4) has actual and attributed production of coal exceeding 300,000 tons during any consecutive 12-month period during the term of the permit for which the assistance is provided; or
- (5) transfers, sells, or assigns the permit to another person whose total actual and attributed production exceeds 300,000 tons during any consecutive 12-month period of the remaining term of the permit; in this case, the applicant and its successor are jointly and severally obligated to reimburse the department.

(Eff. 5/2/83, Register 84; am 11/18/94, Register 132; am 4/24/09, Register 190)

ARTICLE 10.

BONDING.

Section

- 201. Requirement to file a bond
- 203. Period of bond liability
- 205. Determination and adjustment of bond amount
- 207. Requirements for specific types of bonds
- 209. Bond replacement
- 211. Bond release procedure and criteria
- 213. Bond forfeiture
- 11 AAC 90.201. REQUIREMENT TO FILE A BOND. (a) Before a permit, major revision, or renewal may be issued, the applicant shall file a surety, collateral, or escrow account bond, or a combination of these bonds, in accordance with AS 27.21.160.
- (b) The operator may not disturb the surface or extend any underground shafts, tunnels, or operations before acceptance by the commissioner of a performance bond.
- (c) After the amount of the bond has been determined for the permit area in accordance with 11 AAC 90.205, the operator shall file one of the following:
 - (1) the entire bond required for the term of the permit;
- (2) a cumulative bond schedule listing the areas covered by the bond and the sequences for release of acreage as reclamation progresses through varying phases and the addition of acreage as it is to be affected; the amount of bond required to obtain the permit must include the full reclamation cost of the initial area being affected; or
- (3) an incremental bond schedule and the new performance bond required for the first increment in the schedule.
- (d) If the operator elects to separately bond increments under (c)(3) of this section, the operator shall identify the initial and successive incremental areas for bonding on the permit application map submitted under 11 AAC 90.063 and shall specify the incremental bond amounts that must be filed before operations on each increment begin. As succeeding increments of operations are to be initiated, the operator shall file the scheduled amount at least 30 days before beginning that

increment. Incremental areas must be of sufficient size and configuration to provide for efficient reclamation operations if reclamation by the commissioner becomes necessary under 11 AAC 90.213.

- (d) When the operator elects to separately bond increments, the operator shall identify the initial and successive incremental areas for bonding on the permit application map submitted under 11 AAC 90.063 and shall specify the amounts to be filed before beginning operations on each increment. As succeeding increments of operations are to be initiated, the operator shall file the scheduled amount at least 30 days before beginning that increment.
- (e) Actions of third parties which are beyond the control and influence of the permittee
- (f) The operator shall maintain adequate bond coverage at all times. Except as provided in 11 AAC 90.209(c), operating without a bond is a violation of a condition upon which the permit is issued. (Eff. 5/2/83, Register 84; am 4/24/09, Register 190)

Authority: AS 27.21.030 AS 27.21.160

- 11 AAC 90.203. PERIOD OF BOND LIABILITY. (a) The period of bond liability provided in AS 27.21.160 may not end before the end of the period for operator responsibility for revegetation provided in 11 AAC 90.457. The liability for individual bonds may be limited if the bonds are posted and approved to guarantee only specific phases or increments of reclamation in accordance with this chapter.
- (b) Small, isolated, and clearly defined portions of the permit area requiring extended liability because of augmentation may be bonded separately with the approval of the commissioner. These areas must be limited in extent and not constitute a checkerboard pattern of failure. There must be proper access to the separated areas for remedial work.
- (c) If the commissioner approves a long-term, intensive agricultural postmining land use in accordance with 11 AAC 90.481, the applicable five or 10 year period of responsibility under 11 AAC

90.457 commences on the date of initial planting. (Eff. 5/2/83, Register 84)

Authority: AS 27.21.030 AS 27.21.160

11 AAC 90.205. DETERMINATION AND ADJUSTMENT OF BOND AMOUNT. (a) The commissioner will determine the adequacy of bond required in accordance with AS 27.21.160 based on, but not limited to,

- (1) the approved reclamation plan;
- (2) the estimated costs of reclamation submitted by the permit applicant;
- (3) additional estimated costs which may arise from such factors as applicable public contracting requirements or the need to bring personnel and equipment to the site; and,
- (4) if appropriate, an inflation factor based on cost changes in reclamation activities during the recent past.
- (b) The commissioner will require adjustment of the bond amount in accordance with AS 27.21.160 only after
- (1) notifying the permittee, surety, and any person with a property interest in any collateral, of the reasons for the adjustment;
- (2) providing the permittee with an opportunity for an informal conference on the adjustment; and
 - (3) finding that good cause exists for requiring the adjustment.
- (c) A permittee may request reduction in the amount of the bond upon submission to the commissioner of proof that the permittee's method of operation or other circumstances will reduce the estimated cost to reclaim the area. If the request is based on a change in method of operation or a decrease in the number of acres to be disturbed, the commissioner will, in his or her discretion, grant the request after considering the factors in (a) of this section. If the request is based on a decrease in acreage already disturbed, it will be considered a request for partial bond release under 11 AAC 90.211.
- (d) The commissioner will review the bond for adequacy and require adjustment, if necessary, whenever the permit is renewed, revised, or reviewed under 11 AAC 90.133. (Eff. 5/2/83, Register 84)

- 11 AAC 90.207. REQUIREMENTS FOR SPECIFIC TYPES OF BONDS. (a) The following provisions apply to long-term surface facilities and disturbed surface areas of underground mines:
- (1) To achieve continuous bond coverage, bonds covering long-term surface facilities must be conditioned to extend, replace, or pay the full amount of the bond 120 days before the expiration of the bond term.
 - (2) The operator may not extend any underground shafts, tunnels, or

underground operations until measures to prevent subsidence from causing material damage detailed in 11 AAC 90.461 have been completed or a performance bond guaranteeing completion of this work, if applicable, is accepted by the commissioner.

- (b) The following provisions apply to surety bonds:
- (1) They must be non-cancelable during their terms, except that coverage for undisturbed land may be canceled if the commissioner approves.
- (2) The surety company must give prompt notice to the commissioner and the permittee of any action filed alleging the insolvency or bankruptcy of the surety or the permittee, or alleging any violations which could result in suspension or revocation of the surety's right to do business.
- (3) The commissioner will not accept bonds under any one permit in excess of 10 percent of the surety company's capital surplus account as shown on a balance sheet certified by a certified public accountant and will not accept bonds from a surety company for any person, on all permits held by that person, in excess of 30 percent of the surety company's capital surplus account as shown on the certified balance sheet.
 - (c) The following provisions apply to collateral bonds:
- (1) Except for letters of credit and escrow accounts, the commissioner will keep possession of all collateral until released or replaced. This collateral will be valued at its current market value and not its face value. Certificates of deposit must be fully insured by the Federal Deposit Insurance Corporation or the Federal Savings and Loan Insurance Corporation, must be assigned, in writing, to the state, and notice of assignment must appear on the books of the bank issuing the certificates. The commissioner will accept these certificates only if the issuing bank waives all rights of setoff or liens which it may have against them.
- (2) Letters of credit must be issued by a bank organized or authorized to do business in the United States, must be irrevocable during their terms, and must be payable upon demand upon receipt by the bank of a notice of forfeiture issued in accordance with 11 AAC 90.213.
- (3) The commissioner will not accept a letter of credit under any one permit in excess of 10 percent of the bank's capital surplus account as shown on a balance sheet certified by a certified public accountant and will not accept letters of credit from a bank for any person, on all permits held by that person, in excess of 30 percent of the bank's capital surplus account as shown on the balance sheet.
- (4) The bank must give prompt notice to the commissioner and the permittee of any action filed alleging the insolvency or bankruptcy of the bank or the permittee, or alleging any violations which could result in suspension or revocation of the bank's right to do business.

- (5) If real property is posted as collateral for a bond:
- (A) The operator shall grant the state a first mortgage, first deed of trust, or perfected first lien security interest in the property with a right to sell or otherwise dispose of the property in the event of forfeiture.
- (B) Before approval of the collateral, the operator shall submit a schedule which includes a description of the property; the property's fair market value as determined by an independent appraisal conducted by a certified appraiser; and proof of possession and title to the property.
- (C) Real property used as collateral may be part of the permit area but may not be disturbed under any permit while serving as collateral.
- (D) The commissioner will record, as appropriate, the state's interest in property posted as collateral.
 - (d) The following provisions apply to escrow accounts:
- (1) The commissioner will, in his or her discretion, authorize the operator to supplement the bond through the establishment of an escrow amount so long as the total bond, including the escrow amount, is not less than the amount required under 11 AAC 90.205.
- (2) Interest paid on an escrow account must be retained in the account and applied to the bond value unless the commissioner has approved the payment of interest to the permittee.
- (3) Certificates of deposit meeting the requirements of (c) of this section may be substituted for an escrow account with the commissioner's approval.
- (e) The estimated bond value of all collateral posted as bond assurance under this section must be subject to a margin of bond value to market value ratio determined by the commissioner. The margin must reflect legal and liquidation fees, value depreciation, marketability, and fluctuations which might affect the net cash available to the commissioner to complete reclamation. The bond value of collateral may be evaluated at any time, but must be as part of permit renewal. In no case may the bond value exceed the market value.
 - (f) The following provisions apply for self-bonding:
- (1) The commissioner will, in the commissioner's discretion, accept a self-bond if the permit applicant:
- (A) has conducted business over a period of five years immediately preceding the time of application; in making a determination under this paragraph, the commissioner will, in the commissioner's discretion,

NATURAL RESOURCES

- (i) exclude interruptions in the applicants' business conduct that were beyond the applicant's control and do not affect the applicant's likelihood of remaining in business during the proposed surface coal mining and reclamation operations;
- (ii) allow a joint venture or syndicate with less than five years of continuous operation to self-bond if each member of the joint venture or syndicate has conducted business for the five years immediately preceding the application;
- (B) shows to the commissioner, on the basis of sufficiently detailed financial information, that the applicant:
- (i) has a current rating for its most recent bond issuance of "A" or higher as issued by either Moody's Investor Service or Standard and Poor's Corporation;
- (ii) has a tangible net worth of at least \$10,000,000, a ratio of total liabilities to net worth of not more than 2.5 to 1, and a ratio of current assets to current liabilities of at least 1.2 to 1; or
- (iii) has fixed assets in the United States of at least \$20,000,000, a ratio of total liabilities to net worth of not more than 2.5 to 1, and a ratio of current assets to current liabilities of at least 1.2 to 1;
 - (C) submits to the commissioner:
- (i) financial statements for the most recently completed fiscal year, accompanied by a report prepared by an independent certified public accountant in conformity with generally accepted accounting principles and containing the accountant's audit opinion or review opinion of the financial statements with no adverse opinion;
- (ii) unaudited financial statements for completed quarters in the current fiscal year; and
- (iii) additional unaudited information requested by the commissioner; and
- (D) designates a suitable agent to receive service of process in Alaska.
- (2) The commissioner will, in the commissioner's discretion, accept a written guarantee from a parent corporation guarantor which meets the requirements of (1) of this subsection. The commissioner will accept the guarantee only if the guarantee contains conditions that in the event of forfeiture makes the guarantor liable under the indemnity agreement to complete the reclamation or pay the amount of the self-bond to the regulatory authority and that requires the guarantor to notify the permittee and the commissioner if its financial conditions change so that the criteria of (1)(B) and (4) of

this subsection are no longer satisfied. The parent corporation must also have a suitable agent to receive service of process in Alaska. The written guarantee that is presented by a parent corporation to the commissioner under this paragraph must provide that:

- (A) if the permit applicant fails to complete the reclamation plan, the guarantor will complete the reclamation plan or be liable to provide to the commissioner an amount of money, not to exceed the amount of the bond, so that the commissioner can complete the reclamation plan; and
- (B) the guarantee will remain in force unless the guarantor provides at least 90 days notice of cancellation by certified mail to the permit applicant and the commissioner, and the commissioner accepts the cancellation; the commissioner may accept a cancellation of a guarantee under this subparagraph only if the commissioner
 - (i) approves a suitable replacement bond; or
- (ii) finds that the land for which the bond or portion of the bond was accepted has not been disturbed.
 - (3) The commissioner will, in the commissioner's discretion,
 - (A) accept a written guarantee from a corporate guarantor if
- (i) the permit applicant meets the conditions of (1)(A), (C), and (D) of this subsection and the guarantor meets the requirements of (1) of this subsection and has a suitable agent to receive service of process in Alaska; and
- (ii) the guarantee meets the requirements of (2) of this subsection; and
- (B) require the applicant to submit information specified in (1)(B) of this subsection in order to determine the financial capability of the permit applicant.
- (4) The total amount of any existing and proposed self-bonds, and of any guarantees for guarantors, for surface coal mining and reclamation operations may not exceed 25 percent of the tangible net worth in the United States of the applicant or guarantor, respectively.
- (5) The self-bond must include an indemnity agreement that meets the following requirements:
- (A) all persons and parties who are to be bound by the indemnity agreement, including the guarantor, if any, shall execute the indemnity agreement, and the agreement must bind each person and party jointly and severally;
 - (B) if a permit applicant or a guarantor is a corporation, at least two

corporate officers who are authorized to bind the corporation shall sign the indemnity agreement, and the signed indemnity agreement that is submitted to the commissioner must include a copy of the corporate authorization and an affidavit certifying that the indemnity agreement is valid under all applicable federal and state law; in addition, if the guarantor is a corporation, the guarantor shall provide a copy of the corporate authorization for its guarantee of the self-bond and execution of the indemnity agreement;

- (C) if the permit applicant is a partnership, joint venture, or syndicate, the indemnity agreement must bind each partner or party who has a beneficial interest, directly or indirectly, in the partnership, joint venture, or syndicate;
- (D) the indemnity agreement must require that the permit applicant or guarantor complete the approved reclamation plan for land in default or pay to the commissioner the amount necessary to complete the approved reclamation plan up to the amount of the bond; the agreement when under forfeiture shall operate as a judgment against the parties liable under the agreement.
- (6) The commissioner may require a party that is liable under a self-bond or guarantee to submit current information required under (1)(B) and (C) of this subsection within 90 days after the close of the party's annual accounting period.
- (7) At any time when the self-bond is in effect, if the financial conditions of the permittee or guarantor change so that the criteria that are set out in (1)(B) and (4) of this subsection are not satisfied, the permittee or guarantor, as appropriate, shall
- (A) immediately notify the commissioner of the change of financial conditions; and
- (B) within 90 days of the permittee's notifying the commissioner under (A) of this paragraph, post an alternate form of bond in the same amount for which the self-bond had been approved; if the permittee fails to post the alternative form of bond, the department will issue a cessation order and the permittee shall begin immediate commencement of reclamation.

(8) In this subsection,

- (A) "current assets" means cash or other assets or resources that are reasonably expected to be converted to cash or sold or consumed within one year or within the normal operating cycle of the business;
- (B) "current liabilities" means obligations that are reasonably expected to be paid or liquidated within one year or within the normal operating cycle of the business.
- (C) "fixed assets" means plants and equipment, but does not include land or coal in place;

- (D) "liabilities" means obligations to transfer assets or provide services to other entities in the future as a result of past transactions;
- (E) "net worth" means total assets minus total liabilities and is equivalent to owners' equity;
- (F) "parent corporation" means a corporation that owns or controls the permit applicant;
- (G) "self-bond" means an indemnity agreement in a sum certain executed by the permit applicant or by the applicant and a corporate guarantor and made payable to the state with or without a separate surety; and
- (H) "tangible net worth" means net worth minus intangibles such as goodwill and rights to patents or royalties. (Eff. 5/2/83, Register 84; am 11/18/94, Register 132; am 7/29/98, Register 147)

Authority: AS 27.21.030 AS 27.21.160

- 11 AAC 90.209. BOND REPLACEMENT. (a) The commissioner will, in his or her discretion, allow the permittee to replace existing bonds with other bonds providing the same coverage and meeting the conditions of 11 AAC 90.201 11 AAC 90.207.
- (b) The commissioner will not release existing bonds until the permittee has submitted and the commissioner has approved acceptable replacement bonds. A replacement of bond under this section is not a release of bond under 11 AAC 90.211.
- (c) Upon the incapacity of a bank, surety company, or other person providing assurances under AS 27.21.160, by reason of bankruptcy, insolvency, or suspension or revocation of a charter or license, the permittee will be considered to be without bond coverage. The commissioner will issue a notice of violation to the permittee, which will specify a reasonable period to replace bond coverage, not to exceed 90 days. The notice of violation, if abated within the period allowed, will not be counted as a notice of violation for purposes of determining a pattern of willful violations under 11 AAC 90.617 and need not be reported as a past violation in permit applications under 11 AAC 90.023. If the notice of violation is not abated in accordance with the schedule, a cessation order will be issued. (Eff. 5/2/83, Register 84)

Authority: AS 27.21.030 AS 27.21.160

11 AAC 90.211. BOND RELEASE PROCEDURE AND CRITERIA. (a) Requests for bond release under AS 27.21.170 may only be filed at times that allow the commissioner to evaluate properly the reclamation operations alleged to have been completed. The times or seasons appropriate for the evaluation of certain types of

reclamation must be identified in the mining and reclamation operations plan required under 11 AAC 90.071 - 11 AAC 90.101 as approved by the commissioner. The permittee shall include in each request for bond release a notarized statement that certifies that all applicable reclamation activities have been accomplished in accordance with the requirements of AS 27.21, this chapter, and the approved reclamation plan.

- (b) The commissioner will provide notice in accordance with 11 AAC 90.907(d), including a newspaper advertisement published at least once a week for four consecutive weeks. The notice must include the information required under 11 AAC 90.907(e) and
 - (1) the permit and date approved;
- (2) the type and amount of bond filed and the portion sought to be released; and
- (3) the type and dates of reclamation work performed, and a description of how the results achieved relate to the approved reclamation plan.
- (c) The commissioner will also provide written notice of the information listed in (b) of this section to adjoining property owners, local government bodies, planning agencies, and sewage and water treatment authorities or water companies in the locality.
- (d) The commissioner will inspect and evaluate the reclamation work involved as provided in AS 27.21.170. The surface owner or lessee will be given notice of the inspection and may participate in it.
- (e) Any hearing under AS 27.21.170(g) will be held in the locality of the operation or, at the objector's option, an alternate site which allows for participation by interested members of the public. Interested parties for purposes of notification of the hearing include the permittee, surety, any person with an interest in the collateral, and anybody who filed comments, objections, or requests for a hearing under AS 27.21.170 or on the original application for the permit or any renewal or modification of it.
- (f) At this hearing, the commissioner will, in his or her discretion, administer oaths, subpoena witnesses or written or printed material, compel the attendance of witnesses or the production of materials, and take evidence, including, but not limited to, inspections of the land affected and other surface coal mining operations carried on by the permittee in the general vicinity. A verbatim record of the hearing will be made and a transcript will be made available on the motion of any party or by order of the commissioner.
- (g) The commissioner will release all or part of the bond or deposit applicable to the land within the permit area on which the commissioner is satisfied that the reclamation or phase of reclamation has been accomplished as required by AS 27.21.170(c) according to the schedule set out in that section. (Eff. 5/2/83, Register 84; am 4/24/09, Register 190)

Authority: AS 27.21.030 AS 27.21.170

11 AAC 90.213. BOND FORFEITURE. (a) The commissioner will seize all or part of a bond if reclamation operations are not conducted in accordance with the reclamation plan or the terms of the permit, or the operator defaults on the conditions under which the bond was accepted, unless

- (1) the operator or another person agrees to a compliance schedule which meets the conditions of the permit, reclamation plan, or bond; or
- (2) the commissioner finds that the surety has the ability, and allows the surety, to complete the reclamation plan or applicable bonded phase or increment; however, no surety liability will be released, except for partial releases under 11 AAC 90.211, until successful completion of all reclamation under the terms of the permit.
- (b) The commissioner will seize the bond or portion of it if the permittee or surety fails to meet the conditions specified in (a)(1) or (2) of this section.
- (c) The commissioner will seize a bond posted under 11 AAC 90.207(a) if 120 days before expiration of the bond the permittee has not filed a performance bond for the revegetation liability period or a new permit term as required for continuous coverage.
- (d) The commissioner will provide the permittee and any appropriate surety an opportunity for an informal conference on the proposed seizure if there has not been any hearing on the violation. The commissioner will notify the permittee and any appropriate surety, by certified mail, return receipt requested, of any determination to seize all or part of the bond, the reasons for the determination, the conditions under which seizure may be avoided, and the right to administratively appeal the determination.
- (e) The commissioner will collect the seized amount if an appeal is not filed in a timely manner and a stay of collection issued, or the appeal is unsuccessful.
- (f) Upon default, the commissioner will, in his or her discretion, seize any bond deposited to complete those reclamation operations for which the bond was posted. The funds will be used to contract for completion of the reclamation plan, or portion of it, on the permit area or incremental acreage on which bond coverage applies. The commissioner will, in his or her discretion, seize the entire amount of the bond and place the proceeds in an interest bearing escrow account for use in payment of reclamation expenses.
- (g) If the amount of the forfeited bond is insufficient to pay for the full cost of reclamation, the permittee is liable for any remaining cost. The commissioner will, in the

commissioner's discretion, complete the reclamation and recover any additional costs from the permittee.

(h) If the amount of the forfeited bond exceeds the cost of reclamation, the remaining funds will be used to reimburse the state for the cost of the bond forfeiture. Any funds remaining after reimbursing the state will be returned to the party from whom they were collected. (Eff. 5/2/83, Register 84; am 11/18/94, Register 132)

Authority: AS 27.21.030 AS 27.21.170

ARTICLE 11.

PERFORMANCE STANDARDS.

Section

Coolion	
301.	Signs and markers
303.	Capping, casing, and sealing of drilled holes
305.	Temporary sealing of drilled holes
311.	Removal of topsoil
313.	Topsoil storage
315.	Topsoil redistribution
317.	Topsoil nutrients and soil amendments
321.	Hydrologic balance
323.	Water quality standards
325.	Diversions and conveyance of flow
327.	Stream channel diversion
329.	Sediment control measures
331.	Siltation structures
333.	Discharge structures
335.	Acid-forming and toxic-forming spoil
336.	Impoundment design and construction

- 337. Impoundment inspections
- 338. Permanent impoundment criteria
- 339. Ground water protection
- 341. Underground mine entry and access discharges
- 343. Protection of ground water recharge capacity
- 345. Surface and ground water monitoring
- 347. Transfer of wells
- 349. Discharge of water into a mine
- 351. Postmining rehabilitation
- 353. Stream buffer zones
- 361. Coal recovery
- 371. Use of explosives
- 373. Preblasting survey
- 375. Public notice of blasting
- 377. Blasting signs, warnings, and access control
- 379. Control of adverse effects of blasting
- 381. Seismographic measurements
- 383. Records of blasting
- 391. Disposal of excess spoil or coal mine waste
- 393. Protection of underground mining
- 395. Coal mine waste, general requirements
- 397. Disposal area site inspections
- 399. (Repealed)
- 401. Coal mine waste, refuse piles
- 403. Coal mine waste, fires

- 405. Burned waste removal
- 407. Coal mine waste, dams, and embankments
- 409. (Repealed)
- 411. Disposal of noncoal wastes
- 421. Air resources protection
- 423. Protection of fish and wildlife
- 431. Slides and other damage
- 433. Pipelines
- 435. (Repealed)
- 441. Timing requirements for backfilling and grading
- 443. Backfilling and grading
- 445. Covering coal and toxic material
- 447. Backfilling and grading: auger mining
- 449. Stabilizing rills and gullies
- 451. Revegetation
- 453. Revegetation: timing
- 455. Revegetation: mulching
- 457. Standards for revegetation success
- 461. Subsidence control
- 463. Subsidence control public notice
- 471. Cessation of operations
- 481. Postmining land use
- 491. Construction and maintenance of roads, transportation and support facilities, and utility installations
- 501. Alluvial valley floor requirements

- 11 AAC 90.301. SIGNS AND MARKERS. (a) The operator shall post and maintain, during conduct of the activity to which they apply, signs and markers which
- (1) are of a uniform design throughout the operation that can be easily seen and read;
 - (2) are made of durable material; and
 - (3) conform to local ordinances and codes.
- (b) The commissioner will, in his or her discretion, reduce sign and marker requirements where the areas are inaccessible and posting would serve no useful purpose.
- (c) Mine and permit identification signs must be displayed at each point of access to the permit area from public roads and must be retained until the release of all bonds for the permit area. These signs must show the name, business address, and telephone number of the operator and the identification number of the current permit authorizing operations.
- (d) The perimeter of all areas affected by surface operations or facilities must be clearly marked before operations begin, except as provided in (b) of this section.
- (e) Buffer zones required by 11 AAC 90.353 must be marked to prevent disturbance by surface operations and facilities.
- (f) Where topsoil or other vegetation-supporting material is segregated and stockpiled under 11 AAC 90.313, the stockpiled material must be clearly marked. (Eff. 5/2/83, Register 84)

Authority: AS 27.21.030 AS 27.21.210 AS 27.21.220

11 AAC 90.303. CAPPING, CASING, AND SEALING OF DRILLED HOLES. Each exploration hole, other drill or borehole, shaft, drift, adit, tunnel, entryway, well, or other exposed underground opening must be capped, cased, sealed, backfilled or otherwise managed, as approved by the commissioner, consistent with 30 CFR 75.1711. Closure measures must be designed to prevent acid or other toxic drainage from entering ground or surface water, to minimize disturbance to the prevailing hydrologic balance, and to ensure the safety of people, livestock, fish and wildlife, and machinery. After these openings are uncovered or exposed by mining activities they must be permanently closed, unless approved under 11 AAC 90.305, or otherwise managed in a manner approved by the commissioner. Use of a drilled hole, borehole, or monitoring well as a water well must meet the provisions of 11 AAC 90.347. This section does not apply to holes drilled and used solely for blasting. (Eff. 5/2/83, Register 84)

Authority: AS 27.21.030 AS 27.21.210 AS 27.21.220

11 AAC 90.305. TEMPORARY SEALING OF DRILLED HOLES. Each temporarily inactive mine entry, exploration hole, other drill or borehole, well, and other exposed underground opening which has been identified in the approved permit application for return of underground development waste, hazardous coal processing waste, or water to underground workings, or to be used to monitor ground water conditions, must be sealed when not in use and protected during use by protective devices approved by the commissioner. The operator shall periodically inspect and maintain these devices in good operating condition. (Eff. 5/2/83, Register 84)

Authority: AS 27.21.030 AS 27.21.210 AS 27.21.220

11 AAC 90.311. REMOVAL OF TOPSOIL. (a) Topsoil must be removed and conserved in a separate layer from the areas to be disturbed unless use of topsoil substitutes or supplements is approved by the commissioner. If use of topsoil substitutes or supplements is approved, all materials to be redistributed must be removed. The commissioner will, in his or her discretion, not require removal of topsoil if light traffic does not destroy existing vegetation or cause erosion, or if removal of topsoil threatens environmental harm due to permafrost or other environmental conditions and before construction of small permanent structures such as power poles, signs, or fence lines.

- (b) If the topsoil is less than six inches thick, all unconsolidated material including the A horizon to a depth of six inches must be treated as topsoil.
- (c) Topsoil must be removed after vegetative cover that would interfere with the reuse of the topsoil is cleared from the areas to be disturbed but before any drilling, blasting, mining, or other surface disturbance.
- (d) The B horizon, portions of the C horizon, or other underlying layers must be segregated and used as topsoil substitute or supplement if necessary to support the approved postmining land use or if required by the commissioner as the best material available to support vegetation.
- (e) Selected overburden materials may be substituted or used as a supplement to topsoil if the operator demonstrates to the commissioner that the resulting soil medium will be as suitable for sustaining revegetation as the available topsoil and that the substitute material is the best available to support revegetation. This demonstration must be based upon analysis of the thickness of soil horizons, total depth, texture, percent coarse fragments, mineralogy of the fine earth fraction, chemistry, pH, and areal extent of the different kinds of soils. The commissioner will, in his or her discretion, require other chemical and physical analyses, field-site trials, or greenhouse tests determined to be necessary to demonstrate the suitability of the topsoil substitute or

supplement.

- (f) If the removal of vegetative, topsoil, or other materials may result in erosion which may cause air or water pollution, the commissioner will require measures to control erosion, including limiting the size of the area from which material may be removed at any one time and requiring redistribution of the surface soil layer at a time when the physical and chemical properties of topsoil can be protected.
- (g) Repealed 4/24/09. (Eff. 5/2/83, Register 84; am 4/24/09, Register 190)

Authority: AS 27.21.030 AS 27.21.210

- 11 AAC 90.313. TOPSOIL STORAGE. (a) After removal, topsoil and approved topsoil substitutes or supplements must be promptly redistributed on regraded areas. These materials may be stockpiled only if prompt redistribution is impractical.
- (b) Stockpiled materials must be selectively placed on a stable area within the permit area, must not be disturbed, and must be protected from wind and water erosion, leaching of important nutrients and organic material, contaminants, and unusual compaction through the maintenance of an effective cover of quick growing plants or other measures approved by the commissioner. (Eff. 5/2/83, Register 84)

Authority: AS 27.21.030 AS 27.21.210

- 11 AAC 90.315. TOPSOIL REDISTRIBUTION. (a) After final grading and before the replacement of topsoil and other segregated materials, the regraded land must be treated to eliminate slippage surfaces and to promote root penetration. If the operator shows, and the commissioner approves, that no harm will be caused to the topsoil and vegetation, treatment may be conducted after topsoil is replaced.
 - (b) Topsoil and other materials must be redistributed in a manner that
- (1) achieves an approximate uniform, stable thickness consistent with the approved postmining land uses, contours, and surface water drainage system;
 - (2) prevents unnecessary compaction of the material; and
- (3) protects the material from wind and water erosion before and after it is seeded and planted. (Eff. 5/2/83, Register 84)

11 AAC 90.317. TOPSOIL NUTRIENTS AND SOIL AMENDMENTS. The commissioner will require soil amendments to correct soil nutrient deficiencies necessary to meet the revegetation requirements of 11 AAC 90.451 -- 11 AAC 90.457 and the postmining land use. (Eff. 5/2/83, Register 84)

- 11 AAC 90.321. HYDROLOGIC BALANCE. (a) Operations must be planned and conducted to prevent long-term adverse changes in the hydrologic balance in both the permit area and adjacent areas.
- (b) Changes in water quality and quantity, in the depth and flow patterns of ground water, and in the location of surface and subsurface water drainage channels must be minimized so that the approved postmining land use of the permit area is not adversely affected.
- (c) The operator shall comply with all applicable federal and state water quality statutes and regulations.
- (d) Operations must be conducted to prevent or minimize water pollution. The commissioner will require operation of necessary water treatment facilities for as long as treatment is required under this chapter.
- (e) The permittee shall promptly replace the water supply of an owner of interest in real property who obtains all or part of the owner's supply of water for domestic, agricultural, industrial, or other legitimate use from an underground or surface source, if based on the baseline hydrologic information required in 11 AAC 90.043 11 AAC 90.051, the commissioner determines that
- (1) the water supply had been contaminated, diminished, or interrupted by surface or underground mining activities conducted after October 24, 1992; and
- (2) the affected water supply was in existence before the date the commissioner received the permit application for the activities causing the contamination, diminution, or interruption.
- (f) A permittee required under (e) of this section to replace a protected water supply that has been contaminated, diminished, or interrupted by coal mining operations shall provide a water supply on both a temporary and permanent basis to a level that is equivalent to premining quantity and quality. Replacement includes provision of an equivalent water delivery system and payment of operation and maintenance costs in excess of customary and reasonable delivery costs for premining water supplies. However,
- (1) upon agreement by the permittee and the water supply owner, the permittee may pay the excess operation and maintenance costs in a one-time payment

equal to the present value of the total increased annual operation and maintenance costs over a period agreed to by the permittee and the water supply owner;

- (2) the permittee need not provide, on either a temporary or a permanent basis, a water supply that is equivalent to the premining quantity and quality of the water supply, if
 - (A) the affected water supply was not needed for the land use in existence at the time that the water supply was contaminated, diminished, or interrupted;
 - (B) the affected water supply is not needed to achieve the postmining land use;
 - (C) the permittee demonstrates that a suitable alternative water source is available and could feasibly be developed; and
 - (D) the water supply owner concurs in writing. (Eff. 5/2/83, Register 84; am 4/24/09, Register 190)

Authority: AS 27.21.030 AS 27.21.220 AS 27.21.930

AS 27.21.210

11 AAC 90.323. Water quality standards. Discharges of water from areas disturbed by surface and underground mining activities shall be made in compliance with all applicable federal water quality laws and regulations, with all applicable provisions of AS 46.03 and regulations in effect under that chapter, and with the effluent limitations for coal mining promulgated by the United States Environmental Protection Agency set out in 40 C.F.R. Part 434, adopted by reference in 11 AAC 90.001(b). (Eff. 4/24/09, Register 190)

Authority: AS 27.21.030 AS 27.21.210 AS 27.21.220

- 11 AAC 90.325. DIVERSIONS AND CONVEYANCE OF FLOW. (a) Overland flow, including flow through litter, shallow ground water flow from undisturbed areas, and flow in ephemeral streams, may be diverted away from disturbed areas by means of temporary or permanent diversions if required or approved by the commissioner to minimize erosion, reduce the volume of water to be treated, prevent contact with acid-forming or toxic-forming materials, or maximize recovery of the coal. The requirements of this section must be met for all diversions and collection drains that are used to transport water into treatment facilities.
 - (b) Each temporary diversion must be designed and constructed to pass safely

the two-year, six-hour precipitation event or a larger event specified by the commissioner based on the period of use of the diversion and local conditions.

- (c) Each permanent diversion must be designed and constructed to pass safely the 10-year, six-hour precipitation event or a larger event specified by the commissioner based on local conditions. Each permanent diversion must be constructed with banks that are stabilized by vegetation. Other stabilization measures may be used if approved by the commissioner to prevent seepage or to provide stability. (d) Each diversion must be designed, constructed, and maintained to
 - (1) be stable;
- (2) prevent contribution of suspended solids to stream flow and to runoff outside the permit area in excess of applicable state and federal water quality laws and regulations; and
- (3) provide protection against flooding and resultant damage to life and property.
- (e) No diversion may be located where it would increase the potential for land slides. No diversion may be constructed on existing land slides unless the commissioner finds that public safety will be ensured.
- (f) When no longer needed, each temporary diversion must be removed and the affected land regraded, covered with topsoil, and revegetated in accordance with the requirements of this chapter.
 - (g) Diversions must be designed so that
- (1) standard engineering practices are used in channel lining to safely pass the design velocities;
- (2) except for sand and gravel, all riprap complies with the construction requirements of this chapter;
 - (3) freeboard is no less than one foot;
- (4) protection is provided for transition of flows and for critical areas such as swales and curves:
- (5) if a protected area is determined by the commissioner to be critical, the design freeboard is increased;
- (6) energy dissipators are installed when necessary at discharge points where diversions intersect with natural streams and exit velocity of the diversion ditch flow is greater than that of the receiving stream;
 - (7) excavated material not necessary for diversion channel

geometry or regrading of the channel is disposed of in accordance with 11 AAC 90.391; and

(8) topsoil is handled in compliance with 11 AAC 90.311 --11 AAC 90.315.

(h) Diversions may not be constructed or operated to divert water into underground mines without the approval of the commissioner under 11 AAC 90.349. (Eff. 5/2/83, Register 84; am 11/18/94, Register 132; am 4/24/09, Register 190)

Authority: AS 27.21.030 AS 27.21.210 AS 27.21.220

- 11 AAC 90.327. STREAM CHANNEL DIVERSION. (a) Flow from perennial and intermittent streams within the permit area may be diverted if approved by the commissioner in accordance with 11 AAC 90.353 and the diversions comply with local, state, and federal laws and regulations.
- (b) The design and construction of each stream channel diversion must be certified by a registered professional engineer as meeting the requirements of this section, including the following:
- (1) The longitudinal profile of the stream, the channel, and the flood plain must remain stable and prevent, to the extent possible using the best technology currently available, additional contributions of suspended solids to stream flow or runoff outside the permit area. These contributions must not be in excess of requirements of state or federal law and regulations. Erosion control structures must be approved by the commissioner and should be used only if necessary to control erosion. These structures will be approved for permanent diversions, but only where they are stable and will require infrequent maintenance.
- (2) the combination of channel, bank, and floodplain configurations must be adequate to pass safely the 10-year, six-hour precipitation event for temporary diversions, the 100-year, six-hour precipitation event for permanent diversions, or larger events specified by the commissioner based on the period of use and local conditions; however, the capacity of the channel itself must be at least equal to the capacity of the unmodified stream channel immediately upstream and downstream from the diversion.
- (c) When no longer needed to achieve the purpose for which they were authorized, all temporary stream channel diversions must be removed and the affected land regraded and revegetated in accordance with the requirements of this chapter. At the time diversions are removed, downstream water treatment facilities previously protected by the diversion must be modified or removed to prevent overtopping or failure of the facilities. This requirement does not relieve the operator from maintenance of a water treatment facility otherwise required under this chapter or the permit.
 - (d) When permanent diversions are constructed or stream channels restored

after temporary diversions, the operator shall

- (1) restore, enhance where practical, or maintain natural riparian vegetation on the banks of the stream;
- (2) establish or restore the stream to its natural meandering ratio at an environmentally acceptable gradients and velocities determined by the commissioner; and
- (3) establish or restore the stream to a longitudinal profile and cross section, including aquatic habitats that approximate refining stream channel characteristics and which may, using the best technology currently available, be expected to restore aquatic productivity to premining levels. (Eff. 5/2/83, Register 84; am 11/18/94, Register 132; am 4/24/09, Register 190)

Authority: AS 27.21.030 AS 27.21.210 AS 27.21.220

- 11 AAC 90.329. SEDIMENT CONTROL MEASURES. (a) Sediment control measures must be designed, constructed, and maintained, using the best technology currently available to
- (1) prevent, to the extent possible, additional contributions of sediment to streamflow or to runoff outside the permit area;
- (2) meet the more stringent of applicable state or federal effluent limitations; and
 - (3) minimize erosion.
- (b) Sediment control measures may be used singly or in combination and may be required both within and adjacent to the disturbed area. Sediment control methods include, but are not limited to,
- (1) disturbing the smallest practical area at any one time through progressive backfilling, grading, and prompt revegetation as required in 11 AAC 90.453;
- (2) stabilizing the backfill material to reduce the rate and volume of runoff in accordance with 11 AAC 90.441;
 - (3) retaining sediment within disturbed areas;
 - (4) diverting runoff away from disturbed areas;
- (5) using protected channels or pipes for diversions to prevent additional erosion;
 - (6) using riprap, check dams, mulches, vegetative sediment filters, dugout

ponds, and other measures that reduce overland flow velocity or runoff volume, or trap sediment:

- (7) treating with chemicals; and
- (8) treating underground mine drainage in underground sumps. (Eff. 5/2/83, Register 84)

Authority: AS 27.21.030 AS 27.21.210 AS 27.21.220

11 AAC 90.331 SILTATION STRUCTURES. (a) (Reserved)

- (b) A siltation structure must
- (1) be constructed before any disturbance of the area to be drained into the structure and before any discharge of water into surface water from any underground mine working;
- (2) be located as near as possible to the disturbed area and out of any perennial or intermittent stream unless otherwise approved by the commissioner; and
- (3) be designed to include sufficient treatment capacity and other features necessary to meet applicable state and federal water quality laws and regulations.
- (c) Any siltation structure that impounds water must meet the requirements of 11 AAC 90.336 11 AAC 90.338.
 - (d) Each sedimentation pond must be designed, constructed, and maintained to
- (1) contain or treat the 10-year, 24-hour precipitation event unless a lesser design event is approved by the commissioner based on terrain, climate, other site-specific conditions, and a demonstration by the operator that the effluent limitations of 11 AAC 90.323 will be met;
- (2) include a nonclogging dewatering device located above the maximum sediment storage level capable of maintaining the design detention time;
 - (3) minimize short-circuiting to the extent possible; and
- (4) provide for periodic sediment removal to maintain the design sediment storage volume.
- (e) A siltation structure shall be maintained until the commissioner authorizes removal in accordance with the requirements of 11 AAC 90.321(a) (d) and 11 AAC 90.323 and the disturbed area has been stabilized and revegetated. A siltation structure may not be removed sooner than two years after the last augmented seeding. When the structure is removed, the operator must regrade and revegetate the affected

land in accordance with the reclamation plan and requirements of this chapter, unless the commissioner approves retaining one or more ponds as part of the postmining land use under 11 AAC 90.481. Any pond proposed for retention must meet all requirements for a permanent impoundment under 11 AAC 90.336 - 11 AAC 90.338 and 11 AAC 90.351.

- (e) A siltation structure may not be removed before the commissioner's approval under 11 AAC 90.323(b) (after the disturbed area has been stabilized and revegetated) and no earlier than two years after the last augmented seeding. When the structure is removed, the operator must regrade and revegetate the affected land in accordance with the requirements of this chapter, unless the commissioner approves retaining a pond, or ponds, as part of the postmining land use under 11 AAC 90.481. Any pond proposed for retention must meet all requirements for a permanent impoundment under 11 AAC 90.336 11 AAC 90.338 and 11 AAC 90.351.
- (f) The design, construction, and maintenance of a siltation structure under this section does not relieve the operator from compliance with applicable state and federal water quality laws and regulations. If necessary to meet those requirements, the commissioner will require the installation, operation, and maintenance of additional treatment processes.
- (g) The commissioner will, in the commissioner's discretion, grant an exemption to the requirements of this section if
- (1) the disturbed area that would otherwise require a siltation structure is small in relation to the total disturbed area; and
- (2) the operator demonstrates that a siltation structure or alternative sediment control measure is not necessary for the drainage from the disturbed area to meet the effluent limitations and applicable state and federal water quality standards for the receiving waters. (Eff. 5/2/83, Register 84; am 9/28/86, Register 99; am 11/18/94, Register 132)
 - (h) Other treatment facilities shall be designed
- (1) to treat the 10-year, 24-hour precipitation event unless a lesser design event is approved by the commissioner based on terrain, climate, other site-specific conditions, and a demonstration by the operator that the effluent limitations of 11 AAC 90.323 will be met; and
- (2) in accordance with 11 AAC 90.336 and 11 AAC 90.338. (Eff. 5/2/83, Register 84; am 9/28/86, Register 99; am 11/18/94, Register 132; am 4/24/09, Register 190)

Authority: AS 27.21.030 AS 27.21.210 AS 27.21.220

NATURAL RESOURCES

Register 190, July 2009

11 AAC 90.333. DISCHARGE STRUCTURES. Discharge from a siltation structure, permanent or temporary impoundment, coal mine waste dam or embankment, or diversion must be controlled by an energy dissipator, riprap channel, or other device, if necessary to reduce erosion, prevent deepening or enlargement of stream channel, or to minimize disturbance of the hydrologic balance. A discharge structure must be designed according to standard engineering design procedures. (Eff. 5/2/83, Register 84; am 11/18/94, Register 132)

Authority: AS 27.21.030 AS 27.21.210 AS 27.21.220

11 AAC 90.335. ACID-FORMING AND TOXIC-FORMING SPOIL. Drainage from acid-forming and toxic-forming spoil into the ground and surface water must be avoided by

- (1) identifying, burying, and treating where necessary, spoil and waste which, in the judgment of the commissioner, may be detrimental to vegetation or may adversely affect water quality if not treated or buried;
- (2) preventing water from coming into contact with acid-forming and toxicforming material in accordance with 11 AAC 90.445, and other measures required by the commissioner; and
- (3) burying or otherwise treating all acid-forming or toxic-forming material within 30 days after it is first exposed or within a lesser period required by the commissioner; temporary storage of the spoil and waste may be approved if the commissioner finds that burial or treatment within 30 days is not feasible and temporary storage will not result in any material risk of water pollution or other environmental damage; the material must be placed on impermeable material and protected from erosion and contact with surface water, and storage may only last until burial or treatment becomes feasible. (Eff. 5/2/83, Register 84)

Authority: AS 27.21.030 AS 27.21.210 AS 27.21.220

- 11 AAC 90.336. IMPOUNDMENT DESIGN AND CONSTRUCTION. (a) A permanent or temporary impoundment must be designed using accepted engineering standards and be certified by a qualified registered professional engineer or qualified specialist under the direction of a registered professional engineer. In this subsection, "qualified" means experienced or trained in the design and construction of impoundments.
- (b) An impoundment must contain a combination of principal and emergency spillways designed and constructed to pass safely the design peak discharge with the following recurrence interval, or larger event specified by the commissioner based on the period of use and local conditions:

NATURAL RESOURCES

- (1) for a temporary impoundment, the 25-year, six-hour precipitation event;
- (2) for a permanent impoundment, the 100-year, six-hour precipitation event.
- (c) Embankments for permanent and temporary impoundments must meet the following requirements:
- (1) the elevation at the top of the settled embankment must at all times be at least one foot above the water surface with the emergency spillway flowing at design depth; however, the commissioner will, in the commissioner's discretion, require greater freeboard as necessary to resist overtopping:
- (2) except as provided in (d) of this section, the embankment must have a minimum static safety factor of 1.5 for the normal pool with steady seepage saturation conditions, and a seismic safety factor of at least 1.2 based on a design earthquake event at least commensurate with the planned life of the structure;
- (3) the embankment foundation must be designed to be stable under all conditions of construction and operation of the impoundment; the design must be based on foundation investigations and any laboratory testing necessary to determine stability;
- (4) the embankment foundation area must be cleared of all vegetative and organic materials, and all surfaces must be prepared to resist failure, including installation of cutoff trenches if necessary to insure stability;
- (5) fill materials must be free of sod, large roots, other large vegetative matter, frozen soil, and coal mine waste unless otherwise approved by the commissioner under 11 AAC 90.407;
- (6) placement and spreading of fill material must begin at the lowest point of the foundation; the fill must be constructed in horizontal layers and compacted as specified in the design approved by the commissioner;
- (7) a barrier must be provided where necessary to control seepage along any conduit that extends through the embankment;
- (8) the entire embankment and surrounding area disturbed by the construction must be promptly revegetated, except that faces where water is impounded may be riprapped or otherwise stabilized as necessary to protect against surface erosion and sudden drawdown; and
- (9) each embankment must be routinely maintained during the mining operation, including repair of any area where the vegetation is not successful or where rills and gullies develop.

- (d) An impoundment located where failure would not be expected to cause loss of life or serious property damage and which has a design storage volume of less than 20 acre feet and an embankment height of no more that 20 feet, measured from the upstream toe of the embankment to the crest of the emergency spillway, must have a minimum static safety factor of 1.3 for the normal pool with steady seepage saturation conditions. This static safety factor requirement and the stability requirements of (c)(3) of this section are satisfied without further analysis if the embankment meets all design requirements of this section and has the following geometric constraints:
- (1) the minimum top width of the embankment is not less than the quotient of (H+35)/5, where H is the height, in feet, of the embankment measured from the upstream toe of the embankment;
- (2) the side slopes of the settled embankment are must not steeper than 1v:3h on the upstream side and 1v:2h on the downstream side and each slope is designed to be stable even if a flatter side slope is necessary; and
 - (3) the embankment foundation area is sloped no steeper than 1v:1h.
- (e) The perimeter slopes of an excavation that impounds water during or after the mining operation must be stable under all conditions of operation and must not be steeper than 1v:2h. Each side slope where surface runoff enters the impoundment area must be protected against erosion.
- (f) Any plan required to be submitted to the district manager in the United States Department of Labor, Mine Safety and Health Administration under 30 C.F.R. 77.216, and any plan required under 11 AAC 93.151 11 AAC 93.201 (dam safety), must be included in the permit application. Each impoundment must comply with all applicable state and federal requirements in addition to those of this section.
- (g) Impoundments meeting the criteria for significant and high classes of dams in the United States Department of Agriculture, Natural Resources Conservation Service, Conservation Engineering Division, *Earth Dams and Reservoirs*, adopted by reference in 11 AAC 90.001(c), must comply with Table 2-5, "Minimum Auxiliary Spillway Hydrologic Criteria," and with the requirements of this section. (Eff. 5/2/83, Register 84; am 11/18/94, Register 132; am 4/24/09, Register 190)

Authority: AS 27.21.030 AS 27.21.210 AS 27.21.220

Editor's note: For information on how to review or obtain the United States Department of Agriculture, Natural Resources Conservation Service, Conservation Engineering Division, *Earth Dams and Reservoirs*, referenced in 11 AAC 90.336(g), see the editor's note following 11 AAC 90.001.

- 11 AAC 90.337. IMPOUNDMENT INSPECTION. (a) Each permanent or temporary impoundment must be inspected by a qualified registered professional engineer or other qualified specialist under the direction of a registered professional engineer. In this subsection, "qualified" means experienced or trained in the construction of impoundments.
- (b) An inspection must be made regularly during construction or modification, upon completion of construction or modification, and at least annually thereafter until the structure is removed or the performance bond is released.
- (c) The operator shall submit to the commissioner a certified report promptly after each inspection that includes:
- (1) a statement that the impoundment has been constructed and maintained in accordance with the approved design and the requirements of 11 AAC 90.336 and, if applicable, 11 AAC 90.407;
- (2) a discussion of any appearance of instability, structural weakness, or other hazardous condition;
 - (3) the depth and elevation of any impounded water;
 - (4) the existing storage capacity;
- (5) the existing or required monitoring procedures and instrumentation, if any, including a summary of the monitoring and instrumentation data;
 - (6) representative photographs; and
- (7) a discussion of any other aspects of the structure that affect its stability.
- (d) An impoundment meeting the size or other criteria of 30 C.F.R. 77.216(a) must also be inspected under 30 C.F.R. 77.216-3.
 - (e) The operator shall keep a copy of each inspection report at the mine site.
- (f) In addition to the formal inspections required under (a) (e) of this section, each impoundment must be examined at least once in each three-month period. The examination must be made by a qualified person. The person making the examination required by this subsection shall examine the impoundment for any appearances of structural weakness and for other hazardous conditions.
- (g) If an inspection or examination of an impoundment identifies a potential hazard, the operator shall notify the commissioner immediately of the remedial action to be taken, including any procedure for public protection; if adequate remedial action cannot be taken, the commissioner will immediately notify the appropriate emergency agency that other measures are required to protect the public. (Eff. 5/2/83, Register 84;

Register 190, July 2009

NATURAL RESOURCES

am 12/18/83, Register 88; am 7/29/98, Register 147; am 4/24/09, Register 190)

Authority: AS 27.21.030

AS 27.21.220 AS 27.21.230

AS 27.21.210

11 AAC 90.338. PERMANENT IMPOUNDMENT CRITERIA. A permanent impoundment is prohibited unless the commissioner finds that

- (1) the quality of the impounded water will be suitable on a permanent basis for its intended use, and discharge of water from the impoundment will not degrade the quality of the receiving water below the requirements of applicable state and federal water quality laws and regulations;
 - (2) the level of water will be sufficiently stable to support the intended use;
- (3) the operator will provide adequate safety and access to the impounded water for future water users:
- (4) the water impoundment will not diminish the quality or quantity of water used by surrounding landowners for agricultural, industrial, recreational, or domestic uses:
 - (5) the size of the impoundment is adequate for its intended purposes;
- (6) the long term maintenance and operation requirements of the structure have been assessed and provided for where appropriate; and
- (7) the impoundment will be suitable for the approved postmining land use. (Eff. 5/2/83, Register 84; am 11/18/94, Register 132)

Authority: AS 27.21.030

AS 27.21.210

AS 27.21.220

11 AAC 90.339. GROUND WATER PROTECTION. (a) Backfilled materials must be placed so as to minimize contamination of ground water systems with acid, toxic, or otherwise harmful mine drainage, to minimize adverse effects of mining on ground water systems outside the permit area, and to support approved postmining land uses.

(b) To control the effects of mine drainage, pits, cuts, and other mine excavation or disturbances must be located, designed, constructed, and utilized to prevent or control discharge of acid, toxic, or otherwise harmful mine drainage water into ground water systems and to prevent adverse impacts on ground water systems or on approved postmining land uses. (Eff. 5/2/83, Register 84)

Authority: AS 27.21.030 AS 27.21.210

AS 27.21.220

- 11 AAC 90.341. UNDERGROUND MINE ENTRY AND ACCESS DISCHARGES. (a) Surface entries and accesses to underground workings must be located, designed, constructed, and utilized to prevent or control gravity discharge of water from the mine.
- (b) Gravity discharge of water from an underground mine, other than a drift mine subject to (c) of this section, may be allowed if all water discharged, whether treated or not, meets applicable state and federal laws and regulations, and the commissioner finds that
- (1) any changes in the prevailing hydrologic balance will be minimal and the approved postmining land uses will not be adversely affected; or
- (2) consistent maintenance of any treatment facility required under 11 AAC 90.323 will occur throughout the anticipated period of gravity discharge.
- (c) Notwithstanding (a) and (b) of this section, for a drift mine first used after the effective date of this chapter and located in acid-producing or iron-producing coal seams, surface entries and accesses must be located in a manner that prevents any gravity discharge from the mine. (Eff. 5/2/83, Register 84)

Authority: AS 27.21.030 AS 27.21.210 AS 27.21.220

- 11 AAC 90.343. PROTECTION OF GROUND WATER RECHARGE CAPACITY. Surface mining must be conducted so as to restore the capability of the area as a whole, excluding coal mine waste disposal areas and fills, to transmit water to the ground water system. The recharge capacity must be restored to a condition that:
 - (1) supports the approved postmining land use;
- (2) minimizes any disturbance of the prevailing hydrologic balance in the mining area; and
- (3)provides a recharge rate approximating the premining recharge rate.(Eff. 5/2/83, Register 84; am 11/18/94, Register 132)

Authority: AS 27.21.030 AS 27.21.210 AS 27.21.220

11 AAC 90.345. SURFACE AND GROUND WATER MONITORING. (a) Except as provided in (c) of this section, the ground water level, infiltration rate, subsurface flow and storage characteristics, and the quality of ground water at a permit area must be monitored in a manner approved by the commissioner and at enough wells that will determine the effect of the mining activity on the recharge capacity of reclaimed land

and on the quantity and quality of water in any ground water system in the permit and adjacent areas. This monitoring must include:

- (1) total dissolved solids or specific conductance corrected to 25 degrees C;
 - (2) pH;
 - (3) total iron;
 - (4) total manganese; and
 - (5) water level.
- (b) Surface and ground water monitoring required under (a) of this section must be based on the hydrologic and geologic information included in the permit application, and the determination of probable hydrologic consequences under 11 AAC 90.085(a). Monitoring must provide sufficient data to enable the operator to plan for modification of the mining activity, if necessary to minimize disturbance of the prevailing hydrologic balance, and must include parameters that relate to the suitability of surface and

ground water for current and approved postmining land uses.

- (c) The commissioner will, in the commissioner's discretion, waive a monitoring requirement for a particular water-bearing stratum if the applicant demonstrates that the stratum is not significant to protection of the hydrologic balance in the permit and adjacent areas.
- (d) The commissioner will, in the commissioner's discretion, require the operator to conduct specific hydrologic tests and submit the results to the commissioner to demonstrate compliance with 11 AAC 90.339 and 11 AAC 90.343.
- (e) The permittee shall monitor each stream, lake, and surface water body that may be affected by the mining operation or that will receive a discharge. The permittee shall monitor streams, at upstream monitoring locations, as determined necessary by the operator or commissioner, based on the determination of probable hydrologic consequences and the analysis of all baseline hydrologic, geologic, or other information in the permit application. The surface water monitoring must accurately measure and record the quantity and quality of any water discharge from the permit area. This monitoring must include
- (1) total dissolved solids or specific conductance corrected to 25 degrees Celsius;
 - (2) total suspended solids;
 - (3) pH;

- (4) total iron;
- (5) total manganese; and
- (6) stream flow.
- (f) The operator shall make quarterly reports to the commissioner that include the analytical results from each surface or ground water sample taken during the quarter; if the discharge is also subject to a National Pollutant Discharge Elimination System (NPDES) permit that requires an equivalent water monitoring report within 90 days of sample collection, the operator may submit a copy of the completed NPDES permit report to the commissioner at the same time.
- (g) When the analysis of a sample collected under this section indicates noncompliance with a permit condition or applicable standard, the operator shall notify the commissioner, in writing, within five days, and shall promptly implement remedial measures provided for in 11 AAC 90.085(c)(4) and 11 AAC 90.127(5). If a sample does not comply with a NPDES permit effluent limitation, the operator shall send the analytical result to the commissioner with the notice of noncompliance.
- (h) Surface water flow and quality, including any discharge into surface water from the permit area and receiving water, must be monitored after the use of the underground mine working stops and after any surface disturbed area is regraded and stabilized under this chapter. Data from this monitoring may be used to demonstrate that the quality and quantity of runoff without treatment is consistent with the requirements of this chapter and to provide a basis for the commissioner to approve removal of any water quality or flow control system.
- (i) Any equipment, structure, or other device used to measure and sample the quality or quantity of a surface water discharge must be properly installed, maintained, operated, and removed when no longer required. (Eff. 5/2/83, Register 84; am 11/18/94, Register 132; am 4/24/09, Register 190)

- 11 AAC 90.347. TRANSFER OF WELLS. (a) An exploratory or monitoring well may be transferred by the operator for further use as a water well if the surface owner of the land where the well is located agrees to the transfer and the commissioner approves.
 - (b) Upon an approved transfer of a well, the transferee shall
- (1) assume primary liability for damages to persons or property from the well:
 - (2) plug the well when necessary, but in no case later than abandonment

of the well; and

- (3) assume primary responsibility for compliance with 11 AAC 90.303 -- 11 AAC 90.305.
- (c) Upon an approved transfer of a well, the transferor shall be secondarily liable for the transferee's obligations under (b) of this section until release of the bond or other equivalent guarantee required by 11 AAC 90.201 -- 11 AAC 90.207 for the area in which the well is located. (Eff. 5/2/83, Register 84)

Authority: AS 27.21.030 AS 27.21.210 AS 27.21.220

- 11 AAC 90.349. Discharge of water into a mine. The permittee may not divert or otherwise discharge water or coal mine waste into an underground mine working unless the diversion or discharge is approved by the United States Department of Labor, Mine Safety and Health Administration as required under 30 C.F.R. 816.41(i) or 30 C.F.R. 817.41(h), as applicable, and the operator demonstrates to the commissioner's satisfaction that the diversion or discharge will
- (1) minimize disturbance to the hydrologic balance on the permit area, prevent material damage outside the permit area, and otherwise eliminate public hazards resulting from surface mining activities;
- (2) be diverted or discharged as a controlled flow that meets applicable federal water quality laws and regulations and applicable provisions of AS 46.03 and regulations in effect under that chapter;
 - (3) be limited to
 - (A) coal processing waste;
 - (B) fly ash from a coal-fired facility;
 - (C) sludge from an acid mine drainage treatment facility;
 - (D) flue gas desulfurization sludge;
 - (E) inert materials used for stabilizing underground mines; or
 - (F) underground mine development wastes; and
- (4) continue as a controlled and identifiable flow ultimately treated by an existing treatment facility. (Eff. 5/2/83, Register 84; am 11/18/94, Register 132; am 4/24/09, Register 190)

11 AAC 90.351. POSTMINING REHABILITATION. Before abandoning the permit area, the operator shall ensure that all permanent facilities meet the criteria specified in 11 AAC 90.089. (Eff. 5/2/83, Register 84)

Authority: AS 27.21.030 AS 27.21.210 AS 27.21.220

11 AAC 90.353. STREAM BUFFER ZONES. No land within 100 feet of a perennial or intermittent stream may be disturbed by a surface activity, unless the commissioner specifically authorizes a mining activity closer to or through a stream upon finding that

- (1) any temporary or permanent stream channel diversion will comply with 11 AAC 90.327;
- (2) the mining activity will not adversely affect the water quantity or quality of the stream under applicable state and federal water quality laws and regulations; and
- (3) any adverse effect on fish, wildlife, or other environmental resources of the stream will be minimized. (Eff. 5/2/83, Register 84; am 11/18/94, Register 132)

Authority: AS 27.21.030 AS 27.21.210 AS 27.21.220

11 AAC 90.361. COAL RECOVERY. Operations must be conducted to maximize the utilization and conservation of coal while using the best appropriate technology currently available to maintain environmental integrity, so that reaffecting the land in the future through surface mining operations is minimized. (Eff. 5/2/83, Register 84)

- 11 AAC 90.371. USE OF EXPLOSIVES. (a) Each operator shall comply with all applicable state and federal laws and regulations in the use of explosives.
- (b) Blasts that use more than five pounds of explosive or blasting agent must be conducted according to the schedule required by 11 AAC 90.375.
- (c) All blasting operations, including the transportation, storage and use or destruction of explosives within the permit area, must be conducted under the supervision of a blaster certified under 30 CFR Part 850.
 - (d) A blast design must be submitted to and approved by the commissioner

before conducting blasting operations within 1000 feet of any dwelling, school, church, institutional or public building, or within 500 feet of any active or abandoned underground mine. A certified blaster must prepare and sign the blast design and it must

- (1) contain a sketch of the drill pattern, delay periods, and decking;
- (2) indicate the type and amount of explosives to be used;
- (3) describe and locate the structures to be protected; and
- (4) specify the design parameters used and describe how these will protect the public and meet applicable airblast, flyrock, and ground vibration standards in 11 AAC 90.379. (Eff. 5/2/83, Register 84; am 11/18/94, Register 132)

Authority: AS 27.21.030 AS 27.21.210 AS 27.21.220

- 11 AAC 90.373. PREBLASTING SURVEY. (a) A resident or owner of a structure that is located within one-half mile of any part of the permit area may request a preblasting survey. This request must be in writing and may be made either to the commissioner, who will promptly notify the operator, or to the operator. The operator shall promptly conduct a preblasting survey of the dwelling or structure and submit a signed, written report to the commissioner and to the person requesting the survey. The operator shall perform an updated survey of any additions or modifications if requested by the resident or owner.
- (b) The operator shall complete any preblasting survey requested more than 10 days before the planned start of the blasting program and make it available to the person requesting the survey before the blasting program begins.
- (c) The survey must determine the condition of the structure and document any preblasting damage or other physical factor that could reasonably be affected by the blasting. The assessment of any structure such as a pipe, cable, transmission line, or well or other water system may be limited to the surface condition and readily available data. The survey must give special attention to the preblasting condition of any well or other water system used for human, animal, or agricultural purposes and to the quantity and quality of water.
- (d) The report required under (a) of this section may include a recommendation for an adjustment to the blasting procedure that should be incorporated into the blasting plan to prevent damage. If the person requesting the survey disagrees with the survey, that person may notify both the permittee and the commissioner, in writing, of the specific area of disagreement. (Eff. 5/2/83, Register 84; am 11/18/94, Register 132)

- 11 AAC 90.375. PUBLIC NOTICE OF BLASTING. (a) At least 30 days before beginning a blasting program, the operator shall notify, in writing, each resident or owner of a dwelling or other structure located within one-half mile of the permit area, of the procedure for requesting a preblasting survey.
- (b) Approximately 24 hours before surface blasting event, the owner shall notify each resident or owner of a structure within one-half mile of the area affected by a surface blasting activity incident to underground mining.
- (c) The blasting schedule requirements of (d) through (h) of this section apply only to surface mining activities and not activities incident to underground mining.
- (d) The operator shall conduct blasting operations at times approved by the commissioner and announced in the blasting schedule. The commissioner will, in the commissioner's discretion, based on the need to protect the public, limit blasting by hours per day, times per day, number of blasts per day, or specific areas.
- (e) An unscheduled blast may be conducted where safety requires or for road construction or any other difficult to schedule blasting action. Before conducting any unscheduled blast, the operator shall notify each resident within one-half mile of the blast area and document the reason for the unscheduled blast under 11 AAC 90.383.
- (f) At least 10 days, but not more than 30 days, before beginning a blasting program, the operator shall distribute copies of the blasting schedule to local governments, public utilities, each person who regularly works within one-half mile of the permit area, and each residence within one-half mile of the permit area. For the purposes of this subsection, the permit area does not include haul roads, access roads, coal preparation facilities, coal loading facilities, or transportation facilities between coal excavation areas and coal preparation facilities or coal loading facilities if blasting is not conducted in these areas. The commissioner will require the operator to publish a blasting schedule in local newspapers at least 10 days, but not more than 30 days, before beginning a blasting program. The commissioner will, as the commissioner considers necessary to ensure adequate notice to the public, require the operator to notify the public by other appropriate methods.
- (g) The operator shall redistribute the schedule at least every 12 months. A revised schedule must be distributed at least 10 days, but not more than 30 days, before blasting if the area covered by the schedule changes or actual time periods for blasting significantly differ from the prior announcement.
 - (h) The blasting schedule must contain:
 - (1) the name, address, and telephone number of the operator;
 - (2) identification of each specific area in which blasting will take place;

Register 190, July 2009

NATURAL RESOURCES

- (3) the date and time period when explosives are to be detonated;
- (4) methods to be used to control access to the blasting area;
- (5) types and patterns of audible warning and all-clear signals to be used before and after blasting; and
- (6) notice of the meaning of warning and all-clear signal required under 11 AAC 90.377. (Eff. 5/2/83, Register 84; am 11/18/94, Register 132; am 7/29/98, Register 147; am 4/24/09, Register 190)

Authority: AS 27.21.030 AS 27.21.210 AS 27.21.220

- 11 AAC 90.377. BLASTING SIGNS, WARNINGS, AND ACCESS CONTROL. (a) The operator shall conspicuously place signs which meet the requirements of 11 AAC 90.301, and which state
- (1) "Blasting Area" where a public road or right-of-way occurs within 100 feet of a blasting area or at the point where any other road provides access to the blasting area; and
- (2) "Warning! Explosives In Use" at all entrances to the permit area from public roads or highways.
- (b) The signs required by (a)(2) of this section must clearly explain the blast warning and all-clear signals that are in use and must explain the marking of blast areas and charge holes within the permit area.
- (c) Warning and all-clear signals of different character that are audible within a range of one-half mile from the point of the blast must be given.
- (d) Access within the blasting area must be controlled to prevent the presence of livestock or unauthorized personnel during blasting and until an authorized representative of the operator has reasonably determined that
- (1) no unusual hazards, such as imminent slides or undetonated charges, exist; and
- (2) access to and travel within the area can be safely resumed. (Eff. 5/2/83, Register 84)

Authority: AS 27.21.030 AS 27.21.210 AS 27.21.220

11 AAC 90.379. CONTROL OF ADVERSE EFFECTS OF BLASTING. (a)

Blasting shall be conducted so as to prevent injury to any person, injury to fish or wildlife, adverse effects on any underground mine, or change to the quantity, course, channel, or availability of ground or surface water outside the permit area.

(b) Airblast must be controlled so that it does not exceed any value specified below at any dwelling, school, church, or institutional or public building, unless otherwise authorized in (h) of this section.

Lower frequency limit of measuring system, Hz (+3dB)	Maximum Level in dB
2 Hz or lower - flat response	133 peak
6 Hz or lower - flat response	129 peak

The commissioner will, in the commissioner's discretion, reduce the maximum allowable airblast standard if necessary to prevent damage. The requirements of this section must be met even under adverse atmospheric conditions.

- (c) The operator shall conduct periodic monitoring to ensure compliance with the airblast standards. The commissioner will, in the commissioner's discretion, specify the blasts to be monitored and the location of measurement. The measuring system used must have a flat frequency response of at least 200 Hz at the upper end. The commissioner will, in the commissioner's discretion, approve the use of an alternative measuring system that provides an equivalent monitoring level.
- (d) Flyrock traveling in the air or along the ground must not be cast from the blasting site more than half the distance to the nearest occupied structure and in no case beyond the property owned or leased by the permittee.
- (e) Unless otherwise authorized in (h) of this section, the maximum ground vibration may not exceed the following limits for peak particle velocity at the location of any dwelling, school, church, or institutional or public building:

Distance (D) from the blasting site, in feet:	Maximum allowable peak particle velocity:	Scale distance factor (Ds):
0 to 300 feet	1.25 inches/second	50
301 to 5,000	1.00 inches/second	55
5,001 feet and beyond	0.75 inches/second	65

(f) Any structure in the vicinity of the blasting area not listed in (e) of this section,

such as a water tower, pipeline or other utility, tunnel, dam, impoundment, or underground mine, must be protected from damage by establishing an appropriate limit on ground vibration consistent with the requirements in (a) of this section. Unless otherwise authorized in (h) of this section, the maximum peak particle velocity allowed at the location of a structure within this subsection shall be proposed by the operator in the application, and must be approved by the commissioner before blasting.

- (g) Each peak particle velocity must be recorded in three mutually perpendicular directions. The maximum peak particle velocity is the largest of any of the three measurements. The commissioner will, in the commissioner's discretion, reduce the maximum peak particle velocity allowed upon a determination that a lower standard is required because of population density, land use, age or type of structure, geology or hydrology of the area, frequency of blasts, potential harm to fish or wildlife, or other factors.
- (h) The maximum airblast and ground vibration standards of (b), (e), and (f) of this section do not apply to any structure owned by the operator and not leased to another person. If the structure is owned by the operator and leased to another person, the lessee's written waiver must be submitted to the commissioner before blasting.
- (i) The equation for determining the maximum weight of explosives that may be detonated within any eight-millisecond period is set out in (j) of this section. If the blasting is conducted in accordance with this equation, the peak particle velocity will be within the limits established in (e) of this section.
- (j) The maximum weight of explosives to be detonated within any eight-millisecond period is determined by the formula W=(D/Ds)², where W equals the maximum weight of explosives, in pounds, that can be detonated in any eight-millisecond period; D equals the distance, in feet, from the blast to the nearest structure protected under (e) or (f) of this section and Ds equals the scaled distance factor as defined in (e) of this section.

- 11 AAC 90.381. SEISMOGRAPHIC MEASUREMENTS. (a) If a seismograph is used to monitor ground vibration and the peak particle velocity limit established under 11 AAC 90.379(e) or (f) is not exceeded, the equation in 11 AAC 90.379 (j) need not be used. If that equation is not used, a seismograph record must be obtained for each shot.
- (b) The commissioner will, in the commissioner's discretion, approve the use of a modified equation to determine maximum weight of explosives per delay for blasting operations at a particular site if the operator provides seismograph records of test blasting on the site which demonstrate that applicable peak particle velocity limits will not be exceeded.

Register 190, July 2009 NATURAL RESOURCES

(c) The commissioner will, in his or her discretion, require a seismograph record of blasts and specify the location at which measurements are taken. (Eff. 5/2/83, Register 84; am 11/18/94, Register 132)

- 11 AAC 90.383. RECORDS OF BLASTING. (a) A record of each blast, including seismograph reports, must be retained for at least three years and must be available to the commissioner and the public on request. The record must contain the
 - (1) name of the operator conducting the blast;
 - (2) location, date, and time of blast;
 - (3) name, signature, and license number of blaster-in-charge;
- (4) direction and distance, in feet, to the nearest building not owned or leased by the operator within one-half mile of the permit area;
- (5) weather conditions, including temperature, wind direction, and approximate velocity;
 - (6) type of material blasted;
- (7) sketches of the blast pattern, including the number of holes, burden, spacing, decks, and delay pattern;
 - (8) diameter and depth of holes;
 - (9) types of explosives used;
 - (10) total weight of explosives used per hole;
- (11) maximum weight of explosives detonated within any eight-millisecond period;
 - (12) initiation system;
 - (13) type and length of stemming;
 - (14) mats or other protections used;
 - (15) number of persons in the blasting crew;
 - (16) seismographic and airblast records, if required, including
 - (A) type of instrument, sensitivity, and calibration signal;

Register 190, July 2009 NATURAL RESOURCES

(B) exact location of instrument and the date, time, and distance from the blast:

- (C) name of the person taking the seismograph reading;
- (D) name of the person analyzing the seismographic record; and
- (E) the vibration or airblast level recorded; and

(17) reasons and conditions for each unscheduled blast and a statement that persons within one-half mile of the blast area were notified of the unscheduled blast. (Eff. 5/2/83, Register 84)

Authority: AS 27.21.030 AS 27.21.210 AS 27.21.220

11 AAC 90.391. DISPOSAL OF EXCESS SPOIL OR COAL MINE WASTE. (a) Spoil and underground development waste not required to achieve the approximate original contour of the disturbed area must be transported and placed in areas approved in the permit in a controlled manner to assure

- (1) that leachate and surface runoff from the fill will meet the requirements of 11 AAC 90.323;
 - (2) that the fill is stable; and
- (3) that the disposal area is compatible with the natural surroundings and suitable for the postmining land use under 11 AAC 90.481.
- (b) The fill, including any associated drainage system, must be designed using recognized professional standards and be certified by a registered professional engineer experienced in the design of similar earth and waste structures.
- (c) All vegetative and organic materials and topsoil must be removed from the disposal area as required in 11 AAC 90.311 -- 11 AAC 90.317 unless the commissioner approves leaving the materials in place because of permafrost or other Arctic or sub-Arctic conditions.
- (d) The disposal areas must be located on the least sloping and most naturally stable area available. To provide additional stability and prevent mass movement, suitable fill materials may be placed upon or above a natural terrace, bench, or berm.
- (e) The spoil must be placed in horizontal lifts, concurrently compacted as necessary to ensure mass stability and prevent mass movement, covered with topsoil or substitute material in accordance with 11 AAC 90.311, and graded to allow surface and subsurface drainage to be compatible with the natural surroundings and to ensure a long-term static safety factor of 1.5. Lift thickness may not exceed four feet unless the

operator submits, and the commissioner approves, an alternative design that demonstrates that stability of the fill will be ensured and other applicable requirements will be met; lift thickness and compaction for coal mine waste disposal areas must also meet the requirements of 11 AAC 90.401(b).

- (f) Where the slope in the disposal area exceeds lv:2.8h (36 percent), or lesser slopes designated by the commissioner based on local conditions, keyway cuts which are excavations to stable bedrock, or rock toe buttresses must be constructed to stabilize the fill. Where the toe of the spoil rests on a downslope, stability analyses must be performed in accordance with 11 AAC 90.095 (c) to determine the size of rock toe buttresses and keyway cuts.
- (g) The fill must be inspected for stability during critical construction periods in accordance with 11 AAC 90.397.
- (h) Nontoxic and nonacid forming coal mine waste may be disposed of in excess spoil fills if
 - (1) the disposal is approved by the commissioner; and
- (2) the coal mine waste is placed in accordance with 11 AAC 90.401, and the operator demonstrates to the commissioner, before the commissioner approves of the disposal, that the placement is consistent with the design stability of the fill.
- (i) If the disposal area contains a spring, watercourse, or wet weather seep, the fill design must include diversions meeting the requirement of 11 AAC 90.325 or 11 AAC 90.327, whichever is applicable, and underdrains meeting the requirements of (m) of this section, as necessary to control erosion, prevent water infiltration into the fill, and ensure stability.
- (j) The foundation and abutments of the fill must be stable under all conditions of construction and operation as determined by foundation investigation and laboratory testing of foundation materials, including the effect of any underground mine workings upon the stability of the structure.
 - (k) Repealed 11/18/94.
 - (I) Repealed 11/18/94.
- (m) Underdrains must be designed and constructed using current, prudent, engineering practices according to the following:
 - (1) repealed 11/18/94;
 - (2) repealed 11/18/94;
- (3) the underdrain system must carry away from the fill the anticipated seepage of water due to rainfall and from springs and seeps in the foundation of the

disposal area,

- (4) The underdrain must be protected from piping and contamination by an adequate filter,
- (5) rock underdrains must consist of durable non-acid and non-toxic forming rock that will not slake in water and is free of coal, clay, or shale,
- (6) perforated pipe underdrains must be corrosion resistant and must be consistent with the long-term life of the fill.(n) For valley fills, surface water runoff from the areas adjacent to and above the fill must be diverted away from the fill, and surface runoff from the fill itself must be diverted into stabilized diversion channels designed to pass safely the 100-year, six-hour precipitation event or larger event specified by the commissioner based on local conditions. Drainage may not be directed over the outslope of the fill.

(o) Repealed 11/18/94.

- (p) For head-of-hollow fills, and valley fills that do not exceed 250,000 cubic yards of material, a rock-core chimney drain system may be used instead of a system of underdrains under (m) of this section, if the fill site does not contain any intermittent or perennial streams and the following provisions are met:
- (1) the fill must have, along the vertical projection of the main buried stream channel or rill, a vertical core of durable rock at least 16 feet thick that extends from the toe of the fill to the head of the fill and from the base of the fill to the surface of the fill:
- (2) a system of lateral rock underdrains that meet the requirements of (m) of this section must connect the rock core to each area of potential drainage or seepage in the disposal area;
- (3) a filter system must be designed and constructed to ensure the proper long-term functioning of the rock core and lateral drains, using current, prudent, engineering practices;
- (4) the maximum slope of the top of the fill is 1v:33h (three percent); the grading may drain surface water away from the outslope of the fill and toward the rock core;
- (5) a drainage pocket may be maintained at the head of the fill during and after construction to intercept surface runoff and discharge the runoff through or over the rock drain if stability of the fill is not impaired; this pocket may not have a potential for impounding more than 10,000 cubic feet of water; and
- (6) terraces on the fill must be graded with a three to five percent grade toward the fill and a one-percent slope toward the rock core.

- (q) Repealed 11/18/94.
- (r) Each valley and head-of-hollow fill must contain a system of underdrains meeting the requirements of (m) of this section, except as provided in (p) of this section.
- (s) Slope protection must be provided to minimize surface erosion at the site. All disturbed areas, including diversion channels that are not riprapped or otherwise protected, must be revegetated upon completion of construction. (Eff. 5/2/83, Register 84; am 11/18/94, Register 132; am 7/29/98, Register 147)
 - (t) The final configuration of the refuse pile
 - (1) must be suitable for the approved postmining land use; and
 - (2) may have terraces constructed on its outslope if
 - (A) required for stability, control of erosion, conservation of soil moisture, or facilitation of the approved postmining land use; and
 - (B) the grade of the outslope between terrace benches is not more than 50 percent. (Eff. 5/2/83, Register 84; am 11/18/94, Register 132; am 7/29/98, Register 147; am 4/24/09, Register 190)

11 AAC 90.393. PROTECTION OF UNDERGROUND MINING. No operations may be conducted closer than 500 feet to an active or abandoned underground mine unless the nature, timing, and sequence of the operations are jointly approved by the commissioner and the Mine Safety and Health Administration and the activities result in improved resource recovery, abatement of water pollution, or elimination of hazards to the health and safety of the public. Operations must be designed to not interfere with present or future mining activities. (Eff. 5/2/83, Register 84)

- 11 AAC 90.395. COAL MINE WASTE, GENERAL REQUIREMENTS. (a) All coal mine waste disposed of in an area other than the mine workings or excavations shall be placed in new or existing disposal areas that are within the permit area and approved by the commissioner for disposal of coal mine waste. Hauling, conveying, and final placement of coal mine waste shall be done in a controlled manner to
 - (1) prevent combustion;

- (2) not create a public hazard;
- (3) ensure mass stability and prevent mass movement during and after construction;
- (4) minimize adverse effects on surface and ground water quality and quantity; and
- (5) ensure that the facility is suitable for reclamation compatible with the approved postmining land use.
- (b) Coal mine waste from activities located outside a permit area may be disposed of in the permit area only if the disposal meets the requirements of this section and is approved by the commissioner. (Eff. 5/2/83, Register 84; am 11/18/94, Register 132; am 4/24/09, Register 190)

11 AAC 90.397(a) is amended to read:

- 11 AAC 90.397. DISPOSAL AREA INSPECTIONS. (a) All excess spoil, underground development waste, or coal processing waste disposal areas must be inspected by a qualified registered professional engineer or other qualified specialist under the direction of the registered professional engineer. In this subsection, "qualified" means experienced in the construction of similar earth and waste structures. The registered professional engineer shall, within two weeks after the inspection, provide the commissioner with a certified report stating whether the fill has been constructed and maintained in accordance with the approved design.
- (b) The commissioner will specify the frequency of inspection, no less than quarterly, based on an evaluation of the potential danger to the health or safety of the public and potential harm to land, air, or water resources. Inspections must begin within seven days after preparation of the disposal area and may terminate when the disposal area has been graded and covered in accordance with 11 AAC 90.401 and topsoil has been distributed on the bank in accordance with 11 AAC 90.315, or later, as required by the commissioner to protect the public and the environment.
 - (c) The following critical construction periods must be inspected:
- (1) foundation preparation, including the removal of organic material and topsoil, if required;
 - (2) placement of underdrains and protective filter systems;
 - (3) placement and compaction of fill materials;

- (4) installation of final surface drainage systems; and
- (5) the final regraded and revegetated fill.
- (d) If an underdrain system is required, the certified inspection report must include color photographs taken during and after construction, but before the underdrain is covered. If the underdrain system is constructed in phases, each phase must be photographed separately. Photographs must be of sufficient size and number, and include reference points to surrounding terrain, to identify the site and verify that the underdrain was constructed in accordance with the approved design.
- (e) The inspection required in this section must consider such factors as steepness of slopes and seepage, and must include observations and tests necessary to evaluate any potential hazard to human life and property and to ensure that all organic material and topsoil have been removed and that proper construction and maintenance are occurring in accordance with the reclamation plan approved by the commissioner under 11 AAC 90.089. The inspection report must address any appearances of instability, structural weakness, or other hazardous condition.
 - (f) A copy of each inspection report must be maintained at the mine site.
- (g) If a potential hazard exists, the commissioner must be informed immediately of the remedial action to be taken, including procedures for public protection. If adequate remedial action cannot be taken, the commissioner will immediately notify appropriate emergency agencies that other measures are required to protect the public. (Eff. 5/2/83, Register 84; am 11/18/94, Register 132; am 4/24/09, Register 190)

- 11 AAC 90.399. HAZARDOUS COAL PROCESSING WASTE, WATER CONTROL MEASURES. Repealed. (Eff. 5/2/83, Register 84; am 11/18/94, Register 132)
- 11 AAC 90.401. COAL MINE WASTE, REFUSE PILES. (a) Coal mine waste disposal areas that do not impound water, slurry, or other liquid or semi-liquid material must comply with
- (1) 30 C.F.R. 77.214 and 77.215, adopted by reference in 11 AAC 90.001(b); and
 - (2) 11 AAC 90.391, 11 AAC 90.395, 11 AAC 90.397, and this section.
- (b) During construction and modification of disposal areas under this section, except as provided in (f) of this section, coal mine waste must be [:]

- (1) spread in layers no more than 24 inches thick; and
- (2) compacted to attain 90 percent of the maximum dry density to prevent spontaneous combustion and to provide the strength required for stability of the disposal area; dry densities must be determined in accordance with the American Association of State Highway and Transportation Officials (AASHTO) Specification T99-74, adopted by reference in 11 AAC 90.001(c), or an equivalent method.
- (c) All surface drainage from the area above the coal mine waste disposal area and from the disposal area itself must be diverted in accordance with 11 AAC 90.391(n).
- (d) A permanent impoundment is not allowed on the completed disposal area. However, the commissioner may approve small depressions, under 11 AAC 90.443(f), if they are not incompatible with stability.
- (e) Following final grading of a disposal area under this section, the coal mine waste must be covered with a minimum of four feet of the best available non-toxic and non-combustible material in a manner that does not impede flow from subdrainage systems. The commissioner may allow less than four feet of cover upon a physical and chemical demonstration that the cover prevents water pollution and combustion and ensures that the requirements of 11 AAC 90.451 11 AAC 90.457 will be met
- (f) The requirements of (b) of this section apply to the disposal of dewatered fine coal waste, unless the commissioner has granted a variance from those requirements under AS 27.21.040. In this subsection, "fine coal waste" means coal waste of minus 28 sieve size or less. (Eff. 5/2/83, Register 84; am 11/18/94, Register 132; am 4/24/09, Register 190)

Editor's note: For information on how to review or obtain a copy of the American Association of State Highway and Transportation Officials (AASHTO) Specification T99-74, referenced in 11 AAC 90.401(b), see the editor's note following 11 AAC 90.001

11 AAC 90.403. COAL MINE WASTE, FIRES. Coal mine waste fires must be extinguished in accordance with a plan, approved by the Mine Safety and Health Administration and filed with the commissioner, that ensures that extinguishing operations are conducted under the supervision of persons who have an understanding of the procedures to be used. (Eff. 5/2/83, Register 84; am 11/18/94, Register 132)

11 AAC 90.405. BURNED WASTE REMOVAL. No person may remove burned coal mine waste or other materials or refuse from the disposal area without a plan certified by a registered professional engineer and approved by the commissioner. The plan must illustrate the proposed sequence of the operation and method of compliance with this chapter and must consider potential hazards to persons working or living in the vicinity of the structure. (Eff. 5/2/83, Register 84; am 11/18/94, Register 132)

Authority: AS 27.21.030 AS 27.21.210 AS 27.21.220

11 AAC 90.407. COAL MINE WASTE, DAMS AND EMBANKMENTS. (a) Dams and embankments constructed of or intended to impound coal mine waste must comply with 11 AAC 90.336, 11 AAC 90.337, 11 AAC 90.395, and this section. These dams and embankments may not be retained permanently as part of the approved postmining land use.

- (b) Waste may be used in the construction of dams and embankments only if the commissioner finds that the use of waste material does not have a detrimental effect on the downstream water quality or the environment due to seepage of acid or other contaminants through the dam or embankment.
- (c) Surface runoff that may cause instability or erosion of the coal mine waste dam or embankment must be diverted into stabilized channels that
- (1) are designed to pass safely the 100-year, six-hour precipitation event; and
- (2) meet the requirements of 11 AAC 90.325 or 11 AAC 90.327, whichever applies.
- (d) Spillways and outlet works must be designed to provide adequate protection against erosion and corrosion. Inlets must be protected against blockage.
- (e) Dams and embankments described in this section that meet the criteria of 30 CFR 77.216(a) must have sufficient spillway capacity to safely pass, adequate storage capacity to safely contain, or a combination of both to safely control, the probable maximum precipitation of a six-hour precipitation event, or a greater precipitation event that the commissioner may specify. (Eff. 5/2/83, Register 84; am 11/18/94, Register 132; am 7/29/98, Register 147)
- (f) For an impounding structure constructed of coal mine waste or impounding coal mine waste, at least 90 percent of the water stored during the design precipitation event shall be removed within the 10-day period following the design precipitation event. (Eff. 5/2/83, Register 84; am 11/18/94, Register 132; am 7/29/98, Register 147; am 4/24/09, Register 190)

11 AAC 90.409. RETURN TO UNDERGROUND WORKINGS. Coal mine waste and excess spoil may be returned to underground mine workings only in accordance with the waste disposal plan approved by the Mine Safety and Health Administration and the commissioner under 11 AAC 90.099. (Eff. 5/2/83, Register 84; am 7/29/98, Register 147)

Authority: AS 27.21.030 AS 27.21.210 AS 27.21.220

11 AAC 90.411. DISPOSAL OF NONCOAL WASTES. (a) Noncoal wastes must be placed and stored in a designated portion of the permit area to ensure that leachate and surface runoff do not degrade surface or ground water, fires are prevented, and the area remains stable and suitable for reclamation and revegetation compatible with the natural surroundings. The operator shall comply with applicable local, state, and federal requirements.

- (b) The commissioner will, in his or her discretion, require that disposal sites be designed and constructed with appropriate water barriers on the bottom and sides. When disposal is completed, a minimum of two feet of soil cover must be placed over the site, slopes stabilized, and re-vegetation accomplished under 11 AAC 90.451 -- 11 AAC 90.457.
- (c) No solid waste material may be deposited at refuse embankments or impoundment sites nor may any excavation for solid waste disposal be located within eight feet of any coal outcrop or coal storage area. (Eff. 5/2/83, Register 84)

Authority: AS 27.21.030 AS 27.21.210 AS 27.21.220

11 AAC 90.421. AIR RESOURCES PROTECTION. An operator shall stabilize and protect all exposed surface areas to effectively control erosion and attendant air pollution. An operator shall comply with applicable federal and state air quality laws and regulations and employ the required fugitive dust control measures as an integral part of operations. (Eff. 5/2/83, Register 84)

Authority: AS 27.21.030 AS 27.21.210 AS 27.21.220

11 AAC 90.423. PROTECTION OF FISH AND WILDLIFE. (a) An operator shall, to the extent possible using the best technology currently available, minimize disturbances and adverse impacts on fish, wildlife, and related environmental values, and achieve enhancement of such resources where practical.

- (b) An operator shall comply with the provisions of 16 U.S.C. 1531 16 U.S.C. 1543 (Endangered Species Act of 1973, as amended). An operator may not conduct an operation that is likely to jeopardize the continued existence of an endangered or threatened species listed by the secretary, or an operation that is likely to result in the destruction or adverse modification of designated critical habitats of the species. The operator shall promptly report to the commissioner the presence in the permit area of any state or federally listed endangered or threatened species of which the operator becomes aware and that was not previously reported. Upon notification, the commissioner, after consulting with state and federal fish and wildlife agencies, will determine whether and under what conditions the operator may proceed.
- (c) An operator must comply with the provisions of the Bald Eagle Protection Act as amended (16 U.S.C. 688, et seg.). The operator shall promptly report to the commissioner the presence of any golden or bald eagle nests within the permit area of which the operator becomes aware. The commissioner will then determine whether and under what conditions the operator may proceed.
- (d) An operator shall, to the extent possible using the best technology currently available,
- (1) fence roadways where specified by the commissioner to guide wildlife to road crossings. No new barrier will be approved in known and important wildlife migration routes unless satisfactory provision is made for mitigating possible interference with migration;
- (2) fence, cover, or use other appropriate methods to exclude wildlife from ponds which contain hazardous concentrations of toxic-forming materials as a result of the operations;
- (3) avoid disturbances to, enhance if practical, restore, or replace habitats of unusually high value for fish and wildlife;
- (4) ensure that the design and construction of electric power lines and other transmission facilities are designed to minimize damage to eagles and other large birds;
- (5) not use persistent pesticides on the area during operations, unless approved by the commissioner as unlikely to harm fish and wildlife; and
- (6) prevent, control, and suppress fires caused by the operation which are not approved by the commissioner as part of a management plan.
- (e) If fish and wildlife habitat is to be a postmining land use, the plant species to be used on reclaimed areas must be selected based on their proven nutritional value for fish or wildlife, their use as cover for fish and wildlife, and their ability to support and enhance fish or wildlife habitat after bond release. The selected plants must be grouped and distributed in a manner which optimizes edge effect, cover, and other benefits for fish and wildlife. Restoration of aquatic habitats must be designed based on

proven, or reasonably expected, value to fish and wildlife, and on their ability to support and enhance fish and wildlife after bond release.

- (f) If cropland is to be the postmining land use and if appropriate for wildlife and crop management practices, the operator shall intersperse the fields with trees, hedges, rockpiles, or other habitat enhancement devices throughout the harvested area to break up large blocks of monoculture and to diversify habitat types for birds and other animals.
- (g) If residential, commercial, or industrial uses are to be the postmining land use and if consistent with the approved postmining land use, the operator shall intersperse reclaimed land with greenbelts utilizing species of grass, shrubs, and trees useful as food and cover for wildlife.
- (h) Repealed 4/24/09. (Eff. 5/2/83, Register 84; am 7/29/98, Register 147; am 4/24/09, Register 190)

Authority: AS 27.21.030 AS 27.21.210 AS 27.21.220

- 11 AAC 90.431. SLIDES AND OTHER DAMAGE. (a) An undisturbed natural barrier must be provided beginning at the elevation of the lowest coal seam to be mined and extending from the outslope for the distance specified by the commissioner as necessary to assure stability. The barrier must be retained in place to prevent slides and erosion.
- (b) If, as a result of operations, a slide occurs which may have a significant adverse effect on public property, health, safety, or the environment, the operator shall immediately notify the commissioner and comply with any remedial measures specified by the commissioner to protect public property, the health and safety of the public or the environment. (Eff. 5/2/83, Register 84)

- 11 AAC 90.433. PIPELINES. (a) With respect to pipelines carrying crude oil, liquid petroleum, natural gas, or toxic or flammable substances the operator
- (1) shall visibly mark the location of pipelines at 200 foot intervals throughout the permit area;
- (2) shall insure a minimum of six feet of compacted material between any buried pipeline and any haul road or access road within the permit area which crosses over it; and
- (3) may not create a cut within 100 feet or 100 percent of the depth of the cut whichever is greater of any pipeline.

Register 190, July 2009 NATURAL RESOURCES

(b) The commissioner will, in his or her discretion, grant variances to (a) of this section if the structural integrity of the pipeline will be maintained and if permitted by the owner of the pipeline. (Eff. 5/2/83, Register 84)

Authority: AS 27.21.030 AS 27.21.210 AS 27.21.220

11 AAC 90.435. CONTEMPORANEOUS RECLAMATION. Repealed. (Eff. 5/2/83, Register 84; repealed 11/18/94, Register 132)

- 11 AAC 90.441. TIMING REQUIREMENTS FOR BACKFILLING AND GRADING. Reclamation, including backfilling and grading, topsoil replacement, and revegetation, must occur as contemporaneously as practicable with mining operations. Unless the commissioner approves a temporary cessation of operations under 11 AAC 90.471, backfilling and grading must meet the following timing requirements:
- (1) In contour mining, rough backfilling and grading must follow coal removal by not more than 60 days or 1,500 linear feet, unless the commissioner allows additional time upon a showing, based on a detailed written analysis supplied by the operator, that additional time is necessary.
- (2) In open pit mining with thin overburden, rough backfilling and grading must occur in accordance with an approved time schedule which establishes in stated increments the period between removal of coal and completion of backfilling and grading.
- (3) In area strip mining, rough backfilling and grading must be completed within 180 days following coal removal and may not be more than four spoil ridges behind the pit being worked, the spoil from the active pit being considered the first ridge, unless the commissioner allows additional time upon a showing, based on a detailed written analysis supplied by the operator, that additional time is necessary.
- (4) Surface areas disturbed incident to underground mining activities must be backfilled and graded in accordance with the time schedule approved by the commissioner.
 - (b) Repealed 11/18/94.
 - (c) Repealed 11/18/94. (Eff. 5/2/83, Register 84; am 11/18/94, Register 132)

Authority: AS 27.21.030 AS 27.21.210 AS 27.21.220

11 AAC 90.443. BACKFILLING AND GRADING. (a) Except as specifically

provided in this chapter,

- (1) each disturbed area must be returned to its approximate original contour; and
- (2) all spoil must be transported, backfilled, compacted as necessary to ensure stability or to prevent leaching, and graded to eliminate all highwalls, spoil piles, and depressions.
- (b) Backfilled material must be placed to minimize erosion and adverse changes to the quality and quantity of surface and ground water systems, minimize off-site effects, and support the postmining land use.
- (c) The grade of the final slopes must not exceed that of the approximate premining slopes or lesser slopes approved by the commissioner based on soil, climate, or other characteristics of the surrounding area. The operator shall backfill and grade to the least slope possible that eliminates the highwall, does not exceed the angle of repose, and achieves a minimum static safety factor of 1.3.
- (d) For an operation that affects a previously mined area, as defined in this chapter, the commissioner will, in the commissioner's discretion, modify backfilling and grading requirements if the operator demonstrates that the volume of all reasonably available spoil is insufficient to comply with this section. Highwalls must be eliminated to the maximum extent technically practical and areas must be regraded in accordance with the following:
- (1) all spoil generated by the remining operation and other spoil reasonably available in the immediate vicinity must be used to backfill the area; reasonably available spoil in the immediate vicinity must be included in the permit area for the remining operation;
- (2) A regraded slope must be compatible with the approved postmining land use, and must include adequate provision for drainage and long term stability;
- (3) the operator must demonstrate that any highwall remnant will be stable, and will not pose a hazard to public health and safety or the environment; and
- (4) spoil placed on the outslope during a previous mining operation may not be disturbed if the disturbance will cause instability of the remaining spoil or otherwise increase the hazard to public health and safety or the environment.
- (e) In order to conserve soil moisture, ensure stability, and control erosion on final graded slopes, the commissioner will, in the commissioner's discretion, allow cut-and-fill terraces if the terraces are compatible with the approved postmining land use and are appropriate substitutes for construction of lower grades on the reclaimed land. The terraces must meet the following requirements:
 - (1) the width of the individual terrace bench must be that necessary for

stability, erosion control, or roads in the approved postmining land use plan;

- (2) the vertical distance between terraces will be specified by the commissioner to prevent excessive erosion and to provide long-term stability;
- (3) the slope of the terrace outslope must not exceed lv:2h (50 percent) unless approved by the commissioner and have a minimum static safety factor of more than 1.3, provide adequate control over erosion, and closely resemble the surface configuration of the land before mining; highwalls may not be left as part of a terrace and:
- (4) culverts and underground rock drains may be used on the terrace only if approved by the commissioner.
- (f) To minimize erosion, conserve soil moisture, or promote vegetation, the commissioner will, in the commissioner's discretion, approve the construction of small depressions that do not restrict normal access and are appropriate substitutes for lower grades on the reclaimed land.
- (g) All final grading, preparation of overburden before replacement of topsoil, and placement of topsoil, must be done along the contour to minimize subsequent erosion and instability unless grading, preparation, or placement along the contour is hazardous to an equipment operator.
- (h) This subsection applies to an operation carried out continuously in the same limited pit area for more than one year from the day coal removal begins and where the volume of all available spoil and suitable waste materials over the proposed mining area is demonstrated to be insufficient to achieve the approximate original contour of the disturbed land. The operator shall, at a minimum, transport, backfill, grade, and compact where advisable using all available spoil and suitable waste materials from the entire mining area, to attain the lowest practical stable grade, to achieve a static safety factor of 1.3, and to provide adequate drainage and long-term stability of the regraded areas and cover all acid-forming and toxic-forming materials. The commissioner will, in the commissioner's discretion, approve permanent storage of material removed from the original cut in permafrost areas upon a determination that redisturbing the material would cause more environmental harm than would be caused by not using the material as backfill.
 - (i) Repealed 4/24/09.
- (j) For underground mining only, the commissioner will, in the commissioner's discretion, grant an exception to the requirements of this section to restore filled areas to approximate original contour where the fills have been undisturbed over a long period of time, have become stabilized and revegetated, and blend with the topography of the surrounding terrain.
- (k) The operator shall return all spoil to the mined-out area. The requirements of this subsection do not apply to

- (1) spoil disposed of in accordance with 11 AAC 90.391; and
- (2) spoil necessary to blend regraded areas into the surrounding terrain in non-steep slope areas if all
 - (A) vegetative and organic material is first removed from the areas that are to be covered; and
 - (B) topsoil is removed, segregated, stored, and redistributed in accordance with 11 AAC 90.311 11 AAC 90.315.
 - (/) Where thin overburden occurs within the permit area, the permittee at a minimum shall
- (1) use all spoil and other waste materials available from the entire permit area to attain the lowest practicable grade, but not more than the angle of repose; and
 - (2) meet the requirements of (a)(2), (b) (h), and (j) (k) of this section.
- (m) Where thick overburden occurs within the permit area, the permittee at a minimum shall
- (1) restore the approximate original contour and then use the remaining spoil and other waste materials to attain the lowest practicable grade, but not more than the angle of repose;
- (2) meet the requirements of (a)(2), (b) (h), and (j) (k) of this section; and
- (3) dispose of any excess spoil in accordance with 11 AAC 90.391. (Eff. 5/2/83, Register 84; am 11/18/94, Register 132; am 7/29/98, Register 147; am 4/24/09, Register 190)

- 11 AAC 90.444. Backfilling and grading: thick and thin overburden. (a) For purposes of 11 AAC 90.443, overburden is thick overburden if more than sufficient spoil and other waste materials are available from the entire permit area to restore the disturbed area to its approximate original contour. For purposes of this subsection, more than sufficient spoil and other waste materials occur where the overburden thickness times the swell factor, plus the thickness of other available waste materials, exceeds the combined thickness of the overburden and coal bed before removing the coal, so that after backfilling and grading the surface configuration of the reclaimed area would not
 - (1) closely resemble the surface configuration of the land before mining;

or

- (2) blend into and complement the drainage pattern of the surrounding terrain.
- (b) For purposes of 11 AAC 90.441 and 11 AAC 90.443, overburden is thin overburden if insufficient spoil and other waste materials are available from the entire permit area to restore the disturbed area to its approximate original contour. For purposes of this subsection, insufficient spoil and other waste materials occur where the overburden thickness times the swell factor, plus the thickness of other available waste materials, is less than the combined thickness of the overburden and coal bed before removing the coal, so that after backfilling and grading, the surface configuration of the reclaimed area would not
- (1) closely resemble the surface configuration of the land before mining; or
- (2) blend into and complement the drainage pattern of the surrounding terrain. (Eff. 4/24/09, Register 190)

Authority: AS 27.21.030 AS 27.21.210 AS 27.21.220

- 11 AAC 90.445. COVERING COAL AND TOXIC MATERIAL. (a) The operator shall either cover, with a minimum of four feet of the best available non-toxic and noncombustible material, or treat all exposed coal seams remaining after mining and all acid-forming, toxic-forming, combustible, and other materials specified by the commissioner. Such cover or treatment must prevent water pollution and combustion and minimize adverse effects on plant growth and land uses.
- (b) If necessary the commissioner will, in his or her discretion, specify thicker amounts of cover using non-toxic material or special compaction and isolation from ground water contact.
- (c) Backfilled materials must be selectively transported and compacted if necessary to prevent leaching of acid-forming and toxic-forming materials into surface or ground water and if necessary to insure stability of the backfilled materials. The method and design specifications of compacting material must be approved by the commissioner before acid-forming or toxic-forming materials are covered. (Eff. 5/2/83, Register 84)

Authority: AS 27.21.030 AS 27.21.210 AS 27.21.220

11 AAC 90.447. BACKFILLING AND GRADING: AUGER MINING. (a) All auger mining operations must be planned and conducted to

- (1) minimize disturbances to the prevailing hydrologic balance and to the quality and quantity of water in surface and ground water systems, during the operation and after reclamation, as required in 11 AAC 90.321 -- 11 AAC 90.323;
- (2) maximize recoverability of mineral reserves remaining after the operation and reclamation are complete;
 - (3) ensure fill stability;
- (4)prevent disturbance of, or damage to, structures or facilities from subsidence during and after mining is completed; and
 - (5) be consistent with reclamation performed under this chapter.
- (b) Each person who conducts auger mining operations shall leave areas of undisturbed coal, as approved by the commissioner, to provide access for future underground mining activities to coal reserves remaining after augering is completed, unless the commissioner finds, upon presentation of appropriate technical evidence, that the coal reserves have been depleted or are so limited in thickness or extent that it will not be practical to recover the remaining coal.
 - (c) Except as provided in (d) of this section, auger holes must be
- (1) sealed within 72 hours after completion with an impervious and noncombustible material, if the holes are discharging water that contains acid-forming or toxic-forming material, and unless sealing is not possible; if within 72 hours after completion sealing is not possible of a hole discharging water that contains acid-forming or toxic-forming material, the discharge shall be treated commencing within 72 hours after completion to meet applicable requirements under 11 AAC 90.323 until the holes are sealed; and
- (2) sealed as contemporaneously as practical with the augering operation, as approved by the commissioner.
- (d) The commissioner will, in his or her discretion, exempt an operation from the requirements of (c)(1) of this section if he or she determines that
- (1) the resulting impoundment of water may create a hazard to the environment or public health or safety; and
- (2) the drainage from the auger holes will not pose a threat of pollution to surface water, and will comply with the requirements of 11 AAC 90.321 -- 11 AAC 90.323.
- (e) Auger holes must not extend closer than 500 feet (measured horizontally) to any abandoned or active underground mine workings, except as provided in accordance with 11 AAC 90.393. (Eff. 5/2/83, Register 84; am 4/24/09, Register 190)

Register 190, July 2009 NATURAL RESOURCES

Authority: AS 27.21.030 AS 27.21.210

11 AAC 90.449. STABILIZING RILLS AND GULLIES. Rills or gullies which form in areas that have been regraded and covered with topsoil must be stabilized and the area reseeded or replanted if they are disruptive to the approved postmining land use or may result in additional erosion and sedimentation. (Eff. 5/2/83, Register 84)

Authority: AS 27.21.030 AS 27.21.210 AS 27.21.220

11 AAC 90.451. REVEGETATION. (a) The operator shall establish on all affected land, in accordance with the approved permit, a vegetative cover that is

- (1) diverse, effective, and permanent;
- (2) comprised of species native to the area or of introduced species if approved by the commissioner as meeting the requirements of this section based on appropriate field trials;
- (3) at least equal in extent of cover to the natural vegetation of the area; and
- (4) capable of achieving productivity levels compatible with the approved postmining land use.
 - (b) Whether introduced or native, the reestablished plant species must
 - (1) be appropriate for the approved postmining land use;
- (2) have the same seasonal growth characteristics as the original vegetation;
- (3) be capable of stabilizing the soil surface from erosion and capable of self-regeneration and plant succession;
 - (4) be compatible with the plant and animal species of the area; and
- (5) meet the requirements of applicable state and federal laws and regulations regulating seeds, poisonous and noxious plants, and introduced species.
- (c) The commissioner will, in his or her discretion, grant an exception to the requirements of (b)(2) and (3) of this section if the species are necessary to achieve a quick, temporary, and stabilizing cover and measures to establish permanent vegetation are included in the approved permit and reclamation plan.

NATURAL RESOURCES

Register 190, July 2009

(d) As part of a cropland postmining land use, the commissioner will, in his or her discretion, grant an exception to the requirements of (a)(1) and (3) and (b)(2) and (3) of this section. (Eff. 5/2/83, Register 84; am 11/18/94, Register 132)

Authority: AS 27.21.030 AS 27.21.210

11 AAC 90.453. REVEGETATION: TIMING. To effectively control erosion, disturbed areas may be seeded and planted with temporary cover species or otherwise protected until permanent vegetation is adequately established. Seeding and planting of disturbed areas must be conducted during the first normal period for favorable planting conditions after replacement of the plant growth medium, considering locally accepted practice. (Eff. 5/2/83, Register 84)

Authority: AS 27.21.030 AS 27.21.210

11 AAC 90.455. REVEGETATION: MULCHING. The commissioner will require the application of suitable mulch or use of other soil stabilization practices if the commissioner determines that these are necessary to reduce erosion and sedimentation under 11 AAC 90.329, stabilize rills and gullies under 11 AAC 90.449, or promote successful revegetation under 11 AAC 90.451 and 11 AAC 90.457. The commissioner will consider the following factors in making this determination:

- (1) length and steepness of the slope:
- (2) erodibility of the soil;
- (3) past history of erosion at the operation and at the site in question; and
- (4) capacity of the soil to retain sufficient moisture for the prompt establishment of an effective vegetation cover. (Eff. 05/02/83, Register 84; am 11/18/94, Register 132)

Authority: AS 27.21.030 AS 27.21.210

11 AAC 90.457. STANDARDS FOR REVEGETATION SUCCESS. (a) Success of revegetation will be judged on the effectiveness of the vegetation for the approved postmining land use, the extent of cover compared to the cover occurring in natural vegetation in the area, and the other requirements of 11 AAC 90.451, using techniques approved by the commissioner. The commissioner will, in his or her discretion, allow comparison of ground cover and productivity to be made on the basis of reference areas subject to management comparable to that required for the approved postmining land use of the permit area.

- (b) The ground cover, productivity, and stocking of the revegetated area will be considered equal to that of the reference area or other standards approved by the commissioner under (a) of this section if they are at least 90 percent of the ground cover and productivity of the reference area, or at least equal to any other standard approved by the commissioner under (a) of this section. The sampling techniques and statistical tests for measuring success must be submitted to the commissioner for approval and must use a 90 percent statistical confidence interval (i.e., one-sided test with a 0.10 alpha error).
- (c) Standards for success will be applied in accordance with the approved postmining land use and must, at a minimum, satisfy the following conditions:
- (1) For areas developed as grazing land or pastureland, the ground cover and production of living plants on the revegetated area must be at least equal to that of the reference area or other success standards determined by the commissioner under (a) of this section.
- (2) For areas developed as cropland, crop production on the mined area must be at least equal to that of the reference area or other success standards determined by the commissioner under (a) of this section.
- (3) for areas to be developed for fish and wildlife habitat, recreation, undeveloped land, or forest products, success of vegetation shall be determined on the basis of tree and shrub stocking and vegetative ground cover as follows:
 - (A) for each permit, the commissioner will specify minimum stocking and planting arrangements on the basis of local and regional conditions and after consultation with the division of forestry within the department and with the Department of Fish and Game;
 - (B) trees and shrubs will be counted to determine the success of stocking and the adequacy of the planting arrangement as follows:
 - (i) the trees and shrubs must have utility for the approved postmining land use:
 - (ii) the trees and shrubs must be healthy and have been in place for not less than two growing seasons according to the records of woody vegetation planting;
 - (iii) at the time of bond release, at least 80 percent of the trees and shrubs used to determine success must have been in place for at least 60 percent of the applicable minimum period of responsibility;
 - (iv) trees and shrubs that have been seeded or transplanted may be used;
 - (v) records of woody vegetation planted must show that no

woody plants were planted during the last two growing seasons of the applicable minimum period of responsibility; if any replanting of woody plants took place during that period, the total number planted during the last 60 percent of the period must be less than 20 percent of the total number of woody plants required;

- (vi) any replanting of woody plants must be by means of transplants to allow for adequate accounting of plant stocking;
- (vii) the final accounting of woody plants may include volunteer trees and shrubs of approved species; volunteer trees and shrubs of approved species will be considered equivalent to planted specimens two years of age or older; suckers on shrubby vegetation may be counted as volunteer plants if it is evident that the shrub community is vigorous and expanding;
- (C) vegetative ground cover may not be less than that required to achieve the approved postmining land use.
- (4) For areas developed for industrial, commercial, or residential use, the ground cover of living plants may be no less than required to control erosion. If the operator does not achieve the approved postmining land use within five years after regrading is completed, or a lesser period the commissioner will, in his or her discretion, specify, the general revegetation success standards of 11 AAC 90.451 (a)(l)-(3) and (b)(2)-(5) apply.
- (5) For an operation that affects a previously mined area, as defined in this chapter, the ground cover may be no less than the cover existing before redisturbance.
- (d) The period of responsibility under the performance bond requirements of 11 AAC 90.203 begins after the last year of augmented seeding, fertilizing, irrigation or other work, excluding tree and shrub planting, maintenance work, and husbandry practices that can be expected to continue as part of the postmining land use. The period of responsibility is:
- (1) at least five full years in areas of more than 26.0 inches average annual precipitation; the success standard approved under (b) of this section must be met during the growing season of the last two years of the responsibility period, not including the year of establishment;
- (2) at least 10 full years in areas of 26.0 or less inches average annual precipitation; interseeding and supplemental fertilizing are allowed during the first five years of the responsibility period and supplemental irrigation is allowed during the first two years of the responsibility period if necessary to meet the requirements of 11 AAC 90.451; the success standard approved under (b) of this section must be met for the last two years of the responsibility period, not including the year of establishment.
 - (e) Except as provided in (d) this section, the period of responsibility will begin

again whenever augmented seeding, fertilizing, irrigation, or other work is conducted.

(f) The commissioner will, in his or her discretion, require periodic monitoring of revegetation success during the period of responsibility. (Eff. 5/2/83, Register 84; am 11/18/94, Register 132; am 4/24/09, Register 190)

Authority: AS 27.21.030 AS 27.21.210

- 11 AAC 90.461. SUBSIDENCE CONTROL. (a) The standard method of room and pillar mining is permitted.
- (b) A permittee for an underground mine operation shall take measures to prevent or minimize damage as follows:
 - (1) the permittee shall, consistent with known technology, either
 - (A) adopt measures that
 - (i) prevent material damage from subsidence to the extent technologically and economically feasible;
 - (ii) maximize mine stability; and
 - (iii) maintain the value and reasonably foreseeable use of surface land; or
 - (B) adopt mining technology that provides for planned subsidence in a predictable and controlled manner;
- (2) except as provided in (3) of this subsection, if a permittee employs mining technology that provides for planned subsidence in a predictable and controlled manner, the permittee shall take necessary and prudent measures, consistent with the mining method employed, to minimize, to the extent technologically and economically feasible, material damage to non-commercial buildings and to occupied residential dwellings and related structures;
- (3) measures required under (2) of this subsection to minimize material damage are not required if
 - (A) the permitee has the written consent of the owners of the buildings, dwellings, or structures; or
 - (B) the costs of the measures exceed the anticipated costs of repair, and the anticipated damage would not constitute a threat to health or safety.
 - (c) The operator must comply with the approved subsidence control plan

prepared under 11 AAC 90.101.

- (d) The operator shall correct any material subsidence damage by
- (1) restoring, rehabilitating, or removing and replacing each damaged structure, feature, or value, promptly after damage is suffered, to the condition it would be in if no subsidence had occurred and by restoring the land to a condition capable of supporting reasonably foreseeable uses it was capable of supporting before subsidence:
- (2) purchasing the damaged structure or feature for its fair market presubsidence value and promptly after subsidence occurs, restoring the land surface, to the extent technologically and economically feasible, to a condition capable of supporting the purchased structure and other uses it was capable of supporting before subsidence; however, no operator is authorized to exercise the power of condemnation or the right of eminent domain; or
 - (3) complying with the following:
- (A) compensating the owner of any surface structure in the full amount of the diminution in value resulting from subsidence by purchase of a noncancellable, premium prepaid insurance policy, or other means approved by the commissioner which assures, before mining begins, that payment will occur;
- (B) indemnifying every person owning an interest in the surface for all damages suffered as a result of the subsidence; and
- (C) to the extent technologically and economically feasible, fully restoring the land to a condition capable of maintaining reasonably foreseeable uses which it could support before subsidence.
- (e) Underground mining activities may not be conducted under or adjacent to buildings and facilities generally used by members of the public, bodies of water such as perennial streams or impoundments with a storage volume of 20 acre-feet or more, or any aquifer that serves as a significant water source for any public water supply system, unless the subsidence control plan demonstrates that subsidence will not cause material damage or reduce the reasonably foreseeable use of the features or facilities. The commissioner will, in his or her discretion, prohibit underground mining under or adjacent to, or may limit the percentage of coal extraction in the vicinity of, the features or facilities to minimize the potential for material damage or to protect the public health and safety.
- (f) If subsidence causes material damage to any of the features or facilities covered by (e) of this section, the operator shall take measures to remedy the damage and to prevent additional damage. If damage occurs, the commissioner will, in his or her discretion, suspend further mining until the subsidence control plan is modified to ensure prevention of further adverse effects.

- (g) Within a schedule approved by the commissioner, the operator shall submit a detailed plan of the underground workings. The operator may request that information submitted with the detailed plan be held as confidential in accordance with AS 27.21.100(c). The detailed plan must include
- (1) maps and descriptions, as appropriate, of significant features of the underground mine, including the size, configuration, and approximate location of pillars and entries:
 - (2) extraction ratios:
- (3) measures taken to prevent or minimize subsidence and related damage;
 - (4) areas of full extraction; and
- (5) any other information required by the commissioner in order to assess the danger of subsidence or related damage.
- (h) Except as provided in (i) of this section, if subsidence-related material damage to land, structures, or facilities protected under (e) of this section occurs, or if a water supply protected under 11 AAC 90.321(e) is contaminated, diminished, or interrupted, the permittee shall maintain, until the repair, compensation, or replacement is completed, an additional performance bond, in the amount of
- (1) the estimated cost of the repairs if the permittee will be repairing the damage;
- (2) the decrease in value if the permittee will be compensating the owner; and
- (3) the estimated cost to replace the protected water supply under 11 AAC 90.321(e) (f) if the permittee will be replacing the water supply.
- (i) If repair, compensation, or replacement will be completed within 90 days after the occurrence of subsidence-related material damage, an additional bond is not required under (h) of this section. The commissioner will extend the 90-day period, but not to exceed one year, if the permittee demonstrates and the commissioner determines in writing that the 90-day limit is unreasonable for completing repair of the subsidence-related material damage to protected land, structures, or facilities, or for completing replacement of the protected water supply, and that
 - (1) subsidence is not complete;
- (2) not all probable subsidence-related material damage has occurred to protected land, structures, or facilities; or
 - (3) not all reasonably anticipated changes affecting the protected water

supply have occurred.

- (j) The commissioner will consider all relevant and reasonably available information in determining whether damage was caused by subsidence from underground mining.
- (k) For calculation of the bond under (h) of this section, the amount of the estimated cost to replace a protected water supply must include the cost to the permittee of providing a water supply as required in 11 AAC 90.321(e) (f).
 - (I) In this section,
 - (1) "material damage" means
 - (A) a functional impairment of surface lands, features, structures, or facilities:
 - (B) a physical change that has a significant adverse impact on the affected land's capability to support any current or reasonably foreseeable uses or causes significant loss in production or income;
 - (C) a significant change in the condition, appearance, or utility of any structure or facility from its pre-subsidence condition;
- (2) "non-commercial building" means a building, other than an occupied residential dwelling, that, at the time the subsidence occurs, is used on a regular or temporary basis as a public building or a community or institutional building; "non-commercial building" does not include a building used only for commercial agricultural, industrial, retail, or other commercial enterprises;
 - (3) "occupied residential dwelling and related structures" means
 - (A) a building or structure that, at the time the subsidence occurs, is used either temporarily, occasionally, seasonally, or permanently for human habitation, other than a building or structure used only for commercial, agricultural, industrial, retail, or other commercial purposes;
 - (B) a building, structure, or facility that is installed on, above, or below the land surface, and that is adjunct to or used in connection with a building or structure described in (A) of this paragraph; in this subparagraph, "building, structure, or facility that is installed on, above, or below the land surface" includes a garage, a storage shed, a storage barn, a greenhouse and related buildings, a utility, a cable, a fence or other enclosure, a retaining wall, a paved or improved patio, a walk, a driveway, a septic sewage treatment facility, a lot drainage system, and a lawn and garden irrigation system.(Eff. 5/2/83, Register 84; am 9/28/86, Register 99; am 4/24/09, Register 190)

Authority: AS 27.21.030 AS 27.21.220

11 AAC 90.463. SUBSIDENCE CONTROL PUBLIC NOTICE. At least six months before mining, the operator shall notify, in writing, all owners and occupants of surface property which may be subject to subsidence of the specific areas in which mining will take place, of dates that specific areas will be undermined, and of how relevant portions of the operator's subsidence control plan can be obtained. (Eff. 5/2/83, Register 84)

Authority: AS 27.21.030 AS 27.21.220

- 11 AAC 90.471. CESSATION OF OPERATIONS. (a) An operator who temporarily stops operation shall effectively secure surface facilities and surface access openings to underground operations in areas-in which operations are to be resumed. Temporary abandonment does not relieve the operator of the obligation to comply with the approved permit.
- (b) Before temporary cessation of mining and reclamation operations for a period of 30 days or more, or as soon as it is known that a temporary cessation will extend beyond 30 days, the operator shall submit to the commissioner a notice of intention to stop operations. This notice must include a statement of the exact number of acres which will have been affected within the permit area before the cessation, the horizontal and vertical extent of subsurface strata affected within the permit area before cessation, the extent and kind of reclamation accomplished, and identification of the backfilling, regrading, revegetation, environmental monitoring, underground opening closures, and water treatment activities that will continue during the temporary cessation.
- (c) Upon permanent cessation of operations, the operator shall complete the reclamation plan submitted under 11 AAC 90.083 -- 11 AAC 90.099 as approved by the commissioner. (Eff. 5/2/83, Register 84)

Authority: AS 27.21.030 AS 27.21.210 AS 27.21.220

11 AAC 90.481. POSTMINING LAND USE. (a) All disturbed areas must be restored in a timely manner to conditions that are capable of supporting

- (1) the uses which they were capable of supporting before any mining; or
- (2) higher or better uses achievable under the provisions of this section.
- (b) The premining uses of land to which the postmining land use is compared are uses which the land previously supported if the land had not been previously mined and had been properly managed. The postmining land use for land that has been previously mined and not reclaimed must be judged on the basis of the land use before any mining

except that, if the land cannot be reclaimed to the land use that existed before any mining because of the previously mined condition, the postmining land use must be judged on the basis of the highest and best use that can be achieved which is compatible with surrounding areas and does not require the disturbance of undisturbed areas. The postmining land use for land that has received improper management must be judged on the basis of the premining use of surrounding land that has received proper management. If the premining use of the land changed within five years of the beginning of mining, the comparison of postmining use to premining use must include a comparison with the historic use of the land as well as its use immediately preceding mining.

- (c) The commissioner will, in his or her discretion, approve a proposed higher or better postmining land use after consultation with the landowner or the land management agency having jurisdiction over the land, if the following criteria are met:
- (1) the proposed postmining land use is compatible with adjacent land use and, where applicable, with existing local, state, or federal land use policies and plans;
- (2) the commissioner will obtain the views of authorities with statutory responsibilities for land use policies and plans; any required approval, including any necessary zoning or other changes required for land use, must be obtained and remain valid throughout the life of the operation;
- (3) specific plans are submitted which show the feasibility of the postmining land use as related to projected land use trends, markets, and financing and include a schedule showing how the proposed use will be developed, achieved, and sustained within a reasonable time after mining; the commissioner will, in his or her discretion, require a showing that the plans are feasible, reasonable, and successfully integrated with mining and reclamation operations;
- (4) provision of any necessary public facilities is evidenced by a letter of commitment to provide the facilities in a manner compatible with the plans submitted under 11 AAC 90.087;
- (5) the postmining land use plans conform to accepted standards for adequate land stability, drainage, vegetative cover, and esthetic design appropriate for the postmining use of the site;
- (6) the proposed use will not pose any hazard to public health or safety nor will it pose any actual or probable threat of water diminution or pollution;
 - (7) the use will not involve unreasonable delays in reclamation; and
- (8) measures to prevent or mitigate adverse effects on fish, wildlife, and related environmental values and threatened or endangered plants are identified and incorporated into the postmining land use plan, if appropriate. (Eff. 5/2/83, Register 84)

Authority: AS 27.21.030 AS 27.21.210 AS 27.21.220

11 AAC 90.491. CONSTRUCTION AND MAINTENANCE OF ROADS, TRANSPORTATION AND SUPPORT FACILITIES, AND UTILITY INSTALLATIONS. (a) The operator shall design, locate, construct or reconstruct, use, maintain, and restore roads, railroad loops, spurs, sidings, surface conveyor systems, chutes, aerial tramways, airfields, ports, docks, or other transportation facilities, mine buildings, coal loading facilities at or near the minesite, coal storage facilities, storage facilities, fan buildings, hoist buildings, preparation plants, sheds, shops, and other support facilities to:

- (1) prevent or minimize erosion, siltation, and air pollution attendant to erosion, including road dust and dust from exposed surfaces;
 - (2) minimize diminution or degradation of water quality or quantity;
 - (3) prevent or minimize damage to public or private property;
- (4) prevent or minimize damage to fish, wildlife, or their habitat and related environmental values:
- (5) refrain from significantly altering the normal flow of water in streambeds or drainage channels;
- (6) prevent or minimize downstream sedimentation and flooding as well as to prevent additional contributions of suspended solids to stream flow or runoff outside the permit area;
- (7) avoid contributing directly or indirectly to the violation of applicable state or federal water quality laws and regulations applicable to receiving water; and
 - (8) prevent the use of acid- and toxic-forming materials.
- (b) All roads and other facilities covered by this section must be designed and constructed or reconstructed to incorporate recognized engineering minimum design criteria approved or established by the commissioner for environmental protection and safety and appropriate for the planned duration and use and must be maintained to meet the approved design criteria throughout their life.
- (c) All roads and other facilities covered by this section must be reclaimed immediately after they are no longer needed for operations, unless approved for use under the approved postmining land use. The operator shall complete the following to reclaim the road or other facility:
 - (1) close the road or facility to traffic;
 - (2) remove all bridges and culverts;

- (3) restore the natural drainage patterns;
- (4) reshape all cut and fill slopes to be compatible with postmining land use and to complement the drainage pattern of the surrounding terrain;
 - (5) scarify or rip roadbeds;
 - (6) replace the approved topsoil;
- (7) remove or dispose of materials that are not compatible with postmining land use and revegetation requirements; and
- (8) revegetate disturbed surfaces in accordance with 11 AAC 90.451 --11 AAC 90.457.
- (d) All operations must be conducted in a manner which minimizes damage, destruction, or disruption of services provided by oil, gas, and water wells, oil, gas, and coal-slurry pipelines, railroads, electric and telephone lines, and water and sewage lines which pass over, under, or through the permit area, unless otherwise approved by the owner of those facilities and the commissioner.
- (e) A road or part of a road may not be located in the channel of an intermittent or perennial stream unless approved by the commissioner in accordance with 11 AAC 90.321 11 AAC 90.327 and 11 AAC 90.353.
- (f) In addition to the other requirements of this section, the following provisions apply to a road that is used to transport coal or spoil, frequently used in excess of six months for access or other purposes, or retained for an approved postmining land use:
 - (1) the plans and drawings must be prepared by, or under the direction of, and must be certified as meeting the requirements of this chapter and current, prudent engineering practices by a qualified registered professional engineer or a qualified registered professional land surveyor; in this paragraph, "qualified" means experienced in or trained in the design and construction of roads;
 - (2) the road
- (A) must have embankments which have a minimum static safety factor of 1.3;
- (B) must be located on the most stable surface available to minimize erosion to the extent practicable;
- (C) may not use stream fords to cross perennial or intermittent streams unless the use of a stream ford has been approved by the commissioner for temporary use during road construction;

- (D) must have a drainage control system constructed and maintained to safely pass the peak runoff from a 10-year, six-hour precipitation event or greater event as required by the commissioner;
 - (E) must have drainage pipes and culverts that are
 - (i) installed as designed;
 - (ii) maintained in a free and operating condition; and
 - (iii) designed and maintained to prevent or control erosion at inlets and outlets;
- (F) must have drainage ditches that are constructed and maintained to prevent uncontrolled drainage over the road surface and embankment;
- (G) must have culverts that are installed and maintained to sustain the vertical soil pressure, the passive resistance of the foundation, and the weight of vehicles using the road; and
- (H) must be surfaced with crushed rock, gravel, asphalt, or other material approved by the commissioner, as adequate for the anticipated volume of traffic and the weight and speed of the vehicles using the road.
- (3) natural stream channels may not be altered or relocated in constructing the road unless the commissioner has given prior approval in accordance with 11 AAC 90.321 11 AAC 90.327 and 11 AAC 90.353;
- (4) except as provided in (e) of this section, the operator shall use bridges, culverts, low-water crossings, or other structures designed, constructed, and maintained using current, prudent engineering practices to cross perennial and intermittent streams; low-water crossings must be designed, constructed, and maintained to prevent erosion of the structure, erosion of the streambed, and additional contributions of suspended solids to streamflow. (Eff. 5/2/83, Register 84; am 7/29/98, Register 147; am 4/24/09, Register 190)

Authority: AS 27.21.030 AS 27.21.210 AS 27.21.220

- 11 AAC 90.501. ALLUVIAL VALLEY FLOOR REQUIREMENTS. (a) Operations must be conducted to
- (1) preserve, throughout the mining and reclamation process, the essential hydrologic functions of alluvial valley floors not within an affected area by maintaining the characteristics that support those functions; and
 - (2) reestablish the essential hydrologic functions of alluvial valley floors

within an affected area by reconstructing those characteristics that support those functions.

- (b) The characteristics that support the essential hydrologic functions of alluvial valley floors are those listed in 11 AAC 90.149(e) and those other geologic, hydrologic, or biologic characteristics identified during premining investigations or monitoring conducted during the operation.
- (c) Operations must not be conducted to interrupt, discontinue, or preclude farming on alluvial valley floors unless
- (1) the premining land use is undeveloped rangeland which is not significant to farming; or
- (2) the area of affected alluvial valley floor is small and provides or will provide negligible support for production from one or more farms.
- (d) Operations must stop until remedial measures approved by the commissioner are undertaken by the operator if environmental monitoring shows that the operation is causing
- (1) interruption, discontinuance, or preclusion of farming on alluvial valley floors; or
- (2) material damage to the quality or quantity of water in surface or underground water systems that supply alluvial valley floors.
- (e) Subsections (c) and (d) of this section do not apply to land identified in a reclamation plan approved before August 3, 1977, for any operation that, in the year preceding August 3, 1977,
- (1) produced coal in commercial quantities and was located within or adjacent to an alluvial valley floor; or
- (2) was specifically authorized under a permit from the commissioner allowing operations within an alluvial valley floor.
- (f) Operations must ensure that the agricultural utility and the level of productivity of alluvial valley floors in affected areas are reestablished.
- (g) An environmental monitoring system which provides sufficient information for the commissioner to determine compliance with this section must be installed, maintained, and operated by the operator on all alluvial valley floors until all bonds are released in accordance with 11 AAC 90.211. Monitoring must be performed at adequate frequencies to indicate long term trends that could affect agricultural use of the alluvial valley floors and must identify any characteristics of the alluvial valley floor not identified in the permit application and evaluate the importance of all characteristics. All monitoring data collected and analyses of it must be made available to the

Register 190, July 2009 NATURAL RESOURCES

commissioner. (Eff. 5/2/83, Register 84)

Authority: AS 27.21.030 AS 27.21.210 AS 27.21.230

ARTICLE 12.

INSPECTION AND ENFORCEMENT.

Section

Section		
601.	Inspections	
603.	Right of entry	
605.	Investigative records	
607.	Citizens' requests for inspections	
609.	Review of adequacy and completeness of inspections	
611.	Review of decision	
613.	Cessation orders	
615.	Notices of violation	
617.	Suspension or revocation of permits	
619.	Service of notices	
621.	Informal conference	
623.	Inability to comply	
625.	Assessment of penalty	
627.	Procedures for assessment	
629.	Procedures for assessment conference	
631.	Request for hearing	
633.	Final assessment and payment of penalty	
635.	When an individual civil penalty may be assessed.	
637.	Amount of individual civil penalty	

- 639. Procedure for assessment of individual civil penalty
- 641. Payment of penalty
- 11 AAC 90.601. INSPECTIONS. (a) A partial inspection is an on-site or aerial review of the operator's compliance with some of the permit conditions and requirements imposed under the Act and this chapter. Aerial inspections will be conducted to reasonably ensure the identification and documentation of conditions at the operation. Potential violations observed during an aerial inspection will be investigated on site as conditions warrant.
- (b) A complete inspection is an on-site review of an operator's compliance with all permit conditions and requirements imposed under the Act and this chapter within the entire area disturbed or affected by the operation.
- (c) The commissioner will inspect all coal exploration operations required to comply in whole or in part with the Act and this chapter.
 - (d) The inspections required under this section will
- (1) be carried out on an irregular basis to monitor compliance of all operations, including those which operate nights, weekends, or holidays;
- (2) occur without prior notice or with a minimum of notice to the person being inspected or any agent or employee of the person, except for necessary on site meetings; and
- (3) include the prompt filing of inspection reports adequate to enforce the requirements of the Act and this chapter.
- (e) The commissioner will immediately conduct an inspection when the commissioner has reason to believe, on the basis of available information other than information resulting from a previous inspection, that there exists a violation of the Act, this chapter, or any condition of a permit or an exploration approval, or that there exists any condition, practice, or violation that creates an imminent danger to the health or safety of the public or is causing or can reasonably be expected to cause a significant, imminent environmental harm to land, air, or water resources, and the person supplying that information provides the statement required under 11 AAC 90.607(a).
- (f) A permittee may request an on-site compliance conference with the commissioner to review the compliance status of any condition or practice proposed at any coal exploration or surface coal mining and reclamation operation. This conference is not an inspection under AS 27.21.230.
- (g) For all operations for which notice has been filed under 11 AAC 90.471(b) and all operations for which the requirements of AS 27.21.170(c)(2) and (d) have been

satisfied, the commissioner will conduct an average of at least one complete inspection per calendar quarter and such partial inspections as are necessary to ensure effective enforcement of the Act and this chapter.

- (h) A surface coal mining and reclamation operation is an abandoned site if the commissioner has found in writing that
- (1) all surface and underground coal mining and reclamation activities at the site have ceased;
- (2) the commissioner has issued at least one notice of violation, and either
 - (A) the commissioner is unable to serve the notice despite diligent efforts to do so; or
 - (B) the notice was served and has progressed to a failure-to-abate cessation order;
- (3) the commissioner is taking action to ensure that the permittee and operator, and owners and controllers of the permittee and operator, will be precluded from receiving future permits while violations continue at the site;
- (4) the commissioner is taking action under AS 27.21.240(f) or (j) or 27.21.250(e) or (f) to ensure that abatement occurs or that the failure to abate will not recur, except if after evaluating the circumstances the commissioner concludes that further enforcement offers little or no likelihood of successfully compelling abatement or recovering any reclamation costs; and
 - (5) where the site is, or was, permitted and bonded,
 - (A) the permit has either expired or been revoked; and
 - (B) the commissioner has initiated and is diligently pursuing forfeiture of, or has obtained forfeiture of, any available performance bond.
- (i) In lieu of the inspection frequency established in AS 27.21.230(c), the commissioner will inspect each abandoned site on a set frequency commensurate with the public health and safety and environmental considerations present at the specific abandoned site. However, the commissioner will not set the inspection frequency under this subsection at less than one complete inspection per calendar year. Before selecting an alternate inspection frequency under this subsection, the commissioner will conduct a complete inspection of the abandoned site and provide public notice and an opportunity to comment in accordance with (j) of this section. After the end of the public notice period, the commissioner will prepare and maintain for public review a written finding justifying the alternative inspection frequency selected. In the written finding, the commissioner will affirmatively address in detail

- (1) the commissioner's finding under (h) of this section that the site is an abandoned site;
- (2) the existence and extent of any impoundments, earthen structures, and other structures or conditions, and the extent to which they pose, or may reasonably be expected to ripen into, imminent dangers to public health or safety, or significant imminent environmental harm to land, air, or water resources;
- (3) the extent to which existing impoundments or earthen structures were constructed and certified in accordance with prudent engineering designs approved in the permit;
- (4) the degree to which erosion and sediment control is present and functioning at the site;
- (5) the extent to which the site is located near or above urbanized areas, communities, occupied dwellings, schools, and other public or commercial buildings and facilities;
 - (6) the extent to which reclamation was completed before abandonment;
- (7) the degree of stability of unreclaimed areas, taking into consideration the physical characteristics of the land mined and the extent to which settlement or revegetation has naturally occurred; and
- (8) based on a review of the complete and partial inspection report record for the site during at least the last two consecutive years, the rate at which adverse environmental or public health and safety conditions have and can be expected to progressively deteriorate.
- (j) The public notice and opportunity to comment required under (i) of this section will be provided as follows:
- (1) the commissioner will provide public notice in accordance with 11 AAC 90.907(d); a person whose interest may be affected may submit written comments within 30 days after notice is published;
- (2) in the public notice, the commissioner will include the permittee's name, the permit number, the location of the land affected, the proposed inspection frequency, the general reasons for reducing the inspection frequency, the bond status of the permit, the telephone number and address of the commissioner where written comments on the reduced inspection frequency may be submitted, and the closing date of the comment period. (Eff. 5/2/83, Register 84; am 9/28/86, Register 99; am 4/24/09, Register 190)

- 11 AAC 90.603. RIGHT OF ENTRY. (a) The commissioner has the right to enter any coal exploration or surface coal mining and reclamation operation without advance notice or search warrant upon presentation of appropriate credentials.
- (b) The commissioner will inspect any monitoring equipment or method of exploration or operation and have access to and copy any records required under the Act, this chapter, the exploration approval, or the permit. The commissioner will exercise these rights at reasonable times, without advance notice, upon presentation of appropriate credentials. No search warrant is required except to enter a building. (Eff. 5/2/83, Register 84)

11 AAC 90.605. INVESTIGATIVE RECORDS. The commissioner will, in his or her discretion, enter into agreements regarding procedures for the special handling of investigative and enforcement reports and other materials in order to protect their confidentiality. (Eff. 5/2/83, Register 84)

- 11 AAC 90.607. CITIZENS REQUESTS FOR INSPECTIONS. (a) A citizen may request an inspection under 11 AAC 90.601(e) by furnishing to the commissioner a written statement or an oral report followed by a written statement giving the commissioner reason to believe that a violation, condition, or practice referred to in 11 AAC 90.601(e) exists and, if the statement is signed, setting forth a phone number and address where the citizen can be contacted.
- (b) If an inspection is conducted as a result of information provided in a signed statement under (a) of this section, the citizen will be notified as far in advance as practical when the inspection is to occur and will be allowed to accompany the commissioner during the inspection. This person may enter the coal exploration or surface coal mining and reclamation operation about which he or she supplied information if he or she is in the presence of and under the control, direction, and supervision of the commissioner while on the mine property. This right of entry does not include a right to enter buildings without consent of the person in control of the building or without a search warrant.
- (c) Within 10 days after the inspection or, if there is no inspection, within 15 days of receipt of the citizen's signed, written statement, the commissioner will send the citizen the following:
- (1) if an inspection was made, a description of the enforcement action taken, which may consist of copies of the inspection report and all notices of violation and any cessation order issued as a result of the inspection or an explanation of why no

enforcement action was taken;

- (2) if no inspection was conducted, an explanation of the reason why; and
- (3) an explanation of the citizen's right, if any, to informal review of the action or inaction of the commissioner under 11 AAC 90.611.
- (d) The commissioner will give copies of all materials in (a) and (c)(1) and (2) of this section within the time limits specified in those subsections to the alleged violator. (Eff. 5/2/83, Register 84)

Authority: AS 27.21.030 AS 27.21.230 AS 27.21.240

11 AAC 90.609. REVIEW OF ADEQUACY AND COMPLETENESS OF INSPECTIONS. Any person who is or may be adversely affected by a surface coal mining and reclamation operation or a coal exploration operation may notify the commissioner, in writing, of any alleged failure to make adequate and complete or periodic inspections as provided in 11 AAC 90.601. The notification must include sufficient information to create a reasonable belief that 11 AAC 90.601 is not being complied with and to demonstrate that the person is or may be adversely affected. The commissioner will within 15 days of receipt of the notification determine whether 11 AAC 90.601 is being complied with and, if not, will immediately order an inspection to remedy the noncompliance. The commissioner will also furnish the complainant with a written statement of the reasons for the determination and any actions taken to remedy the noncompliance. (Eff. 5/2/83, Register 84)

Authority: AS 27.21.030 AS 27.21.230 AS 27.21.240

- 11 AAC 90.611 REVIEW OF DECISION. (a) Any person who may be adversely affected by a coal exploration or surface coal mining and reclamation operation may ask the commissioner to review informally a decision not to inspect or take appropriate enforcement action with respect to any violation alleged by that person in a request for inspection under 11 AAC 90.607. The request for review must be in writing and must include a statement of how the person is or may be adversely affected and why the decision merits review.
- (b) The commissioner will conduct the review and inform the person, in writing, of the results of the review within 30 days of receipt of the request. The alleged violator will also be given a copy of the results of the review, except that the name of the citizen will not be disclosed unless confidentiality has been waived or disclosure is required.
- (c) Informal review under this section does not affect any right to formal review under AS 27.21.230 or to a civil action under AS 27.21.950. (Eff. 5/2/83, Register 84)

Authority: AS 27.21.030 AS 27.21.230 AS 27.21.240

11 AAC 90.613. CESSATION ORDERS. (a) The commissioner will immediately order a cessation of exploration activities or surface coal mining and reclamation operations or of the relevant portion if he or she finds, on the basis of an inspection, any condition or practice or any violation of the Act, this chapter, or any condition of an exploration approval or permit imposed under the Act or this chapter

- (1) creating an imminent danger to the health or safety of the public; or
- (2) causing, or reasonably expected to cause, significant imminent environmental harm to land, air, or water resources.
- (b) If the cessation ordered under (a) of this section will not completely abate the imminent danger or harm in the most expeditious manner physically possible, the commissioner will impose affirmative obligations on the person to whom it is issued to abate the condition, practice, or violation. The order will specify the time by which abatement must be accomplished.
- (c) Exploration activities or surface coal mining and reclamation operations conducted without a valid approval or permit constitute a condition or practice which causes or can reasonably be expected to cause significant, imminent environmental harm to land, air, or water resources, unless these operations

are an integral uninterrupted extension of previously approved activities or operations and the person conducting the activities or operations has filed a timely and complete application for an approval or permit to conduct the operations.

- (d) The commissioner will immediately order a cessation of coal exploration or surface coal mining and reclamation operations, or of the relevant portion when a notice of violation has been issued under 11 AAC 90.615 and the person to whom it was issued fails to abate the violation within the abatement period fixed or subsequently extended by the commissioner.
- (e) A cessation order issued under this section will be in writing, be signed by the commissioner, and set forth with reasonable specificity
 - (1) the nature of the violation;
 - (2) any required remedial actions, affirmative obligations, or interim steps;
 - (3) the time established for any abatement and any interim steps;
- (4) a description of the portion of the coal exploration or surface coal mining and reclamation operation to which it applies; and

- (5) that the right to an informal conference on the order will be considered waived unless a conference is requested within 30 days after service of the order.
- (f) The cessation order will remain in effect until the condition, practice, or violation has been abated or until vacated, modified, or terminated, in writing, by the commissioner or until the order expires under AS 41.45.240(h).
- (g) Reclamation operations and other activities intended to protect public health and safety and the environment must continue during the period of any order unless otherwise provided in the order.
- (h) The commissioner will, in his or her discretion, modify, terminate, or vacate a cessation order for good cause and extend the time for abatement if the failure to abate within the time previously set was not caused by lack of diligence on the part of the person to whom it was issued.
- (i) The commissioner will terminate a cessation order, by written notice to the person to whom the order was issued, when he or she determines that all conditions, practices, or violations listed in the order have been abated. Termination does not affect the right of the commissioner to assess civil penalties for those violations under 11 AAC 90.625. (Eff. 5/2/83, Register 84)

- 11 AAC 90.615. NOTICES OF VIOLATION. (a) The commissioner will issue a notice of violation if, on the basis of an inspection, he or she finds a violation of the Act, this chapter or any condition of a permit or an exploration approval imposed under the Act or this chapter, which does not create an imminent danger or harm for which a cessation order will be issued under 11 AAC 90.613.
- (b) A notice of violation issued under this section will meet the requirements of 11 AAC 90.613(e).
- (c) The commissioner will, in his or her discretion, extend the time set for abatement or for

accomplishment of an interim step if the failure to meet the time previously set was not caused by lack of diligence on the part of the person to whom it was issued. The total time for abatement under a notice of violation, including all extensions, may not exceed 90 days from the date of issuance except for good cause as described in paragraph (f) of this section. An extended abatement date will not be granted when the failure to abate within 90 days has been caused by a lack of diligence or intentional delay in completing the remedial action required.

(d) If the person to whom the notice was issued fails to meet any time set for abatement, the commissioner will issue a cessation order under 11 AAC 90.613. A

cessation order may be issued for failure to meet the time set for accomplishment of an interim step.

- (e) The commissioner will terminate a notice of violation by written notice to the person to whom it was issued when he or she determines that all violations listed in the notice of violation have been abated. Termination does not affect the right of the commissioner to assess civil penalties for those violations under 11 AAC 90.625.
- (f) "Good cause" for an abatement period of more than 90 days, under (c) of this section, must be based on one of the following circumstances:
- (1) if the permittee of an ongoing operation has timely applied for and diligently pursued a permit renewal or revision, but renewal or revision will not be issued within 90 days after a valid permit expires or revision is required for reasons not within the control of the permittee;
- (2) if a judicial order, as to which the operator has diligently pursued all rights of appeal and as to which there is no other effective legal remedy, precludes abatement within 90 days;
 - (3) if a labor strike precludes abatement within 90 days;
- (4) if climatic conditions either preclude abatement within 90 days or would cause more environmental harm than that prevented by abatement within 90 days;
- (5) if abatement within 90 days requires action that would violate safety standards established under the Mine Safety and Health Act of 1977.
- (g) An extension of the abatement period beyond 90 days will only be granted upon a demonstration by the operator, by clear and convincing proof of good cause under paragraph (f) of this section, and a written finding by the commissioner. The extension granted will not exceed the shortest time necessary to abate the violation, and in no case exceed 90 days. The operator may apply for an additional extension of up to 90 days in accordance with the provisions of this section. If an extension of the abatement period is granted, interim abatement measures will be imposed to the extent necessary to minimize harm to the public and the environment. (Eff. 5/2/83, Register 84)

Authority: AS 27.21.030 AS 27.21.240

11 AAC 90.617. SUSPENSION OR REVOCATION OF PERMITS. (a) Except as otherwise provided in this section, the commissioner will issue an order to a permittee requiring him or her to show cause why his permit and right to mine under the Act should not be suspended or revoked if the commissioner determines that a pattern of violations of any requirements of the Act, this chapter, or any permit condition required by the Act exists or has existed and that the violations were caused willfully or

were unwarranted. For purposes of this subsection and unless the context indicates otherwise

- (1) "willful violation" means an act or omission which violates the Act, this chapter, or any permit condition required by the Act or this chapter committed by a person who intends the result which actually occurs;
- (2) "unwarranted violation" means the failure of the permittee to prevent the occurrence of any violation of the permit or any requirement of the Act due to indifference, lack of diligence, or lack of reasonable care or the failure to abate any violation of the permit or the Act due to indifference, lack of diligence, or lack of reasonable care. Violations by any person conducting operations on behalf of the permittee will be attributed to the permittee unless the permittee establishes that they were acts of deliberate sabotage.
- (b) The commissioner will, in his or her discretion, determine that a pattern of violations exists or has existed based on two or more inspections of the permit area within any 12-month period after considering circumstances including
- (1) the number of violations, cited on more than one occasion, of the same or related requirements of the Act, this chapter, or the permit;
- (2) the number of violations, cited on more than one occasion, of different requirements of the Act, this chapter, or the permit; and
- (3) the extent to which the violations were unrelated departures from lawful conduct.
- (c) The commissioner will promptly review the history of violations of any permittee cited for violations of the same or related requirements of the Act, this chapter, or the permit during three or more inspections of the permit area within any 12-month period. If, after review, the commissioner determines that a pattern of violations exists or has existed, he or she will issue an order under (a) of this section.
- (d) The commissioner will, in his or her discretion, decline to issue a show cause order or vacate an outstanding show cause order if he or she finds, taking into account exceptional factors present in the particular case, that it would be demonstrably unjust to issue or fail to vacate the show cause order. The basis for this finding will be fully explained and documented in the records of the case.
- (e) At the time of issuance of the order the commissioner will provide notice, including a brief statement of the procedure for intervention in the proceeding, in accordance with 11 AAC 90.907(d).
- (f) Following issuance of a show cause order, the commissioner will hold a public hearing upon 30 days written notice of the time, date, and place of the hearing to the permittee and any intervenors. The hearing is subject to AS 44.62.330 -- 44.62.630.

- (g) Within 60 days after the hearing, the commissioner will issue a written determination whether a pattern of violations exists and, if appropriate, an order. If the permit and the permittee's right to mine are revoked or suspended, the permitted shall immediately cease operations on the permit area and shall
- (1) if revoked, complete reclamation within the time frame specified in the order; or
- (2) if suspended, complete all affirmative obligations to abate all conditions, practices, or violations as specified in the order.
- (h) If a permittee fails to abate a violation contained in a notice of violation or a cessation order within the abatement period set in the notice or order or as subsequently extended, the commissioner will review the permittee's history of violations to determine whether a pattern of violations exists under this section and will issue an order to show cause, if appropriate. (Eff. 5/2/83, Register 84)

- 11 AAC 90.619. SERVICE OF NOTICES. (a) A notice of violation, cessation order, or show cause order will be served on the person to whom it is directed or his designated agent promptly after issuance, as follows:
- (1) by tendering a copy at the coal exploration or surface coal mining and reclamation operation to
 - (A) the designated agent; or,
- (B) if the designated agent is not present, to the individual who, based upon reasonable inquiry appears to be in charge of the operation; or
- (C) if the individual in charge can not be located at the site, any individual at the site who appears to be an employee or agent of the person to whom the notice or order is issued; or
- (2) by sending a copy of the notice or order by certified mail or by hand to the person to whom it is issued or his designated agent.
- (b) Service is complete upon tender of the notice or order and is not incomplete because of refusal to accept.
- (c) Designation by any person of an agent for service of notices and orders must be made, in writing, to the commissioner. (Eff. 5/2/83, Register 84)

NATURAL RESOURCES

Register 190, July 2009

AS 27.21.240 Authority: AS 27.21.030

11 AAC 90.621. INFORMAL CONFERENCE. (a) Except as expressly provided in (b) of this section or by necessary implication of this entire section, a notice of violation or cessation order which requires cessation of mining or exploration activities must be reviewed within 30 days after service at an informal conference. The conference will be held at or reasonably close to the mine site so that the site may be viewed during the conference, or at any other location acceptable to the commissioner and the person to whom the notice or order was issued. The office of the commissioner nearest to the mine site will be considered reasonably close to the mine site unless a closer location is requested and agreed to by the commissioner. Expiration of a notice or order does not affect the commissioner's right to assess civil penalties for the violations mentioned in the notice or order under AS 27.21.250.

- (b) A notice of violation or cessation order will not expire as provided in AS 27.21.240(h) if the informal conference has been waived, either explicitly or as provided in 11 AAC 90.613(e)(5), or if, with the consent of the person to whom the notice or order was issued, the informal conference is held later than 30 days after the notice or order was served. For purposes of this subsection, the person will be considered to have consented to an extension of the time for holding the conference if the request for the conference is received by the commissioner on or after the 21st day after service of the notice or order, in which case there will be an extension of 10 days.
- (c) The commissioner will give as much advance notice as is practical of the time, place, and subject matter of the informal conference to the person to whom the notice or order was issued and to any person who filed a statement which led to that notice or order.
- (d) The commissioner will post notice of the conference at the district office closest to the mine site and publish it, where practical, in a newspaper of general circulation in the area of the mine.
- (e) The commissioner will conduct the informal conference, accept oral or written arguments, and any other relevant information from any person attending.
- (f) Within five days after the close of the informal conference, the commissioner will affirm, modify, or vacate the notice or order in writing. The decision will be sent to the persons specified in (c) of this section.
- (g) The granting or waiver of the informal conference does not affect the right of any person to review under AS 27.21.240 and AS 44.62. At review proceedings, no evidence of statements made or evidence produced at the informal conference under this section may be introduced as evidence to impeach a witness. (Eff. 5/2/83, Register 84)

- 11 AAC 90.623. INABILITY TO COMPLY. (a) The commissioner will not vacate any cessation order or notice of violation based upon the inability of the person to whom it was issued to comply with the order or notice.
- (b) Inability to comply may be considered in mitigation of the amount of civil penalty under 11 AAC 90.625 -- 11 AAC 90.633 and of the duration of the suspension of a permit. (Eff. 5/2/83, Register 84)

- 11 AAC 90.625. PENALTY ASSESSMENT AND COMPUTATION. (a) The commissioner in his or her discretion, assess a penalty for each violation contained in a notice of violation, and will assess a penalty for each violation contained in a cessation order. In determining whether to assess a penalty, and in computing the amount of the penalty, the commissioner will consider the factors listed in AS 27.21.250(a), as follows:
- (1) seriousness. Except as provided in (D) of this paragraph, a value for seriousness will be determined based on the degree of adverse environmental impact and hazard to public health and safety actually occurring or reasonably likely to occur as a result of the violation, as well as the extent of the impact or harm.
- (A) A dollar value for the degree of potential or actual adverse environmental impact resulting from the violation will be determined in accordance with the following table.

Degree of Adverse	Potential	Actual	Irreparable
Environmental Impact		(Dollar Value)	
None	0	0	0
Minimal	25	50	100
Moderate	50	100	150
Severe	100	150	200

(B) a dollar value for the degree of potential public health and safety hazard resulting from the violation will be determined in accordance with the following table and will be added to the dollar value determined under (A) of this paragraph.

Register 190, July 2009	NATURAL RESOURCES	
Degree of Potential Public	Dollar Value	
Health and Safety Hazard		
None	0	
Moderate	75	
Severe	150	

(C) a value for the extent of the damage or hazard will be determined according to the following table. The total dollar value determined under (A) and (B) of this paragraph will be multiplied by the value determined in this subparagraph to obtain a total value for the seriousness factor.

Extent of Damage or Hazard	Value
None or minimal (on or off permit area)	0
Small (on permit area)	3
Small (off permit area)	6
Moderate (on permit area)	6
Moderate (off permit area)	9
Large (on permit area)	9
Large (off permit area)	12

(D) If a violation does not result in a penalty under (A), (B), or (C) of this paragraph, but does obstruct program administration or enforcement, a dollar value of \$250 will be assigned for seriousness.

(2) negligence, the dollar amount determined under (1) of this subsection will be multiplied by a factor for the degree of negligence determined under this paragraph. The degree of fault of the permittee in allowing the violation to occur or in failing to correct the violation after discovery will be characterized by one of the following, and be assigned the indicated factor.

(A) no fault, the violation could not have been prevented through the use of reasonable care by the operator. Factor: 1.

- (B) negligence, the violation occurred because of the operator's or permittee's lack of reasonable care, lack of diligence, or indifference. Factor: 2.
- (C) reckless, the violation occurred because of the disregard of either a known situation likely to cause a violation or a situation that should have been recognized as likely to cause a violation. Factor: 3.
- (D) willful, the permittee or operator was aware that its action would cause a violation and failed to avoid or correct the situation. Factor: 4.
- (3) history of previous violations. \$500 will be assessed for history if three or more other violations occurred during the previous 12 months at the same operation and are not the subject of administrative or judicial review at the time of the assessment. The \$500 assessment is added to the dollar amount determined under (2) of this subsection.
- (4) good faith in compliance after receipt of a notice of violation or cessation order will, in the commissioner's discretion, be awarded during the assessment procedures under 11 AAC 90.627 or 11 AAC 90.629. The total penalty determined under (1) (3) of this subsection will in the commissioner's discretion, be reduced if abatement is achieved in less time than originally set for abatement according to the following schedule:

Percentage Credit	Percentage of original abatement time
40	25
25	50
10	75

- (b) The commissioner will, in his or her discretion, assess a separate civil penalty, computed under (a) of this section, for any day after the date of issuance of the notice of violation or cessation order if;
- (1) the violation continued to cause irreparable damage after the date the notice of violation or cessation order was issued;
 - (2) the degree of fault was reckless or willful;
- (3) the person to whom the notice or order was issued gained an economic benefit as a result of the violation; or
 - (4) the violation resulted in administrative or inspection costs in excess of

NATURAL RESOURCES

Register 190, July 2009

those normally incurred by the commissioner. (Eff. 5/2/83, Register 84; am 9/28/86, Register 99)

Authority: AS 27.21.030 AS 27.21.240 AS 27.21.250

11 AAC 90.627. PROCEDURES FOR ASSESSMENT. (a) Within 10 days after service of a notice or order, the permittee or operator or an authorized representative may submit written information about a violation and the penalty assessment factors to the commissioner and may request an informal review of the finding of violation. If requested, a meeting will be held to discuss these matters within 20 days after service of the notice or order. Informal review under this section does not deprive the alleged violator of the right to an assessment conference under 11 AAC 90.629.

- (b) The commissioner will consider any written material submitted or information presented at any meeting held under (a) of this section and will affirm, modify, or vacate the notice or order, and propose a civil penalty as appropriate. The proposed penalty assessment, including and explanation of the computation, will be served on the operator by certified mail within 30 days after issuance of the notice or order. Service is complete upon tender at the address set out on the sign required under 11 AAC 90.301(c) or at the address at which the person is in fact located. Service is complete despite a refusal to accept.
- (c) Unless an assessment conference under 11 AAC 90.629 has been requested, the commissioner will review and reassess any penalty if necessary to consider facts which were not reasonably available on the date of issuance of the proposed assessment because of the length of the abatement period. The commissioner will serve a copy of any reassessment and of the worksheet showing the computation of the reassessment in the manner provided in (b) of this section within 30 days after the date the violation is abated. (Eff. 5/2/83, Register 84; am 9/28/86, Register 99)

- 11 AAC 90.629. PROCEDURES FOR ASSESSMENT CONFERENCE. (a) The commissioner will arrange for a conference to review a proposed assessment or reassessment if a written request is received within 30 days after the date the proposed assessment or reassessment was received by the operator.
- (b) The commissioner will hold the assessment conference within 60 days from the date of issuance of the proposed assessment or the end of the abatement period, whichever is later. The commissioner will, in his or her discretion, hold the assessment conference as part of the informal conference under 11 AAC 90.621. The conference will be held in accordance with the following procedures:

- (1) the time and place of the conference will be posted at the district office closest to the mine at least five days before the conference;
 - (2) any person has the right to attend and participate in the conference;
- (3) the commissioner will consider all relevant information on the violation and will, within 30 days after the conference, either
 - (A) settle the issues, in which case a settlement agreement will be prepared and signed by the commissioner and the operator, or
 - (B) affirm, raise, lower, or vacate the penalty.
- (c) The commissioner will promptly serve the operator with a notice of the decision and will include a worksheet if the penalty has been raised or lowered. The reasons for the decision will be fully documented in the file.
- (d) If a settlement agreement is entered into, the person assessed will be considered to have waived all rights to further review of the violation or penalty in question, except as otherwise expressly provided for in the settlement agreement. The settlement agreement will contain a clause to this effect.
- (e) If full payment of the amount specified in the settlement agreement is not received by the commissioner within 30 days after the date of signing, the commissioner will, in his or her discretion, enforce the agreement or rescind it and proceed according to 11 AAC 90.627(c).
- (f) At formal review proceedings under the Act, no evidence of statements made or evidence produced by one party at a conference may be introduced as evidence by another party or to impeach a witness. (Eff. 5/2/83, Register 84; am 4/24/09, Register 190)

- 11 AAC 90.631. REQUEST FOR HEARING. (a) An operator may contest a proposed penalty or the fact of a violation, by requesting a hearing in accordance with AS 27.21.250(b) or within 30 days after the date of service of the decision under 11 AAC 90.629(c), whichever is later.
- (b) A request under (a) of this section is effective only upon submission of either
 - (1) a bond equal to the amount of the proposed penalty; or
- (2) the amount of the proposed penalty, to be held by the commissioner in an escrow account until final resolution of the appeal.

(c) The commissioner will review any bond filed under (b)(1) of this section to determine whether the bond submitted is sufficient to ensure payment of the penalty if the commissioner's proposed penalty amount is upheld on appeal. If the commissioner determines that the bond is not sufficient, he or she will notify the operator, in writing, of his decision. The operator has 10 days to make the request for hearing effective by complying with (b)(2) of this section. (Eff. 5/2/83, Register 84; am 4/24/09, Register 190)

Authority: AS 27.21.030 AS 27.21.250

- 11 AAC 90.633. FINAL ASSESSMENT AND PAYMENT OF PENALTY. (a) If an operator fails to request a hearing as provided in 11 AAC 90.631, the proposed assessment will become a final order of the commissioner and the penalty assessed will become due and payable upon expiration of the time allowed to request a hearing.
- (b) If any party requests judicial review of a final order of the commissioner, the proposed penalty bond or escrow will continue to be held until completion of the review. Otherwise, subject to (b) of this section, the bond or escrow will be transferred to the commissioner in payment of the penalty.
- (c) If the final decision in administrative and judicial review results in an order reducing or eliminating the proposed penalty, the commissioner will, within 30 days of receipt of the order, refund to the person assessed all or part of the bonded or escrowed amount. Interest from the date of payment into escrow to the date of the refund will be paid in accordance with the escrow agreement. If the review results in an order increasing the penalty, the operator shall pay the difference to the commissioner within 15 days after the order is mailed to the operator. (Eff. 5/2/83, Register 84)

- 11 AAC 90.635. When an individual civil penalty may be assessed. (a) Except as provided in (b) of this section, the commissioner may assess an individual civil penalty against any corporate director, officer, or agent of a corporate permittee who knowingly and willfully authorized, ordered, or carried out a violation of AS 27.21, this chapter, or a permit condition.
- (b) The commissioner will not assess an individual civil penalty under (a) of this section in situations resulting from a violation by a corporate permittee unless
- (1) the commissioner has issued a cessation order to the corporate permittee for a violation; and
- (2) the violation has remained unabated for at least 30 days after issuance of the cessation order. (Eff. 4/24/09, Register 190)

Register 190, July 2009 NATURAL RESOURCES

Authority: AS 27.21.030 AS 27.21.250

11 AAC 90.637. Amount of individual civil penalty. (a) In determining the amount of an individual civil penalty assessed under 11 AAC 90.635, the commissioner will consider

- (1) the individual's history of authorizing, ordering, or carrying out previous violations at the particular operation;
- (2) the seriousness of the violation, as indicated by the extent of damage, the anticipated cost of reclamation, whether irreparable damage to the environment occurred, the extent that the violation has created a hazard to public health or safety, and the seriousness of any hazard that has been created to public health or safety;
- (3) the extent to which the individual's negligence, rather than knowing and willful conduct, resulted in the violation; and
- (4) the demonstrated good faith of the individual in attempting to achieve rapid compliance after receiving the notice of the violation.
- (b) The commissioner may consider each day of a continuing violation as a separate violation, and may assess a separate individual civil penalty for each day the violation continues, beginning on the date of service of the underlying notice of violation, cessation order, or other order incorporated in a final decision issued by the commissioner, and ending on the date abatement or compliance is achieved. (Eff. 4/24/09, Register 190)

Authority: AS 27.21.030 AS 27.21.250

11 AAC 90.639. Procedure for assessment of individual civil penalty. (a) The commissioner will serve on each individual to be assessed an individual civil penalty a notice of proposed individual civil penalty assessment, including a narrative explanation of the reasons for the penalty, the amount of the proposed assessment, and a copy of any underlying notice of violation and cessation order.

- (b) The notice of proposed individual civil penalty assessment becomes a final decision of the commissioner 30 days after service upon the individual unless
- (1) the individual contests the amount of the penalty or the fact of the violation, in accordance with AS 27.21.250(b); or
- (2) the commissioner agrees in writing with the individual or the responsible corporate permittee to a plan, including a schedule, for the abatement or correction of the violation.

(c) For purposes of this section, service will be done by certified mail or in person. Service is complete upon mailing or personal service, and will not be considered incomplete because of refusal to accept. (Eff. 4/24/09, Register 190)

Authority: AS 27.21.030 AS 27.21.250

- **11 AAC 90.641. Payment of penalty.** (a) Except as provided in (b) and (c) of this section, the penalty shall be paid in full within 30 days after service of a notice of proposed individual civil penalty assessment.
- (b) If an individual named in a notice of proposed individual civil penalty assessment contests the amount of the penalty or the fact of the violation in accordance with AS 27.21.250(b) and 11 AAC 90.639(b), the penalty is due upon issuance of a final written decision affirming, increasing, or decreasing the proposed penalty.
- (c) If the commissioner and the corporate permittee or individual have agreed in writing on a plan, including a schedule, for the abatement or correction of the violation, and the abatement or correction has not been satisfactory, the penalty is due upon issuance of a final written decision affirming, increasing, or decreasing the proposed penalty.
 - (d) If an individual fails to pay overdue penalties, the commissioner may
- (1) request that the attorney general initiate litigation to recover the penalty;
 - (2) report the failure to the United States Internal Revenue Service;
 - (3) report the failure to the Department of Revenue;
 - (4) report the failure to credit bureaus; or
 - (5) refer the debt to collection agencies. (Eff. 4/24/09, Register 190)

Authority: AS 27.21.030 AS 27.21.250

Article 13. Exemption for Coal Extraction Incidental to the Extraction of Other Minerals.

Section

652. Application requirements for incidental mining exemption and procedures

- 654. Contents of application for incidental mining exemption
- 656. Public availability of information
- 658. Requirement for incidental mining exemption
- 660. Conditions of incidental mining exemption and right of inspection and entry
- 662. Stockpiling of minerals
- 664. Revocation of incidental mining exemption and enforcement
- 666. Reporting requirements
- 669. Definitions applicable to incidental mining exemption
- 11 AAC 90.652. Application requirements for incidental mining exemption and procedures. (a) A person who plans to commence coal extraction in reliance on the incidental mining exemption in AS 27.21.998(17)(A)(iv) must file a complete application for exemption with the commissioner for each incidental extraction mining area.
- (b) Except as provided in (e) of this section, a person may not commence coal extraction based upon the incidental mining exemption in AS 27.21.998(17)(A)(iv) until the commissioner has approved the incidental mining exemption application.
- (c) The commissioner will notify the applicant if the application for an incidental mining exemption is incomplete and may at any time require the submittal of additional information.
- (d) The commissioner will provide public notice and take comment in accordance with 11 AAC 90.907 on an application for an incidental mining exemption.
- (e) After the close of the public comment period and no later than 90 days after the complete application was filed, the commissioner will issue a written decision granting or denying the incidental mining exemption in accordance with 11 AAC 90.658 based upon information contained in the application and in public comment, and any other information available to the commissioner at that time. The commissioner will set out the basis for the commissioner's decision, and the terms and conditions of the incidental mining exemption in the written decision. The commissioner will distribute the written decision in accordance with 11 AAC 90.907.
- (f) If the commissioner fails to provide an applicant with a decision within the timeline specified in (e) of this section, an applicant may begin incidental coal extraction pending a final determination on the application unless the commissioner issues an interim finding prohibiting coal extraction and stating the reasons for the prohibition.

(g) A person adversely affected by a decision issued under (e) of this section may request, within 20 days after service of that decision, administrative review of the decision in accordance with 11 AAC 02. A request for administrative review does not stay a decision issued under this section. (Eff. 4/24/09, Register 190)

Authority: AS 27.21.030 AS 27.21.998

11 AAC 90.654. Contents of application for incidental mining exemption. An application for an incidental mining exemption must include

- (1) the name and address of the applicant;
- (2) a list of the other minerals sought to be extracted;
- (3) estimates of annual anticipated production of coal and of other minerals within each incidental extraction mining area over the anticipated life of the mining operation;
- (4) estimated annual revenues that will be received over the anticipated life of the mining operation from bona fide sales of coal and other minerals to be extracted within each incidental extraction mining area;
- (5) if the coal and the other minerals sought to be extracted from an incidental extraction mining area will be used rather than sold, the estimated annual fair market values of the coal and other minerals at the time of projected use;
- (6) the basis for all annual production, revenue, and fair market value estimates:
- (7) a description of each incidental extraction mining area; the description must be of sufficient certainty so that the incidental extraction mining area may be located and distinguished from other mining areas, and must include the boundaries of the incidental extraction mining area and the borough, if any, in which it is located;
- (8) an estimate to the nearest acre of the number of acres that will compose the incidental extraction mining area over the anticipated life of the mining operation;
- (9) one or more representative stratigraphic cross-sections based on test borings or other information identifying and showing
 - (A) the relative position, approximate thickness, and density of the coal and each other mineral to be extracted for commercial use or sale; and
 - (B) the relative position and approximate thickness of any material, not classified as other minerals, that will also be extracted during the conduct of

mining activities;

- (10) a map of appropriate scale that clearly identifies the incidental extraction mining area;
- (11) a general description of mining and mineral processing activities for the incidental extraction mining area;
- (12) a summary of sales commitments and legally binding agreements for future delivery, if any, that the applicant has received for other minerals to be extracted from the incidental extraction mining area, or a description of potential markets for those minerals;
- (13) if the applicant will use other minerals commercially, a description of the use:
- (14) for an operation that has extracted coal and other minerals before filing an incidental mining exemption application,
 - (A) any relevant documents the operator has received from the commissioner documenting its exemption from the requirements of AS 27.21;
 - (B) the cumulative production of the coal and other minerals from the incidental extraction mining area;
 - (C) estimated tonnages of stockpiled coal and other minerals; and
 - (D) any other information pertinent to the qualification of the operation as exempt. (Eff. 4/24/09, Register 190)

Authority: AS 27.21.030 AS 27.21.998

11 AAC 90.656. Public availability of information. Except as provided in AS 27.21.100(c), all information submitted to the commissioner under 11 AAC 90.652 - 11 AAC 90.669 will be made immediately available for public inspection and copying at the commissioner's office and at the regional office of the department closest to the location of the coal mining operation. (Eff. 4/24/09, Register 190)

Authority: AS 27.21.030 AS 27.21.100 AS 27.21.998

- 11 AAC 90.658. Requirement for incidental mining exemption. The commissioner will determine a mining activity to be exempt under AS 27.21.998(17)(A)(iv) from the requirements of AS 27.21 and this chapter if
 - (1) the cumulative production of coal extracted will not exceed 16 2/3

percent of the total cumulative production of coal and other minerals removed for purposes of bona fide sale or reasonable commercial use;

- (2) the coal will be produced from a geological stratum lying above or immediately below the deepest stratum from which other minerals are extracted for purposes of bona fide sale or reasonable commercial use;
- (3) the cumulative revenue derived from the coal extracted will not exceed 50 percent of the total cumulative revenue derived from the coal and other minerals removed for purposes of bona fide sale or reasonable commercial use:
- (4) each other mineral upon which an incidental mining exemption is based is a commercially valuable mineral for which a market exists or that is mined in bona fide anticipation that a market will exist for the mineral in the reasonably foreseeable future, not to exceed 12 months after the end of the current cumulative production period as evidenced by a legally binding agreement for the future sale of the mineral; and
- (5) for coal or other minerals that will be transferred or sold by the operator to a related entity for its use or sale, the transaction will be made for legitimate business purposes. (Eff. 4/24/09, Register 190)

Authority: AS 27.21.020 AS 27.21.030 AS 27.21.998

- 11 AAC 90.660. Conditions of incidental mining exemption and right of inspection and entry. A person mining under an incidental coal mining exemption under 11 AAC 90.652 11 AAC 90.669, or mining pending a final determination as provided under 11 AAC 90.652(f), shall
- (1) maintain on site or at other locations available to authorized representatives of the commissioner, information adequate to verify conformance with the conditions of the exemption, including commercial use and sales information, extraction tonnages, a copy of the exemption application, and a copy, if a final determination has been made, of the commissioner's approval of the exemption;
- (2) notify the commissioner upon the completion of the mining operation or permanent cessation of all coal extraction activities;
- (3) conduct operations in accordance with the application and exemption as approved, or if authorized to extract coal under 11 AAC 90.652(f), in accordance with the standards of 11 AAC 90.652 11 AAC 90.669; and
- (4) allow authorized representatives of the commissioner and the United States Department of Interior, Office of Surface Mining Reclamation and Enforcement to conduct inspections of mining and reclamation operations without advance notice or a search warrant, except a search warrant may be required for entry into a building;

inspections under this paragraph include

- (A) entry to, upon, and through any mining and reclamation operations, upon presentation of appropriate credentials;
- (B) access to and copies of any records relevant to the exemption; and
- (C) the gathering of physical and photographic evidence to document conditions, practices, or violations at a site. (Eff. 4/24/09, Register 190)

- **11 AAC 90.662. Stockpiling of minerals.** (a) Coal extracted and stockpiled may be excluded from the calculation of cumulative production until the time of its sale, transfer to a related entity, or use
- (1) for an incidental extraction mining area where coal has been extracted for a period of two years or more, up to an amount equaling a 12-month supply of the coal required for future sale, transfer, or use as calculated based upon the average annual sales, transfer, and use from the incidental extraction mining area over the two preceding years; or
- (2) for an incidental extraction mining area where coal has been extracted for a period of less than two years, up to an amount that would represent a 12-month supply of the coal required for future sales, transfer, or use as calculated based on the average amount of coal sold, transferred, or used each month.
 - (b) For other minerals extracted and stockpiled, the commissioner
- (1) will disallow all or part of an operator's tonnages of stockpiled other minerals for purposes of meeting the requirements of 11 AAC 90.652 11 AAC 90.669 if
 - (A) the operator fails to maintain adequate and verifiable records of the incidental extraction mining area of origin;
 - (B) the operator fails to maintain adequate and verifiable records of the disposition of stockpiles; or
 - (C) the disposition of the stockpiles indicates that a commercial use or market for the other minerals does not exist:
- (2) will not allow an operator to utilize tonnages of stockpiled other minerals for purposes of meeting the requirements of 11 AAC 90.652 11 AAC 90.669 unless

- (A) the stockpiling is necessary to meet market conditions or is consistent with generally accepted industry practices; and
- (B) except as provided in (3) of this subsection, the stockpiled other minerals do not exceed a 12-month supply of the mineral required for future sales as approved by the commissioner on the basis of the exemption application;
- (3) will allow an operator to utilize tonnages of stockpiled other minerals beyond the 12-month limit established in (2) of this subsection if the operator demonstrates to the commissioner's satisfaction that the additional tonnage is required to meet future business obligations of the operator; and
- (4) may periodically revise the other minerals stockpile tonnage limits in accordance with (2) and (3) of this subsection based on additional information available to the commissioner. (Eff. 4/24/09, Register 190)

- 11 AAC 90.664. Revocation of incidental mining exemption and enforcement. (a) The commissioner will conduct an annual compliance review of the incidental extraction mining area, utilizing the annual report submitted under 11 AAC 90.666, a site inspection, and any other information available to the commissioner.
- (b) If the commissioner finds that a specific incidental extraction mining area did not satisfy the exemption criteria of 11 AAC 90.652 11 AAC 90.669 at the end of the previous reporting period or will be unable to satisfy the exemption criteria at the end of the current reporting period, the commissioner will notify the operator that the exemption may be revoked and the reasons for revocation. The commissioner will revoke the exemption unless, within 30 days after the commissioner issues the notification, the operator demonstrates to the commissioner's satisfaction that activities conducted in the incidental extraction mining area qualify for the exemption. The commissioner will immediately serve the commissioner's decision on revocation on the operator and any intervenors.
- (c) Within 20 days after the commissioner issues the decision whether to revoke an exemption, an adversely affected person may request administrative review of that decision in accordance with 11 AAC 02. A request for administrative review does not stay a decision whether to revoke an exemption.
- (d) An operator who is mining in accordance with the terms of an approved incidental mining exemption under 11 AAC 90.652 11 AAC 90.669 will not be cited for any violations of this chapter that occurred before the revocation of the exemption.
- (e) An operator who conducts activities in violation of the terms of an approved incidental mining exemption under 11 AAC 90.652 11 AAC 90.669, and who knows or

should know that those activities are in violation of the approved exemption, may be subject to direct enforcement action for violations of this chapter that occur during the period of those activities.

(f) Upon revocation of an exemption or denial of an exemption application, an operator shall stop conducting surface coal mining operations until a permit is obtained and shall comply with the reclamation standards of this chapter with regard to conditions, areas, and activities existing at the time of revocation or denial. (Eff. 4/24/09, Register 190)

- 11 AAC 90.666. Reporting requirements. (a) Following approval by the commissioner of an exemption for an incidental extraction mining area, the person receiving the exemption shall, for each incidental extraction mining area, and annually within 30 days after the end of the cumulative measurement period, file a written report with the commissioner containing the information specified in (b) of this section. The information must include
- (1) annual production of coal and other minerals, and annual revenue derived from coal and other minerals during the preceding 12-month period; and
- (2) the cumulative production of coal and other minerals and the cumulative revenue derived from coal and other minerals.
- (b) For each period and incidental extraction mining area covered by the report, the report must specify
- (1) the number of tons of extracted coal sold in bona fide sales, and the total revenue derived from those sales;
- (2) the number of tons of coal extracted and used by the operator or related entity, and the estimated total fair market value of that coal;
- (3) the number of tons of coal extracted and transferred by the operator to a related entity, and the estimated total fair market value of that coal;
 - (4) the number of tons of stockpiled coal;
- (5) the number of tons of other minerals extracted and sold in bona fide sales, and the total revenue derived from those sales;
- (6) the number of tons of other minerals extracted and used by the operator or related entity, and the estimated total fair market value of those minerals;
 - (7) the number of tons of other minerals extracted and transferred by the

operator to a related entity, and the estimated total fair market value of those minerals; and

(8) the number of tons of other minerals removed and stockpiled by the operator. (Eff. 4/24/09, Register 190)

Authority: AS 27.21.030 AS 27.21.998

11 AAC 90.669. Definitions applicable to incidental mining exemption. In 11 AAC 90.652 - 11 AAC 90.669, unless the context requires otherwise,

- (1) "cumulative measurement period" means the period of time
- (A) over which both cumulative production and cumulative revenue are measured:
- (B) that begins, subject to commissioner approval, on the following date selected and consistently used by the operator:
 - (i) for incidental extraction mining areas where coal or other minerals were extracted before August 3, 1977, the date extraction of coal or other minerals commenced at that incidental extraction mining area or August 3, 1977;
 - (ii) for incidental extraction mining areas where extraction of coal or other minerals commenced on or after August 3, 1977, the date extraction of coal or other minerals commenced at that incidental extraction mining area; and
- (C) that ends on the last day of the calendar quarter during which coal extraction commenced, and each anniversary of that day afterwards;
- (2) "cumulative production" means the total tonnage, as modified under 11 AAC 90.662, of coal or other minerals extracted from an incidental extraction mining area during the cumulative measurement period;
- (3) "cumulative revenue" means the sum of the total revenue derived from the sale of coal or other minerals extracted from an incidental extraction mining area during the cumulative measurement period and the fair market value, determined at the time of use or transfer, of coal or other minerals extracted from an incidental extraction mining area during the cumulative measurement period that are transferred to a related entity or used by the operator, but not sold, during the cumulative measurement period;
- (4) "incidental extraction mining area" means an individual excavation site or pit from which coal, other minerals, material, and overburden are removed. (Eff. 4/24/09, Register 190)

ARTICLE 14.

PROCESS FOR IDENTIFYING LAND UNSUITABLE FOR MINING.

Section

- 701. Petition filing
- 703. Initial processing of petitions
- 705. Notification and request for information
- 707. Data base and inventory system
- 709. Hearing requirements
- 711. Decision713. Maps and records
- 715. Land exempt from designation
- **11 AAC 90.701. Petition filing.** (a) A petition filed with the commissioner under AS 27.21.260(b) to designate lands as unsuitable for surface coal mining operations must include
- (1) the petitioner's name, address, telephone number, and notarized signature;
- (2) identification of the petitioned area, including its location and size, and a United States Geological Survey topographic map outlining the perimeter of the petitioned area;
- (3) an identification of each of the petitioner's interests that is or may be adversely affected by surface coal mining operations, a description of the injury to each of the petitioner's specific affected interests, and a demonstration of how the petitioner is among persons whose interests are or may be injured;
- (4) a description of how mining of the area has affected or may adversely affect people, land, air, water, or other resources, including the petitioner's interests;

NATURAL RESOURCES

- (5) allegations of fact and supporting evidence that cover all lands in the petition area, and that tend to establish that the area is unsuitable for all or certain types of surface coal mining operations, under the criteria of AS 27.21.260(c) specified in the allegations, assuming that contemporary mining practices required under AS 27.21 and this chapter would be followed if the area were to be mined; each allegation of fact must
 - (A) be specific as to the mining operation, if known;
 - (B) specify each portion of the petitioned area that would be affected;
 - (C) specify the petitioner's interests that would be affected; and
 - (D) be supported by evidence that tends to establish the validity of the allegations; and
- (6) other information that is readily available and that the commissioner considers necessary to making a determination whether to designate lands as unsuitable for surface coal mining operations.
- (b) A petition filed with the commissioner under AS 27.21.260(b) to terminate a designation of lands as unsuitable for surface coal mining operations must include
- (1) the petitioner's name, address, telephone number, and notarized signature;
- (2) identification of the petitioned area, including its location and size, and a United States Geological Survey topographic map outlining the perimeter of the area to which the termination petition applies;
- (3) an identification of each of the petitioner's interests that is or may be adversely affected by the designation of lands as unsuitable for surface coal mining operations, a description of the injury to each of the petitioner's specific affected interests, and a demonstration of how the petitioner is among persons whose interests are or may be injured;
- (4) allegations of fact and supporting evidence that cover all lands for which termination of the designation is proposed, and that tend to establish that the designation should be terminated under the criteria of (c) of this section specified in the allegations, assuming that contemporary mining practices required under AS 27.21 and this chapter would be followed if the area were to be mined; for areas previously and unsuccessfully proposed for termination, significant new allegations of facts and supporting evidence must be presented; each allegation of fact must
 - (A) be specific as to the mining operation, if any;
 - (B) specify each portion of the petitioned area that would be affected:

- (C) specify the petitioner's interests that would be affected; and
- (D) be supported by evidence that
- (i) is not contained in the record of the designation proceeding; and
 - (ii) tends to establish the validity of the allegations; and
- (5) other information that is readily available and that the commissioner considers necessary to making a determination whether to terminate a designation of lands as unsuitable for surface coal mining operations.
- (c) For a petition filed under (b) of this section, criteria that must be specified in support of termination of the designation include at least one of the following:
- (1) the nature of or the abundance of the protected resource or condition or other basis of the designation, if the designation was based on the criteria set out in AS 27.21.260(c)(2);
- (2) reclamation now being technologically and economically feasible, if the designation was based on the criteria set out in AS 27.21.260(c)(1);
- (3) resources or conditions not being affected by surface coal mining operations, or in the case of land use plans, not being incompatible with surface coal mining operations during and after mining, if the designation was based on the criteria set out in AS 27.21.260(c)(2). (Eff. 4/24/09, Register 190)

- 11 AAC 90.703. INITIAL PROCESSING OF PETITIONS. (a) Within 30 days after the receipt of a petition filed under AS 27.21.260(b), the commissioner will notify the petitioner by certified mail whether or not the petition is complete. If the petition is complete, no party bears any further burden of proof in the petition proceeding.
- (b) If the commissioner determines that a petition is incomplete, it will be returned to the petitioner with a written statement of the reasons for the determination and the categories of information needed to make the petition complete, and the petitioner may resubmit the petition.
- (c) The commissioner will determine whether any identified coal resources exist in the area described in the petition. If the commissioner finds that there are no identified coal resources in that area, the petition will be returned to the petitioner with a statement of findings.
 - (d) If the commissioner finds that a petition is frivolous, the petition will be

returned to the petitioner with a statement of the findings.

- (e) Repealed 11/18/94.
- (f) When considering a petition for an area that was previously and unsuccessfully proposed for designation, other than petitions previously determined to be incomplete, the commissioner will determine whether or not the petition presents substantial new allegations of facts and supporting evidence. If the petition does not contain substantial new allegations of facts, the commissioner will return the petition with a statement of findings and a reference to the record of the previous designation proceedings.
- (g) Petitions received after the close of the public comment period on a permit application relating to the same area will not prevent the commissioner from issuing a decision on that permit application. The commissioner will, in his or her discretion, return the petition to the petitioner with a statement of why the petition will not be considered. For the purpose of this section, "close of the public comment period" means the close of the period for filing written comments and objections under 11 AAC 90.115 or the close of the informal conference, whichever is later. If a petition submitted during the public comment period on a permit application is considered incomplete, the commissioner will allow the petitioner to resubmit the petition within 15 days after the rejection or before the close of the public comment period, whichever is longer. Resubmissions made after the close of the public comment period may only clarify or refine materials that were originally submitted and may not provide new allegations as the basis of the petition. (Eff. 5/2/83, Register 84; am 11/18/94, Register 132)

- 11 AAC 90.705. NOTIFICATION AND REQUEST FOR INFORMATION. (a) Within 14 days after a petition is received, the commissioner will make the petition available in accordance with 11 AAC 90.907(b), and will provide notice in accordance with 11 AAC 90.907(d).
- (b) The commissioner will notify the petitioner of any application for a permit that proposes to include any area covered by the petition.
- (c) Within 21 days after a determination that a petition is complete, the commissioner will circulate copies of the petition to, and request submission of relevant information from:
 - (1) Other interested government agencies;
 - (2) native corporations and villages in the adjacent area;
 - (3) the petitioner;

- (4) intervenors under (e) of this section;
- (5) persons known to have an ownership or other property interest in the petition area; and
- (6) other persons who have expressed to the commissioner an interest in the property or the petition.
- (d) Within 21 days after a determination that a petition is complete, the commissioner will provide notice in accordance with 11 AAC 90.907 (d), including a newspaper advertisement published once a week for two consecutive weeks. The notice will request submission of relevant information and will request that a person with an ownership or other interest in the property covered by the petition who wishes to be notified of any hearing contact the commissioner.
- (e) Until 14 days before the commissioner holds a public hearing on a petition under 11 AAC 90.709, any person may intervene in the proceeding by filing
 - (1) the intervenor's name, address, and telephone number;
- (2) identification of the intervenor's interest which is or may be adversely affected;
 - (3) an identification of the petition;
- (4) allegations of fact and supporting evidence that would tend to establish or dispute the allegations found in the petition. (Eff. 5/2/83, Register 84; am 11/18/94, Register 132)

- 11 AAC 90.707. DATA BASE AND INVENTORY SYSTEM. (a) The commissioner will develop and maintain a database and inventory system that permits evaluation of reclamation feasibility in areas covered by petition.
- (b) The commissioner will include in the data base and inventory system information relevant to the criteria in AS 27.21.260(c).
- (c) The data base and inventory system will include sufficient information to prepare the statements required in 11 AAC 90.711, including information on
 - (1) the coal resources of Alaska;
 - (2) the demand for Alaskan coal;
 - (3) the supply of Alaskan coal;

NATURAL RESOURCES

- (4) the economy of Alaska and its coal mining regions;
- (5) subsistence practices and use areas; and
- (6) the environment and natural resources of Alaska.
- (d) The commissioner will include in the data base and inventory system relevant information that becomes available from federal, state, and local agencies, petitions, publications, studies, experiments, permit applications, surface coal mining operations, and other sources.
- (e) The commissioner will make the record, data base, and information system available for public inspection, free of charge, and copying at reasonable cost during all normal business hours. (Eff. 5/2/83, Register 84)

Authority: AS 27.21.030 AS 27.21.100 AS 27.21.260

- 11 AAC 90.709. HEARING REQUIREMENT. (a) The commissioner will, in his or her discretion, delay a hearing under AS 27.21.260(b) up to five additional months if the delay is necessary to provide a field season and a reasonable period of time to review the results of the field surveys. If all petitioners and intervenors agree, the hearing may be delayed further, may be held in some other location or need not be held. The commissioner will make a record of the hearing.
- (b) The commissioner will give notice of the date, time, and location of the hearing to
- (1) federal, state, and municipal agencies and native corporations and villages that may have an interest in the petition;
 - (2) the petitioner and the intervenors;
- (3) persons known to have an ownership or other property interest to the petition area; and
- (4) persons who have expressed to the commissioner an interest in the petition area.
- (c) Notice of the hearing will be sent by certified mail to the persons identified in (b)(2) and (3) of this section and by regular mail to the persons identified in (b)(1) and (b)(4) of this section, and be postmarked not less than 30 days before the scheduled date of the hearing.
- (d) The commissioner will notify the general public of the date, time, and location of the hearing at least 30 days before the hearing and during the week before the hearing by newspaper notices and other methods under 11 AAC 90.907(d).

NATURAL RESOURCES

(e) The commissioner will, in his or her discretion, consolidate in a single hearing the hearings required for each of several petitions that relate to areas in the same locale. (Eff. 5/2/83, Register 84)

Authority: AS 27.21.030 AS 27.21.260

Register 190, July 2009

- 11 AAC 90.711. DECISION. (a) In reaching a decision on a petition, the commissioner will use system;
 - (1) the relevant information contained in the data base and inventory
- (2) relevant information or analysis submitted during the comment period and public hearing; and
 - (3) relevant information provided by other governmental agencies.
- (b) A final written decision, including a statement of reasons, will be issued by the commissioner within 60 days after completion of the public hearing or, if no public hearing is held, within 12 months after receipt of the complete petition unless otherwise extended by agreement of the petitioners and intervenors; the commissioner will simultaneously send the decision by certified mail to the petitioner, all intervenors, and to the federal Office of Surface Mining, and by regular mail to all other persons who have requested a copy of the decision.
- (c) If the commissioner does not designate a petitioned area under this chapter, the commissioner will, in his or her discretion, direct that any future permits issued for the area contain specific requirements for mitigating the impact of operations on the feature that was the subject of the petition. If, at the time of permit application, the conditions addressed in the petition have changed, the commissioner will, in his or her discretion, modify or delete the mitigation requirements. (Eff. 5/2/83, Register 84)

Authority: AS 27.21.030 AS 27.21.260

11 AAC 90.713. MAPS AND RECORDS. (a) The commissioner will maintain a current map or other unified and cumulative record of areas designated as unsuitable for all or certain types of surface coal mining operations at each district office of the Department of Natural Resources and at the office of

the director of mining. The map will be available for inspection and copying. Copies of these maps will be distributed to appropriate federal, state, and municipal agencies and native corporations and villages whenever the maps are updated. (Eff. 5/2/83, Register 84)

- 11 AAC 90.715. LAND EXEMPT FROM DESIGNATION. (a) Petitions for designating land as unsuitable for all or certain surface coal mining operations will not be considered for
- (1) land on which surface coal mining operations were being conducted on August 3, 1977:
- (2) land covered by a permit issued under this chapter or a permit application for which the public comment has closed according to 11 AAC 90.113; or
- (3) land where substantial legal and financial commitments in surface coal mining operations were in existence before January 4, 1977.
- (b) The determination of "substantial legal and financial commitments" under (a)(3) of this section will be based on a finding that significant investments have been made on the basis of a long term coal contract. The costs of acquiring the coal in place or the right to mine the coal will not alone constitute a substantial legal and financial commitment in the absence of an existing mine. In determining whether significant investments have been made, the commissioner will consider various factors including
- (1) the actual expenditure of a substantial amount of money or the execution of a valid and binding contract for the expenditure of a substantial amount of money on the improvement or modification of land within, for access to, or in support of surface coal mining operations in the petitioned area; and
- (2) the actual expenditure of a substantial amount of money or the execution of a valid and binding contract for a substantial amount of money on exploration, mapping, surveying, and geologic work, as well as engineering and legal fees, associated with the acquisition of the property or preparation necessary to conduct surface coal mining and reclamation operations. (Eff. 5/2/83, Register 84)

Authority: AS 27.21.030 AS 27.21.260

ARTICLE 15.

CONFLICT OF INTEREST.

Section

- 751. Report of financial interest
- 753. Contents of statement

- 755. Gifts and gratuities
- 757. Resolution of prohibited interests
- 759. Appeal procedures
- 11 AAC 90.751. REPORT OF FINANCIAL INTEREST. (a) All affected persons shall file a statement of employment and financial interest on the required the federal Office of Surface Mining Form with the commissioner by February I of each year. However, persons hired or retained after February 1 shall file their statement by the date that they begin work for the department and are not required to file an annual statement on the next annual filing date if that date occurs within two months after the filing of their first statement.
- (b) The commissioner will prepare a list of positions within the department involving the performance of functions or duties under AS 27.21 and will annually review and update the list. (Eff. 5/2/83, Register 84; am 9/28/86, 99)

- 11 AAC 90.753. CONTENTS OF STATEMENT. (a) The statement required by 11 AAC 90.751 must contain the following information regarding any prohibited interest that the affected person, his or her spouse, minor children, or any relative who resides full time in his or her home may have:
- (1) statement of employment, including continuing financial interests in business entities and not-for-profit organizations through a pension or retirement plan, shared income, salary or other income arrangement resulting from prior or current employment; however, guaranteed income under a retirement plan, which is unlikely to change as a result of any action the commissioner may take, need not be reported;
- (2) a list of securities, including any financial interest in business entities and not-for-profit organizations through ownership of stock, stock options, bonds, securities or other arrangements, including trusts; however, holdings in widely diversified mutual funds, investment clubs, or regulated investment companies not specializing in coal mining operations need not be reported;
- (3) a list of real property, including ownership, lease, royalty, or other interests or rights in land or minerals; however, land developed and occupied for a personal residence need not be reported; and
- (4) a list of creditors, including business entities and not-for-profit organizations to which the affected person is indebted; however, debts owed to financial institutions which are chartered to provide commercial or personal credit, charge

accounts, and similar short term debts for current and ordinary household and living expenses need not be reported.

- (b) An affected person is expected to have complete knowledge of his or her personal involvement in a business enterprise such as a sole proprietorship and partnership, his or her outside employment, and the outside employment of the spouse and other covered relatives and to be aware of the information contained in the annual financial statement or other corporate or business reports routinely circulated to investors or routinely made available to the public.
 - (c) The statement required by 11 AAC 90.751 must contain
- (1) a signed certification by the affected person that, to the best of his or her knowledge,
- (A) none of the listed financial interests represents an interest in a coal mining operation other than an interest which (a) of this section exempts; and
- (B) the information shown on the statement is true, correct, and complete; and
- (2) a description of the financial interests believed exempt under (a) of this section which provides enough information for the commissioner to determine whether a conflict of interest under AS 27.21.050 exists, including:
 - (A) the identity of the financial interests;
- (B) the number of shares of, estimated value of, and the annual income from these financial interests; and
- (C) any other information which the commissioner should consider in determining whether or not the interest presents a conflict. (Eff. 5/2/83, Register 84)

- 11 AAC 90.755. GIFTS AND GRATUITIES. (a) Except as provided in (b) of this section, affected persons may not solicit or accept, directly or indirectly, any gift, gratuity, favor, entertainment, loan, or other thing of monetary value from a coal company which
- (1) conducts, or is seeking to conduct, operations or activities that are regulated by the commissioner; or
- (2) has interests that may be substantially affected by the performance or nonperformance of the affected person's function or duty under AS 27.21.

- (b) The prohibitions in (a) of this section do not apply
- (1) in the context of obvious family or personal relationships when the circumstances make it clear that it is these relationships, rather than the business interest of the affected person, which prompted the solicitation or acceptance described under (a) of this section; or
- (2) to meals, transportation, lodging or similar expenses when these expenses facilitate performance of the affected person's duties or functions under AS 27.21.
- (c) Affected persons who violate the provisions of this section are subject to administrative remedies which may include
 - (1) return of the gift or gratuity;
 - (2) reassignment;
 - (3) suspension or reduction in pay;
 - (4) job termination; and
- (5) for private contractors, termination of the contract. (Eff. 5/2/83, Register 84)

- 11 AAC 90.757. RESOLUTION OF PROHIBITED INTERESTS. (a) A department employee who fails to file the statement required by 11 AAC 90.751 will be considered in violation of the provisions of AS 27.21.050 and is subject to removal from his or her duties under that Act.
- (b) If the commissioner determines that an affected person has a prohibited interest, he or she will promptly notify that person that remedial action which will resolve the conflict must be taken within 90 days. Remedial action may include:
- (1) reassignment of a department employee to a position where he or she does not perform any function or duty under AS 27.21;
 - (2) divestiture of the prohibited financial interest;
 - (3) termination of the contract of a private contractor;
 - (4) other appropriate action which eliminates the conflict; or
 - (5) an administrative remedy under 11 AAC 90.755(c).

Register 190, July 2009 NATURAL RESOURCES

(c) If 90 days after an affected person is notified to take remedial action, that person is not in compliance with the requirements of AS 27.21.050, the commissioner will take appropriate action as specified in (b) of this section and report the facts of the situation to the federal Office of Surface Mining. The report to the federal Office of Surface Mining will include the original or a certified true copy of the affected person's statement and any other relevant information, including a statement of actions being taken at the time the report is made. (Eff. 5/2/83, Register 84)

Authority: AS 27.21.030 AS 27.21.050

11 AAC 90.759. APPEAL PROCEDURES. Affected persons have the right to appeal an order for remedial action under 11 AAC 90.757 and will have 30 days to exercise this right before disciplinary action is initiated. Department employees may file their appeal, in writing, through procedures within the department. (Eff. 5/2/83, Register 84)

Authority: AS 27.21.030 AS 27.21.050

ARTICLE 16.

TRAINING, EXAMINATION, AND CERTIFICATION OF BLASTERS.

Section

- 771. Blaster certification required
- 773. Training and experience
- 775. Application
- 777. Examination content and procedure
- 779. Certification
- 781. Certification renewal
- 783. Certification by credentials
- 785. Suspension and revocation

11 AAC 90.771. BLASTER CERTIFICATION REQUIRED. (a) No later than 12

months after these regulations11 AAC 90.771-11 AAC 90.785 are approved by the director of the federal Office of Surface Mining, all blasting at surface coal mining operations must be conducted by a person certified under these provisions. Before that time, all blasting operations must be conducted by competent experienced persons who understand the hazards involved.

- (b) In 11 AAC 90.771-11 AAC 90.785 "blaster" means a person directly responsible for the use of explosives in surface coal mining operations who is certified under 11 AAC 90.779-11 AAC 90.783.
- (c) A blaster's certificate must be available for inspection at the permit area during blasting operations.
- (d) A person who is not certified and who is assigned to the blasting crew or who assists in the use of explosives must receive direction and on-the-job training from a blaster.
- (e) A blaster and at least one other person must be present at the firing of all blasts.
- (f) A person responsible for blasting operations must be familiar with the blasting plan and any site-specific performance standards or stipulations. (Eff. 9/28/86, Register 99)

- 11 AAC 90.773. TRAINING AND EXPERIENCE. (a) Before applying for blaster certification, a person must have completed verifiable training in the following subjects:
 - (1) explosives, including
 - (A) selection of types of explosives to be used;
- (B) determination of the properties of explosives which will produce the desired results at an acceptable level of risk; and
 - (C) handling, transportation, and storage of explosives;
 - (2) blast designs, including
 - (A) geologic and topographic considerations;
 - (B) design of a blast hole with critical dimensions;
 - (C) pattern design, field layout, and timing of blast holes; and
 - (D) field applications;

explosives;

- NATURAL RESOURCES

 (3) loading blast holes, including priming and boostering;

 (4) initiating systems and blasting machines;

 (5) blasting vibrations, airblast, and flyrock, including:

 (A) monitoring techniques; and

 (B) methods to control adverse effects;

 (6) secondary blasting applications;

 (7) current federal and state regulations applicable to the use of

 (8) blast records;

 (9) schedules;

 (10) preblasting surveys, including:

 (A) availability;

 (B) coverage;

 (C) consideration of in-blast design;
- (11) blast plan requirements;
- (12) certification and training;
- (13) signs, warning signals, and site control; and
- (14) unpredictable hazards including:
 - (A) lighting;
 - (B) stray currents;
 - (C) radio waves; and
 - (D) misfires.
- (b) The commissioner will ensure that training is available in the subjects listed in (a) of this section by maintaining and periodically updating a list of formal training courses and self-study materials that provide the required training.
- (c) Before applying for blaster certification a person must have a minimum of 12 months of verifiable practical experience that demonstrates practical knowledge of

Register 190, July 2009 NATURAL RESOURCES

blasting techniques, understanding of the hazards involved in the use of explosives, and a pattern of conduct consistent with the responsibilities of a certified blaster. (Eff. 9/28/86, Register 99)

Authority: AS 27.21.030 AS 27.21.940

- 11 AAC 90.775. APPLICATION. (a) An applicant for blaster certification shall submit a notarized application on a form approved by the commissioner at least 30 days before the date on which the applicant wishes to take a scheduled examination. The application must be accompanied by the fee prescribed by 11 AAC 05.010(a)(11)(J).
- (b) The commissioner will review each application for blaster certification to ensure that the requirements of 11 AAC 90.773(a) and (c) have been met. If those requirements have not been met, the application will be returned to the applicant with an explanation of what must be done to meet those requirements. (Eff. 9/28/86, Register 99)

Authority: AS 27.21.030 AS 27.21.940

- 11 AAC 90.777. EXAMINATION CONTENT AND PROCEDURE. (a) The commissioner will establish a schedule for blaster examinations, which will be given quarterly. The written examination will, at a minimum, test the applicant's knowledge in each of the subjects listed in 11 AAC 90.773. The examination will also include, in the commissioner's discretion, oral or written questions concerning field blasting situations and the blasting plan of a particular operation. The commissioner will establish and announce the passing grade for the examination.
- (b) An applicant who fails an examination may apply for reexamination by submitting a new application and fee. (Eff. 9/28/86, Register 99)

- 11 AAC 90.779. CERTIFICATION. (a) The commissioner will issue a blaster certificate if he or she finds that the applicant has the verifiable training and experience required under 11 AAC 90.773 and has passed the examination required under 11 AAC 90.777. Certification will be for a three-year period.
- (b) The commissioner will replace the certificate of a blaster certified in Alaska who submits a signed statement that his or her certificate was lost or destroyed.
- (c) The following conditions apply to all blaster certifications. Failure to comply with these conditions constitutes grounds for certification suspension or revocation

under 11 AAC 90.785:

- (1) the blaster shall take every reasonable precaution to protect his or her certificate from loss, theft, or unauthorized duplication; any of these occurrences must be reported immediately to the commissioner,
- (2) the blaster shall immediately exhibit his or her certificate to an authorized representative of the commissioner or the federal Office of Surface Mining upon request,
 - (3) the certification may not be assigned or transferred, and
- (4) the blaster may not delegate his or her responsibility to a individual who is not a certified blaster. (Eff. 9/28/86, Register 99)

Authority: AS 27.21.030 AS 27.21.940

- 11 AAC 90.781. CERTIFICATION RENEWAL. (a) The commissioner will accept an application for renewal of a certification on a form approved by the commissioner during the six-month period preceding the expiration of a blaster's certification. The application must be accompanied by the fee prescribed by 11 AAC 05.010(a)(11)(J).
- (b) The commissioner will, in his or her discretion, require a written examination for certification renewal
- (1) because of significant changes in federal or state regulations or in blasting technology; or
- (2) if the applicant for renewal has not worked as a blaster for at least one of the preceding three years.
- (c) If an examination is not required under (b) of this section, the commissioner will, within 30 days of receipt of the application, renew the blaster certification for the three year period after the expiration date of the current certification.
- (d) If an examination is required under (b) of this section, the commissioner will advise the applicant of the date and place for examination. If the applicant passes the examination, the commissioner will renew the blaster certification for the three-year period after the expiration date of the current certification. If the applicant fails the examination, the commissioner will allow the applicant to take a second examination for renewal. If the applicant fails to pass the second examination, he or she may apply for certification in accordance with 11 AAC 90.775. (Eff. 9/2//86, Register 99)

- 11 AAC 90.783. CERTIFICATION BY CREDENTIALS. (a) The commissioner will, in his or her discretion, issue a blaster certificate to an applicant who holds a current blaster certificate issued under an out-of-state blaster certification program approved by the federal Office of Surface Mining. A person certified under this subsection must pass the next regularly scheduled blaster examination under 11 AAC 90.777. If the person does not pass that examination, his or her certification is revoked, but the person may apply for certification under 11 AAC 90.775.
- (b) A certification under this section expires on the expiration date of the out-ofstate certification, except that no certification under this section may be for longer than three years.
- (c) Certification under this section may be renewed in accordance with 11 AAC 90.781. (Eff. 9/28/86, Register 99)

- 11 AAC 90.785. SUSPENSION AND REVOCATION. (a) Upon a written finding that any of the following grounds for suspension or revocation exist, the commissioner will, in his or her discretion, suspend or revoke a blaster's certification:
 - (1) noncompliance with an order of the commissioner;
- (2) unlawful use in the work place of, or current addiction to, alcohol, narcotics, or other dangerous drugs;
- (3) violation of a provision of state or federal explosives laws or regulations;
 - (4) violation of the conditions in 11 AAC 90.779(c); or
 - (5) providing false information to obtain certification.
- (b) Upon a written finding that any of the conduct described in (a) of this section was willful, the commissioner will suspend or revoke a blaster's certification.
- (c) If practical, the commissioner will provide the blaster with written notice and the opportunity for a hearing before suspension or revocation of certification; otherwise, an opportunity for hearing will be provided as soon as practical after the suspension or revocation.
- (d) Upon suspension or revocation, the blaster shall immediately surrender his or her certificate to the commissioner. The commissioner will reinstate a suspended certification, when the conditions of the suspension are satisfied, by returning the certification to the blaster.

Register 190, July 2009 NATURAL RESOURCES

(e) A person whose blaster certification was revoked may apply for new certification in accordance with 11 AAC 90.775. A new certificate will not be issued unless the commissioner finds that the cause of the revocation has been corrected. (Eff. 9/28/86, Register 99)

Authority: AS 27.21.030 AS 27.21.940

ARTICLE 17.

ABANDONED MINES.

Section

- 800. Alaska abandoned mined land reclamation fund
- 808. Fund objectives
- 816. Noncoal reclamation
- 824. Impact assistance
- 832. Emergency reclamation
- 840. Rights of entry
- 848. Land acquisition
- 856. Procedures for land acquisition
- 864. Management of acquired land
- 872. Land disposal
- 880. Liens and appraisals
- 888. Imposition of liens
- 896. Satisfaction of liens

11 AAC 90.800. ALASKA ABANDONED MINED LAND RECLAMATION FUND. The commissioner will establish an account, known as the "Alaska Abandoned Mined Land Reclamation Fund (fund)," to receive money from the following sources:

- (1) the federal Office of Surface Mining grants for operating the Alaska abandoned mined land reclamation program;
- (2) charges collected for use of land acquired or reclaimed with money from the fund under 11 AAC 90.864;
- (3) money recovered through satisfaction of liens filed under AS 27.21.310;
- (4) money recovered by the state from sale of land acquired under AS 27.21.300;
 - (5) grant money and donations from private and public sources;
- (6) money deposited in the fund to carry out the Alaska abandoned mined land reclamation program. (Eff. 12/18/83, Register 88)

Authority: AS 27.21.030(13) AS 27.21.270

- 11 AAC 90.808. FUND OBJECTIVES. Money in the fund will, in the commissioner's discretion, be spent on eligible land and water which has been adversely affected by coal mining practices, as described in AS 27.21.280, in a manner which reflects the following priorities in the order listed:
- (1) protection of public health, safety, general welfare, and property from extreme danger;
 - (2) protection of public health, safety, and general welfare;
- (3) restoration of land, water, and the environment, including measures for the conservation and development of soil, woodland, fish and wildlife, recreation, agriculture, and water, except channelization;
- (4) research and demonstration projects relating to the development of surface mining reclamation and water quality control program methods and techniques;
- (5) protection, repair, replacement, construction, or enhancement of utilities, roads, recreation, conservation, and other public facilities; and,
- (6) development of publicly owned land, including land acquired under AS 27.21.300, for recreation, historic purposes, conservation, reclamation purposes, and open space benefits. (Eff. 12/18/83, Register 88)

Authority: AS 27.21.030(13) AS 27.21.270(1)

- 11 AAC 90.816. NONCOAL RECLAMATION. (a) Land or water mined or affected by mining of minerals and materials other than coal is eligible for reclamation with fund money if necessary to protect the public health and safety, or if all coal-related reclamation has been accomplished. This noncoal reclamation will take place only if
 - (1) authorized by AS 27.21.320;
 - (2) the mining occurred before August 3, 1977;
- (3) the land or water was left in either an unreclaimed or inadequately reclaimed condition;
- (4) there is no continuing responsibility for reclamation by the operator or permittee under state or federal law; and
 - (5) the governor has requested the reclamation.
- (b) Money from the fund will, in the commissioner's discretion, be spent on land and water under this section in a manner which reflects the following priorities in the order listed:
 - (1) resolution of problems endangering life;
- (2) resolution of problems constituting a hazard to the public health or safety;
- (3) restoration of the environment adversely affected by past mining. (Eff. 12/18/83, Register 88)

Authority: AS 27.21.030(13) AS 27.21.270 AS 27.21.320

- 11 AAC 90.824. IMPACT ASSISTANCE. Money from the fund may be used for construction of public facilities in communities impacted by coal development if the governor certifies and the federal Office of Surface Mining concurs that:
- (1) all areas under 11 AAC 90.808 and 11 AAC 90.816 have been reclaimed
- (2) the public facilities are required to mitigate the adverse effects of coal development; and
- (3) impact funds available under federal law are inadequate for the construction. (Eff. 12/18/83, Register 88)

Authority: AS 27.21.030(13) AS 27.21.270(1)

- 11 AAC 90.832. EMERGENCY RECLAMATION. (a) The commissioner will, in his or her discretion, after making written findings under AS 27.21.330(a), enter property where an emergency exists to abate, control, or prevent the adverse effects of coal mining practices and to do all things necessary to protect the public health, safety, or general welfare in accordance with AS 27.21.330.
- (b) The commissioner will make reasonable efforts, consistent with the emergency conditions, to obtain the written consent of the owner before entering the property. If it is not possible to obtain the written consent of the owner before entering the property, the commissioner will give notice in accordance with 11 AAC 90.840(d) as soon after entry as practical and before undertaking restoration or reclamation work. (Eff. 12/18/83, Register 88)

- 11 AAC 90.840. RIGHTS OF ENTRY. (a) The commissioner has the right to enter property
 - (1) that has been adversely affected by past mining practices;
 - (2) necessary for access to property described in (a)(1) of this section; or
- (3) to conduct studies or exploratory work to determine whether there are adverse effects of past mining practices and the feasibility of restoring or reclaiming the land or abating, controlling, or preventing the adverse effects of past mining.
- (b) The right of entry will, in the commissioner's discretion, be exercised for the purposes described in AS 27.21.290, AS 27.21.320, or AS 27.21.330.
- (c) Except as authorized by AS 27.21.330, the commissioner will make a reasonable effort to obtain the written consent of the owner of the property before exercising the right of entry under (a) of this section.
- (d) If the owner does not give written consent, the commissioner will comply with AS 27.21.290 (c) before entering the property, except as authorized by AS 27.21.330; the commissioner will send written notice, return receipt requested, to the owner, if known, at least 30 days before entering the property; the notice will include the findings required under AS 27.21.290(c) (2); if the owner is not known, the commissioner will comply with the notice requirements of AS 27.21.290(c)(1) and include in the notices the address where a copy of the findings required under AS 27.21.290(c)(2) may be obtained.
- (e) The commissioner will, in his or her discretion, enter land under (a)(3) of this section after making a written finding that there is reason to believe that the conditions described in AS 27.21.290(c)(2) exist. (Eff. 12/18/83, Register 88)

Register 190, July 2009 NATURAL RESOURCES

Authority: AS 27.21.030(13) AS 27.21.270 AS 27.21.290

AS 27.21.320 AS 27.21.330

11 AAC 90.848. LAND ACQUISITION. (a) The commissioner will, in his or her discretion, acquire land in accordance with the requirements of AS 27.21.300, conservation purposes under AS 27.21.300(a)(2) include agriculture, if federal money is used for the acquisition, the commissioner will obtain approval from the federal Office of Surface Mining in advance.

- (b) Any money in the fund which was received from the federal Office of Surface Mining will, in the commissioner's discretion, be used to acquire land to fulfill the purposes of AS 27.21.320 if approved in advance by the federal Office of Surface Mining.
- (c) The commissioner will, in his or her discretion, acquire only that interest in the land necessary for the planned reclamation work or the use of the land after reclamation; the commissioner will, in his or her discretion, also acquire interests in improvements on the land, mineral rights, or associated water rights if adequate written assurances cannot be obtained from the owner of the severed interest that the future use of the severed interest will not conflict with the planned reclamation and the interests are necessary for the planned reclamation work or for the use of the land after reclamation. (Eff. 12/18/83, Register 88)

Authority: AS 27.21.030(13) AS 27.21.270 AS 27.21.300

AS 27.21.320

- 11 AAC 90.856. PROCEDURES FOR LAND ACQUISITION. (a) The commissioner will attempt to acquire land or interests in land by purchase from a willing seller; if the commissioner has made all reasonable efforts to purchase the land or interest and has been unsuccessful, the land or interest will, in the commissioner's discretion, be acquired in accordance with AS 09.55.240 -- AS 09.55.460.
- (b) Before acquiring the land or interest in land, the commissioner will obtain an appraisal. The appraisal must state the fair market value of the land or interest as adversely affected by past mining. (Eff. 12/18/83, Register 88)

Authority: AS 27.21.030(13) AS 27.21.300

11 AAC 90.864. MANAGEMENT OF ACQUIRED LAND. (a) Land acquired under AS 27.21.300 or 11 AAC 90.848(b) will, in the commissioner's discretion, be used for any lawful purpose consistent with the planned reclamation work and the use of the land

after reclamation.

- (b) All user fees collected in connection with land acquired with money from the fund will be deposited in the fund.
- (c) The commissioner will, in his or her discretion, transfer administrative responsibility for land to municipalities or quasi-governmental bodies. (Eff. 12/18/83, Register 88)

Authority: AS 27.21.030(13) AS 27.21.270 AS 27.21.300

AS 27.21.320

- 11 AAC 90.872. LAND DISPOSAL. (a) Land acquired under AS 27.21.300 and 11 AAC 90.848(b) will, in the commissioner's discretion, be disposed of in accordance with AS 27.21.300(c), commercial purposes under AS 27.21.300(c) include agriculture.
- (b) Notice of any proposed land disposal under this section will be given in accordance with AS 38.05.345(b) and (c); the notice will state that, if requested, the commissioner will hold a hearing to receive comments on the disposition of land after reclamation or after the abatement, control, or prevention of the adverse effects of past mining practices.
- (c) The land will be sold according to the procedure set out in AS 38.05.055, except that the land may not be sold for less than its current fair market value.
 - (d) Before the disposal, the commissioner will make written findings that
 - (1) the sale meets the requirements of AS 27.21.300(c);
- (2) the planned use of the land is consistent with any state and local land use plans; and
 - (3) it is not in the public interest for the state to retain the land.
- (e) The commissioner will, in his or her discretion, transfer title to land to municipalities or quasi-governmental bodies; the conveyance document will specify for what purposes the land may be used and will provide that title to the land will revert to the state if the land is no longer used for the specified purposes, unless the commissioner approves a new use after complying with the pertinent requirements of AS 27.21.300 and this section.
- (f) All money received from disposal of land acquired under 11 AAC 90.848 will be deposited in the fund if the land was acquired with money from the fund. (Eff. 12/18/83, Register 88)

Register 190, July 2009 NATURAL RESOURCES

Authority: AS 27.21.030(13) AS 27.21.270 AS 27.21.300

AS 27.21.320

11 AAC 90.880. LIENS AND APPRAISALS. (a) The commissioner will, in his or her discretion, file a lien against any private property on which work was done under AS 27.21.290 or AS 27.21.320 in accordance with the requirements of AS 27.21.310.

- (b) After considering the factors listed in AS 27.21.310(a) and 11 AAC 90.888, the commissioner will, in his or her discretion, decide whether to impose or waive a lien; if the decision is made to waive a lien before beginning a project under AS 27.21.290 or AS 27.21.320, no appraisal is necessary; otherwise, the commissioner will obtain a notarized appraisal from an independent appraiser before the start of the reclamation project; the owners of the land and interests which may be subject to a lien may also obtain a notarized appraisal from an independent appraiser before the start of the project; any appraisal conducted under this section must state the estimated market value of the land before reclamation activities.
- (c) After reclamation activities under AS 27.21.290 or AS 27.21.320 are completed, the commissioner will consider the factors in AS 27.21.310 and 11 AAC 90.888 to determine whether to impose or waive a lien; if the decision is made at this time to waive a lien, no further appraisal is necessary; otherwise, the commissioner will obtain a notarized appraisal from an independent appraiser of the estimated market value of the land after reclamation; the owners of the land may also obtain a notarized appraisal from an independent appraiser of the estimated market value of the land after reclamation.
- (d) If the commissioner determines to impose a lien under AS 27.21.310, the amount of the lien will be determined as follows:
- (1) If the owners of the land have obtained appraisals which meet the requirements of (b) and (c) of this section, the amount of the lien will be the difference between the average of the two appraisals of the estimated market value of the land after reclamation and the estimated market value of the land before reclamation.
- (2) If the owners of the land have not obtained appraisals which meet the requirements of (b) and (c) of this section, the amount of the lien will be the difference between the estimated market value of the land after reclamation and the estimated market value of the land before reclamation as shown in the two appraisals obtained by the commissioner under (b) and (c) of this section.
- (3) Notwithstanding the provisions of (1) and (2) of this subsection, in no case may the amount of the lien be greater than the money spent on the project as contained in the statement of costs required by AS 27.21.310(a).
 - (e) The commissioner will, in his or her discretion, specify the appraisal

standards to be used under this section.

(f) If a lien is filed, the commissioner will send a copy of the lien, the statement of costs, and the appraisals to the owner of record of the property by certified mail. (Eff. 12/18/83, Register 88)

Authority: AS 27.21.030(13) AS 27.21.290 AS 27.21.310 AS 27.21.320

- 11 AAC 90.888. IMPOSITION OF LIENS. In determining whether to impose or waive a lien under AS 27.21.310(b), the commissioner will consider
- (1) the extent to which the reclamation work performed on private land benefits the health.

safety, or environmental values of the greater community or area in which the land is located;

- (2) whether the reclamation work is required by an unforeseen occurrence and the work will not result in a significant increase in the market value of the land as it existed immediately before the unforeseen occurrence;
 - (3) the cost of filing the lien in relation to its value; and
 - (4) other pertinent factors. (Eff. 12/18/83, Register 88)

Authority: AS 27.21.030(13) AS 27.21.310

- 11 AAC 90.896. SATISFACTION OF LIENS. (a) A lien under AS 27.21.310 may be satisfied at any time by payment to the commissioner of the amount of the lien; the commissioner will, in his or her discretion, agree to accept partial payments on terms and conditions the commissioner specifies.
- (b) Money received from the satisfaction of liens under AS 27.21.310 will be deposited in the fund.
- (c) A lien under AS 27.21.310 must be satisfied at the time of transfer of title to the land.
 - (d) The commissioner will maintain or renew the lien as may be required by law.
- (e) When a lien is satisfied, the commissioner will file an appropriate instrument with the recording office where the lien was filed. (Eff. 12/18/83, Register 88)

ARTICLE 18.

GENERAL PROVISIONS.

Section

- 901. Applicability
- 903. Intervention
- 905. Notice of civil actions
- 907. Public participation
- 909. Costs and expenses
- 911. Definitions
- 11 AAC 90.901. APPLICABILITY. (a) This chapter applies to all coal exploration and surface coal mining and reclamation operations, except the extraction of
 - (1) coal exempt under AS 27.21.910;
- (2) 250 tons of coal or less by an operator; however, the operator shall comply with the provisions of 11 AAC 90.161 11 AAC 90.167; and
- (3) coal incidental to the extraction of other minerals if the exemption is approved by the commissioner in accordance with 11 AAC 90.652 11 AAC 90.669.
- (b) Noncommercial use under AS 27.21.910(1) does not include the extraction of coal by an integrated company or other entity which uses the coal in its own manufacturing or power plants.
 - (c) Repealed 11/18/94.
- (d) The exemption provided by AS 27.21.910(3) applies only if all the following information is maintained on the construction site:
 - (1) a description of the construction project;
- (2) a description of the exact location of the construction, right-of-way, and boundaries of the area directly affected by the construction; and

- (3) identification of the government agency which is financing construction and a description of the amount and kind of financing, including the percentage of the entire construction costs provided by government financing.
- (e) The commissioner will, in the commissioner's discretion, terminate jurisdiction over all or a portion of a reclaimed surface coal mining and reclamation operation if the commissioner determines in writing that all applicable requirements of the Alaska state program have been successfully completed and any performance bond has been released under AS 27.21.170 and 11 AAC 90.211(g). The commissioner will reassert jurisdiction over the operation or portion of it if it is demonstrated that the commissioner's previous determination to terminate jurisdiction over the operation or a portion of it was based on fraud, collusion, or misrepresentation of a material fact. (Eff. 5/2/83, Register 84; am 11/18/94, Register 132; am 7/29/98, Register 147; am 4/24/09, Register 190)

Authority: AS 27.21.030 AS 27.21.910 **AS 27.21.998**

- 11 AAC 90.903. INTERVENTION. (a) Any person may petition for leave to intervene at any stage in any proceeding before the commissioner under the Act and this chapter.
- (b) A person wishing to intervene shall file a request with the commissioner which sets forth that person's interest in the proceeding and a showing of how his or her interest may be adversely affected.
 - (c) The commissioner will grant permission to intervene if
- (1) the person requesting intervention had a statutory right to initiate the proceeding in which he or she wishes to intervene; or
- (2) the person requesting it has an interest which is or may be adversely affected by the outcome of the proceeding.
- (d) The commissioner will, in his or her discretion, approve the request to intervene absent the showings in (c) of this section after considering
 - (1) the nature of the issues:
- (2) the adequacy of representation of the interests of the person seeking to intervene which is provided by the existing parties to the proceeding;
- (3) the ability of the person seeking to intervene to present relevant evidence and argument; and
- (4) the effect of intervention on the department's implementation of the Act and this chapter. (Eff. 5/2/83, Register 84)

Authority: AS 27.21.030

- 11 AAC 90.905. NOTICE OF CIVIL ACTIONS. (a) A person who intends to initiate a civil action under AS 27.21.950 shall give notice by certified mail to the commissioner and any alleged violator.
- (b) Service of notice under this section is complete upon mailing to the last known address of the person being notified.
- (c) A person giving notice regarding an alleged violation must state, to the extent known
- (1) the act or omission alleged to constitute a violation and the provision of the Act, regulation, order, or permit allegedly violated;
- (2) the name, address, and telephone number of the person or persons responsible for the alleged violation;
 - (3) the date, time, and location of the alleged violation; and
- (4) the name, address, and telephone number of the person giving notice and their legal counsel, if any.
- (d) A person giving notice of an alleged failure by the commissioner to perform a mandatory act or duty under the Act must include, to the extent known, the information required under (c)(1) and (4) of this section. (Eff. 5/2/83, Register 84)

- 11 AAC 90.907. PUBLIC PARTICIPATION. (a) Unless otherwise provided in this chapter, the following public participation requirements apply to all proceedings under the Act or this chapter.
- (b) Except for materials identified in (i) of this section, complete copies of the following documents will be made available for inspection and copying in the district office of the Department of Natural Resources closest to the affected area and in the office of the director of the division of mining and water management:
 - (1) petitions filed under AS 41.45.260, and all related documents;
- (2) applications for permits, major revisions, renewals, or transfers of permits;
 - (3) notices of intent to explore and application for exploration permits;

- (4) request for bond release;
- (5) changes in any of the documents listed in this section;
- (6) written comments, objections, or requests for informal conferences; and
 - (7) other documents filed under the Act of this chapter.
- (c) The commissioner will, in the commissioner's discretion, mail copies of the documents listed in (b) of this section to a resident of the area where mining is occurring or is proposed to occur if the resident makes a request to the commissioner in writing to obtain the documents by mail because the resident is unable to reach one of the offices described in (b) of this section.
- (d) Notice of pending actions listed in (b) of this section will be given in a manner designated by the commissioner and designed to reach members of the public who may be interested, including one or more of the following methods:
- (1) publication in a newspaper of statewide circulation, a newspaper of general circulation in the vicinity of the proposed action, or both;
- (2) public service announcements in the area affected by the proposed action;
- (3) posting or providing handbills in a conspicuous location in the area affected by the proposed action;
- (4) direct notification to parties known or likely to be affected by the action; or
- (5) another method calculated to reach persons who may have an interest in the proposed action.
 - (e)The notice under (d) of this section will contain the following information:
 - (1) the name and address of the person filing the request for action;
- (2) sufficient information to inform the public of the nature of the action, including the location of copies of the documents listed under (b) of this section;
 - (3) a description of the exact area to be affected by the proposed action;
- (4) the address where comments, including objections and requests for hearings or informal conferences, must be filed, and the time period for filing such comments; and
 - (5) other information specified in this chapter.

- (f) In addition to the notice required under (d) of this section, the commissioner will provide written notice containing the information listed in (d) of this section to known government agencies with jurisdiction over or an interest in the area affected by the proposed action.
- (g) A person who is or may be adversely affected by the proposed action, including an official of a federal, state, or local government agency, may file written comments within 30 days after issuance of the notice under (d) of this section.
- (h) The commissioner will review a complete application, petition, notice or request, all written comments, and the record of any informal conference before making a decision. The decision will be written and will contain findings of fact and the determination of any issues presented. A decision will be distributed simultaneously to the person requesting the action, each person who filed a written comment, each party to any informal conference, and appropriate local government officials.
- (i) Material determined to be confidential under AS 27.21.100(c), including information regarding archeological resources on federal or Indian lands protected under the Archaeological Resources Protection Act of 1979 (16 U.S.C. 470aa 470mm), must not be made available for public review or copying; a person either seeking or opposing disclosure of confidential material may request an informal

conference under 11 AAC 90.115.

(j) The department will make the documents described in (b) of this section available for inspection and copying for at least five years after expiration of the period during which the mining operation is active or is covered by any portion of a reclamation bond, whichever is later.

(Eff. 5/2/83, Register 84; am 3/30/84, Register 89; am 9/28/86, Register 99; am 11/18/94, Register 132; am 7/29/98, Register 147)

- 11 AAC 90.909. COSTS AND EXPENSES. (a) A request for costs and attorneys fees under AS 27.21.240(i) must be filed with the commissioner within 30 days of receipt of the commissioner's final order and include an affidavit setting forth all costs and attorneys fees reasonably incurred by the person in connection with the matter, with receipts attached; such a request may include the costs and attorneys fees reasonably incurred in seeking the award of costs and attorneys fees.
- (b) Any party from whom costs and attorneys fees are sought must be served with a copy of the request at the same time it is filed with the commissioner; the party has 30 days from service of the copy of the request to file an answer.
 - (c) The commissioner will, in his or her discretion, award appropriate costs and

attorney fees under AS 27.21.240(i) as follows:

- (1) to any person, from the operator, if the commissioner finds that
- (A) the person initiated or participated in an administrative proceeding to enforce the Act, this chapter, or the permit or approval;
 - (B) the violation alleged occurred; and
- (C) the person made a substantial contribution to the full and fair determination of the issues:
- (2) to any person, other than the operator, from the state, if the commissioner finds that the person made a substantial contribution to a full and fair determination of the issues:
- (3) to an operator, from the state or from another person, if the commissioner finds that the commissioner issued a notice or order, or the person initiated or participated in an enforcement proceeding, in bad faith and for the purpose of harassing or embarrassing the operator.
- (d) An award under this section may be appealed in accordance with the provisions of AS 27.21.240 and AS 44.62.560-570. (Eff. 5/2/83, Register 84)

- 11 AAC 90.911. DEFINITIONS. Unless the context indicates otherwise, in AS 27.21 and this chapter,
- (1) "acid drainage" means water with a pH which may cause or contribute to violation of the Alaska water quality laws and regulations discharged from an active, inactive, or abandoned surface coal mine and reclamation operation or from an area affected by surface coal mining and reclamation operations;
- (2) "acid-forming materials" means earth materials that contain sulfide minerals or other materials which, if exposed to air, water, or weathering processes, form acids that may create acid drainage;
- (3) "Act" means the Alaska Surface Coal Mining Control and Reclamation Act (AS 27.21);
- (4) "adjacent area" means land located outside the affected area or permit area, depending on the context, where air, water, fish, wildlife, vegetation or other resources may be adversely impacted by surface coal mining and reclamation operations;

- (5) "affected area" means any land or water upon or in which mining activities are conducted or located, including land or water which is located above underground mine workings;
- (6) "affected person" as used in 11 AAC 90.751 11 AAC 90.759 means any person subject to the provisions of AS 27.21.050;
- (7) "agricultural activities" means, with respect to alluvial valley floors, the use of any tract of land for the production of domestic animal or vegetable life, where the use is enhanced or facilitated by subirrigation or flood irrigation associated with alluvial valley floors; including pasturing, grazing and watering livestock, and cropping, cultivating or harvesting plants whose production is aided by the availability of water from subirrigation or flood irrigation; but not including agricultural practices which do not benefit from the availability of water from subirrigation or flood irrigation;
- (8) "agricultural use" means the use of any tract of land for the production of domestic animal or vegetable life including pasturing, grazing, and watering livestock and cropping, cultivating, and harvesting plants;
- (9) "aircraft runways" means areas cleared, graded, surfaced, or otherwise modified from the natural condition to facilitate the landing, storage, and servicing of fixed wing and rotary aircraft;
- (10) "Alaska state program" means the program submitted to the Secretary under section 503(a) of the Surface Mining Control and Reclamation Act of 1977:
- (11) "approximate original contour" means that surface configuration achieved by backfilling and grading of the mined area so that the reclaimed area, including any terracing or access roads, closely resembles the general surface configuration of the land before mining and blends into and complements the drainage pattern of the surrounding terrain in accordance with the performance standards of this chapter;
- (12) "aquifer" means a zone, stratum, or group of strata that can store and transmit water in sufficient quantities for a specific use;
- (13) "arid and semiarid area" means, in the context of alluvial valley floors, an area experiencing water deficits where water use by native vegetation equals or exceeds that supplied by precipitation;
- (14) "auger mining" means a method of mining coal at a cliff or highwall by drilling holes into an exposed coal seam from the highwall and transporting the coal along an auger bit to the surface;
- (15) "best technology currently available" or "BTCA" means equipment, devices, systems, methods, or techniques which will prevent, to the extent possible, additional contributions of suspended solids to stream flow or runoff outside the permit

area, but not result in contributions of suspended solids in excess of requirements set by applicable state or federal laws and regulations, and minimize, to the extent possible, disturbances and adverse impacts on fish, wildlife, and related environmental values, and achieve enhancement of those resources where practical; "BTCA" includes equipment, devices, systems, methods, or techniques which are currently available anywhere as determined by the commissioner, even if they are not in routine use; BTCA" includes construction practices, siting requirements, vegetative selection and planting requirements, animal stocking requirements, scheduling of activities, and design of sedimentation ponds in accordance with 11 AAC 90.301 - 11 AAC 90.501; the commissioner will, in his or her discretion, determine the "best technology currently available" on a case-by-case basis;

- (16) "cemetery" means any area of land where human bodies are interred;
- (17) "coal exploration" means
- (A) the field gathering of surface or subsurface geologic, physical, or chemical data by mapping, trenching, drilling, geophysical, or other techniques necessary to determine the quality and quantity of overburden and coal of an area; or
- (B) the gathering of environmental data to establish the conditions of an area before beginning surface coal mining and reclamation operations under the requirements of this chapter;
- (18) "coal processing plant" means a complex of facilities where coal is subjected to crushing, cleaning, concentrating, or other chemical or physical processing;
- (19) "collateral bond" means an indemnity agreement in a sum certain executed by the permittee as principal and supported by the deposit with the commissioner of one or more of the following:
- (A) cash in federally insured accounts payable only to the state upon demand;
- (B) negotiable bonds of the United States, a state, or a municipality, endorsed to the order of the State of Alaska;
- (C) negotiable certificates of deposit made payable or assigned to the state;
- (D) an irrevocable letter of credit of any bank organized or authorized to transact business in the United States, payable only to the state upon presentation;
 - (E) a perfected, first-lien security interest in real property in favor of the state:
 - (F) other investment-grade rated securities having a rating of AAA,

AA or A or equivalent rating issued by a nationally recognized securities rating service, endorsed to the order of the state;

- (20) "combustible material" means organic material that is easily ignited by fire, heat, or oxidation;
- (21) "compaction" means increasing the density of a material by reducing the voids between the particles generally by controlled placement and mechanical effort such as the repeated application of wheel, track, or roller loads from heavy equipment;
- (22) "commissioner" means the commissioner of natural resources or his or her designee. (23) "coal mine waste" means coal processing waste and underground development waste;
- (23) "coal mine waste" means coal processing waste and underground development waste;
- (24) "cropland" means land used for the production of adapted crops for harvest, alone or in a rotation with grasses and legumes, including row crops, small grain crops, hay crops, nursery crops, orchard crops, and other similar specialty crops;
- (25) "direct financial interest" means ownership or part ownership of land, stocks, bonds, debentures, warrants, partnership shares, or other holdings or any other arrangement which may result in a benefit from a holding in or salary from coal mining operations; "direct financial interest" includes employment, pensions, creditor, real property, and other financial relationships;
- (26) "disturbed area" means an area where vegetation, topsoil, aquatic substrate, or overburden is removed or upon which topsoil, spoil, coal processing waste, underground development waste, or noncoal waste is placed or, in the case of aquatic systems where the area is channelized or dewatered, until reclamation is complete and the performance bond or other assurance of performance required by 11 AAC 90.201 11 AAC 90.209 is released;
- (27) "diversion" means a channel, embankment, or other structure constructed to divert water from one area to another;
- (28) "downslope" means the land surface between the projected outcrop of the lowest coal bed being mined along each highwall and a valley floor;
- (29) "embankment" means an artificial deposit of material that is raised above the natural surface of the land and used to contain, divert, or store water, to support roads or railways, or for other similar purposes;
- (30) "emergency" means a sudden danger or impairment that presents a high probability of substantial physical harm to the health, safety, or general welfare of people before the danger can be abated;

- (31) "ephemeral stream" means a stream which flows only in direct response to precipitation in the immediate watershed or in response to the melting of a cover of snow and ice, and which has a channel bottom that is always above the local water table;
- (32) "employee" means any person employed by the department who performs any function or duty under the Act;
- (33) "escrow account bond" means cash deposited in one or more federally insured accounts which are payable on demand only to the state, or cash deposited directly with the state;
- (34) "essential hydrologic functions" means the role of an alluvial valley floor in collecting, storing, regulating, and making the natural flow of surface or ground water, or both, usefully available for agricultural activities by reason of the valley floor's topographic position, the landscape, and the physical properties of its underlying materials; a combination of these functions provides a water supply during extended periods of low precipitation; the role of the alluvial valley floor
- (A) in collecting water includes accumulating runoff and discharge from aquifers in sufficient amounts to make the water available at the alluvial valley floor greater than the amount available from direct precipitation;
- (B) in storing water involves limiting the rate of discharge of surface water, holding moisture in soils, and holding ground water in porous materials;
- (C) in regulating the natural flow of surface water results from the characteristic configuration of the channel flood plain and adjacent low terraces;
- (D) in regulating the natural flow of ground water results from the properties of the aquifers which control inflow and outflow; and
- (E) in making water usefully available for agricultural activities results from the existence of flood plains and terraces where surface and ground water can be provided in sufficient quantities to support the growth of agriculturally useful plants, from the temporal and physical distribution of water making it accessible to plants throughout the critical phases of the growth cycle either by flood irrigation or by subirrigation, from the natural control of alluvial valley floors in limiting destructive extremes of stream discharge, and from the erosional stability of earth materials suitable for the growth of agriculturally useful plants;
- (35) "existing structure" means a structure or facility used in connection with or to facilitate surface coal mining and reclamation operations for which construction began before approval of the state program:
- (36) "expended" means that money has been paid or that work has been accomplished or services rendered;

- (37) "extraction of coal as an incidental part" means the extraction of coal which is necessary to enable the construction to be accomplished, including only that coal extracted from within the right-of-way, in the case of a road, railroad, utility line or other construction, or within the boundaries of the area directly affected by other types of government-financed construction, will be considered incidental to that construction;
- (38) "extreme danger" means a condition that could reasonably be expected to cause substantial physical harm to persons, property, or the environment and to which persons or improvements on real property are currently exposed;
- (39) "flood irrigation" means, with respect to alluvial valley floors, supplying water to plants by natural overflow or the diversion of flows, so that the irrigated surface is largely covered by a sheet of water;
- (40) "fragile land" means geographic areas containing natural, ecologic, scientific, or aesthetic resources that could be damaged or destroyed by surface coal mining and reclamation operations. Examples of fragile land includes, but is not limited to, uncommon geologic features, National Natural Landmark sites, groundwater recharge areas, valuable habitats for fish and wildlife, critical habitats for endangered species of animals and plants, critical wetlands, environmental corridors containing concentrations of ecologic and aesthetic features, areas of recreational value due to high environmental quality, buffer zones around areas where surface coal mining is prohibited; and important, unique, or highly productive soils or mineral resources;
- (41) "fugitive dust" means particulate matter not emitted from a duct or stack which becomes airborne due to the forces of wind or surface coal mining and reclamation operations or both, including emissions from haul roads; wind erosion of exposed surfaces, storage piles, and spoil piles; and other activities in which material is either removed, stored, transported, or redistributed;
- (42) "fund" means the "Alaska Abandoned Mined Land Reclamation Fund" established under 11 AAC 90.800;
- (43) "general area" means, with respect to hydrology, the topographic and ground water basin surrounding a permit area which is of sufficient size, including areal extent and depth, to include one or more watersheds containing perennial streams and ground water zones and to allow assessment of the probable cumulative impacts on the quality and quantity of surface and ground water systems in the basins;
- (44) "government financing agency" means a federal, state, municipal, or local unit of government, or a department, bureau, agency or office of the unit which, directly or through another unit of government, finances construction;
- (45) "government-financed construction" means construction funded 50 Percent or more by funds appropriated from a government financing agency's budget or obtained from general revenue bonds, but does not mean government financing agency guarantees, insurance, loans, funds obtained through industrial revenue bonds or their equivalent, or in-kind payments;

- (46) "ground water" means that one or more zones of saturation located at various depths below the ground surface and either confined by impermeable earth material or overlaying an impermeable layer of earth material;
- (47) "coal processing waste" means earth materials which are separated and wasted from the product coal during physical or chemical processing, cleaning, or concentrating of coal;
- (48) "habitat" means terrestrial and aquatic systems that support fish and wildlife by providing feeding, breeding, resting and protective cover.

(49) "head-of-hollow fill" means a fill structure consisting of any material	,
other than organic material, placed in the uppermost reaches of a hollow where side	
slopes of the existing hollow measured at the steepest point are greater than 20	\square or the
average slope of the profile of the hollow from the toe of the fill to the top of the fill is	
greater than 10	□; the top surfac
same elevation as the adjacent ridge line, and no significant area of natural drainage	

occurs above the fill draining into the fill area;

- (50) "higher or better uses" means those postmining land uses that have a higher value or other benefit to the landowner or community than the premining land use;
- (51) "highwall" means the face of exposed overburden and coal in an open cut of a surface coal mining activity or for entry to underground mining activities:
- (52) "historic land" means historic or cultural districts, places, structures, or objects, including but not limited to, sites listed or eligible for listing on a state or National Register of Historic Places, national historic landmarks, archeological and paleontological sites, or cultural or religious districts, places, or objects;
- (53) "hydrologic balance" means the relationship between the quality and quantity of water inflow to, water outflow from, and water storage in a hydrologic unit such as a drainage basin, aquifer, soil zone, lake, or reservoir; "hydrologic balance" encompasses the dynamic relationships among precipitation, runoff, evaporation, and changes in ground and surface water storage;
- (54) "hydrologic regime" means the entire process of water movement in a given areas as a function of the climate and includes the phenomena by which water first occurs as atmospheric water vapor, passes into a liquid or solid form, falls as precipitation, moves along or into the ground surface, and returns to the atmosphere as vapor by means of evaporation and transpiration;
- (55) "impoundment" means a closed basin, naturally formed or artificially built, which is dammed or excavated for the retention of water, sediment, or waste;
 - (56) "indirect financial interest" means the same financial relationships as

206

for direct ownership, but where the employee or private contractor benefits from interests held by his or her spouse, minor child and other relatives, including in-laws, residing in his or her home; no indirect financial interest exists if there is no relationship between the employee's or contractor's functions or duties and the coal mining operation in which the spouse, minor children, or other resident relatives hold a financial interest:

- (57) "in situ processes" means activities conducted on the surface or underground in connection with in-place distillation, retorting, leaching, or other chemical or physical processing of coal, including in situ gasification, in situ leaching, slurry mining, solution mining, borehole mining, and fluid recovery mining;
- (58) "intermittent stream" means a stream or reach of a stream that drains a watershed of at least one square mile, is below the local water table for at least some part of the year, and obtains its flow from both surface runoff and ground water discharge;
- (59) "irreparable damage to the environment" means any damage to the environment that cannot be corrected by actions of the applicant;
- (60) "land use" means specific uses or management-related activities, rather than the vegetation or cover of the land which may be identified in combination when joint or seasonal uses occur and may include support facilities that are an integral part of the use; "land use" includes use of the following categories of land for the purposes stated:
- (A) "cropland" means land used for the production of adapted crops for harvest, alone or in a rotation with grasses and legumes, and includes row crops, small grain crops, hay crops, nursery crops, orchard crops, and other similar specialty crops;
- (B) "pastureland" means land used primarily for the long-term production of adapted, domesticated forage plants to be grazed by livestock or occasionally cut and cured for livestock feed;
- (C) "grazing land" means land used for both grassland and forest land where the indigenous vegetation is actively managed for grazing, browsing, or occasional hay production;
- (D) "forestry land" means land used or managed for the long-term production of wood, wood fiber, or wood derived products;
- (E) "residential land" means land used for single and multiple-family housing, mobile home parks, and other residential lodgings;
 - (F) "industrial/commercial land" means land used for
 - (i) extraction or transformation of materials for fabrication of

products, wholesaling of products, or long-term storage of products. This includes all heavy and light manufacturing facilities;

- (ii) retail or trade of goods or services, including hotels, motels, stores, restaurants, and other commercial establishments;
- (G) "recreational land" means land used for leisure-time use, including facilities such as parks and camps, as well as areas for less intensive uses such as hiking, canoeing, and other undeveloped recreational uses;
- (H) "fish and wildlife habitat" means land dedicated wholly or partially to the production, protection, or management of species of fish or wildlife;
- (I) "developed water resources" means land used for storing water for beneficial uses such as stock ponds, irrigation, fire protection, flood control, and water supply;
- (J) "undeveloped land" means land that is undeveloped or, if previously developed, land that has been allowed to return to a natural equilibrium through succession;
- (61) "left or abandoned in either an unreclaimed or inadequately reclaimed condition" means land or water
- (A) which was mined or which was affected by mining, wastebanks, processing, or other mining processes before August 3, 1977, and on which all mining has ceased;
- (B) which continues, in its present condition, to substantially degrade the quality of the environment, prevent or damage the beneficial use of the land or water resources, or endanger the health and safety of the public;
- (C) for which there is no continuing reclamation responsibility under state or federal law:
- (62) "marine docking facilities" means shoreland that is cleared, graded, stabilized, constructed upon, or otherwise modified from the natural condition to facilitate the landing, anchorage, loading and unloading, and servicing of marine craft, including motorized and non motorized transport

vessels;

(63) "materially damage the quantity or quality of water" means, with respect to alluvial valley floors, changes in the quality or quantity of the water supply to any portion of an alluvial valley floor where these changes are caused by surface coal mining and reclamation operations and result in changes that significantly and adversely affect the composition, diversity, or productivity of vegetation dependent on subirrigation, or which result in changes that would limit the adequacy of the water for

flood irrigation of the irrigable land acreage existing before mining;

- (64) "mountaintop removal" means surface mining which removes an entire coal seam or seams running through the upper fraction of a mountain, ridge, or hill, by removing substantially all of the overburden off the bench and creating a level plateau or a gently rolling contour, with no highwalls remaining, and capable of supporting postmining land uses approved in accordance with 11 AAC 90.141;
- (65) "mulch" means vegetation residues or other suitable materials that aid in soil stabilization and soil moisture conservation, thus providing micro-climatic conditions suitable for germination and growth;
- (66) "natural hazard land" means geographic areas in which natural conditions exist that pose or, as a result of surface coal mining operations, may pose a threat to the health, safety, or welfare of people, property, or the environment, including, but not limited to, areas subject to landslides, cave-ins, subsidence, substantial erosion, earthquakes, unstable geology, long-term disruptions, or degradation of surface and subsurface water supplies, and substantial increases in flood heights or frequencies;
- (67) "occupied dwelling" means any building that is currently being used on a regular basis for human habitation;
- (68) "OSM" means the Federal Office of Surface Mining Reclamation and Enforcement;
- (69) "outslope" means the face of the spoil or embankment sloping downward from the highest elevation to the toe;
- (70) "overburden" means earth material of any nature, consolidated or unconsolidated, that overlies a coal deposit, including interburden but excluding topsoil;
- (71) "perennial stream" means a stream or part of a stream that, as a result of ground-water discharge or surface runoff, flows continuously during all of the calendar year, except when frozen not including intermittent or ephemeral streams;
- (72) "performing any function or duty under this Act" means those decisions or actions which, if performed or not performed, affect the programs under the Act:
- (73) "performance bond" means a surety bond, collateral bond, escrow account bond, or a combination of these bonds, by which a permittee assures faithful performance of all the requirements of the Act, this chapter, and the requirements of the permit and reclamation plan;
- (74) "permanent" as used for diversions or impoundments means a diversion or impoundment remaining after surface coal mining and reclamation operations are completed;

- (75) "permanent facility" means any structure that is built, installed, or established to serve a particular purpose or any manipulation or modification of the surface that is designed to remain after reclamation is completed;
- (76) "person having an interest which is or may be adversely affected or person with a valid legal interest" includes any person
- (A) who uses any resource of economic, recreational, aesthetic, or environmental value that may be adversely affected by coal exploration or surface coal mining and reclamation operations or any related action of the commissioner, or
- (B) whose property is or may be adversely affected by coal exploration or surface coal mining and reclamation operations or any related action of the commissioner:
- (77) "project" means an area with one or more abandoned mine land problems which are the subject of reclamation activity, construction which meets the requirements of 11 AAC 90.808(4) or 11 AAC 90.840(a)(3); and
- (78) "property to be mined" means both the surface and mineral estates on and underneath land which is within the permit area;
- (79) "prohibited interest" as used in 11 AAC 90.751 11 AAC 90.759, means any financial interest prohibited under AS 27.21.050;
- (80) "public building" means any structure that is owned or leased by a public agency or used principally for public business, meetings, or other group gatherings;
- (81) "public office" means a facility under the direction and control of a governmental entity which is open to public access on a regular basis during reasonable business hours;
- (82) "public park" means an area dedicated or designated by a federal, state, or municipal agency or native village for recreational use, whether or not such use is limited to certain times or days. It includes any land leased, reserved, or held open to the public because of that use;
- (83) "public road" means any thoroughfare constructed or maintained with public funds which is open to the public for passage of motorized vehicles;
- (84) "rangeland" means land on which the natural potential (climax) plant cover is principally native grasses, forbs, and shrubs valuable for forage;
- (85) "recharge capacity" means the ability of the soils and underlying materials to allow precipitation and runoff to infiltrate and reach the zone of saturation;
 - (86) "reclamation" means those actions taken to restore mined land as

required by this chapter to a postmining land use approved by the commissioner;

- (87) "reclamation activity" means the reclamation, restoration, abatement, control, or prevention of adverse effects of past mining.
- (88) "recurrence interval" means the interval of time in which precipitation event is expected to occur once on the average;
- (89) "reference area" means a land unit which is representative of geology, soil, slope, and vegetation in the permit area and which is maintained under appropriate management for the purpose of measuring vegetation ground cover, productivity and plant species diversity that are produced naturally or by crop production methods approved by the commissioner;
- (90) "renewable resource land" means aquifers and areas for the recharge of aquifers and other underground water, areas for agricultural or silvicultural production of food and fiber, and grazing land;
- (91) "road" means a surface right-of-way for purposes of travel by land vehicles used in coal exploration or surface coal mining and reclamation operations, consisting of the entire area within the right-of-way, including the roadbed, shoulders, parking and side areas, approaches, structures, ditches, surface, and contiguous appendages necessary for the total structure, and including access and haul roads, and roads used by coal-hauling vehicles leading to transfer, processing, or storage areas; however, the term "road" does not include a ramp or route of travel within the immediate mining area or within spoil or coal mine waste disposal areas;
- (92) "runoff event" means the quantity of water expected as a result of all physical and meteorological conditions, expressed in terms of recurrence interval;
- (93) "safety factor" means the ratio of the available shear strength to the developed shear stress, or the ratio of the sum of the resisting forces to the sum of the loading or driving forces, as determined by accepted engineering practices;
- (94) "secretary" means the Secretary of the United States Department of the Interior or the Secretary's representative;
- (95) "sedimentation pond" means a primary sediment control structure including but not limited to a barrier, dam, or excavated depression which slows down water runoff to allow sediment to settle out; "sedimentation pond" does not include secondary sedimentation control structures, such as straw dikes, riprap, check dams, mulches, dugouts, and other measures that reduce overland flow velocity, reduce runoff volume, or trap sediment to the extent that these secondary sedimentation structures drain to a sedimentation pond;
- (96) "shallow ground water" means that body of ground water, excluding the capillary fringe, that is not confined by an overlying impermeable zone;

- (97) "slope" means average inclination of a surface, measured from the horizontal, generally expressed as the ratio of a unit of vertical distance to a given number of units of horizontal distance:
- (98) "soil amendments" means any material that when added to the soil increases its ability to support plant growth by correcting deficiencies of either a physical or chemical origin;
- (99) "soil horizons" means contrasting layers of soil parallel or nearly parallel to the land surface differentiated on the basis of field characteristics and laboratory data; the three major soil horizons are
- (A) A horizon, or the uppermost mineral layer, often called the surface soil or topsoil which is the part of the soil in which organic matter is most abundant and leaching of soluble or suspended particles is typically the greatest;
- (B) B horizon, or the layer that typically is immediately beneath the A horizon and often called the subsoil and which commonly contains more clay, iron, or aluminum than the A or C horizons; and
- (C) C horizon, or the deepest layer of soil profile which consists of loose material or weathered rock that is relatively unaffected by biologic activity;
- (100) "soil survey" means a field or other investigation, resulting in a map showing the geographic distribution of different kinds of soils and an accompanying report that describes, classifies, and interprets soils for use meeting the standards of the National Cooperative Soil Survey;
- (101) "spoil" means overburden that has been removed during surface coal mining operations;
- (102) "stabilize" means to control movement of soil, spoil piles, or areas of disturbed earth by modifying the geometry of the mass, or by otherwise modifying physical or chemical properties, such as by providing a protective surface coating;
- (103) "steep slope" means any slope of more than 20 degrees or any lesser slope designated by the commissioner after consideration of soil, climate, and other characteristics of a region;
- (104) "subirrigation" means, with respect to alluvial valley floors, the supplying of water to plants from underneath or from a semi-saturated or saturated subsurface zone where water is available for use by vegetation; "subirrigation" may be identified by:
- (A) diurnal fluctuation of the water table due to the differences in nighttime and daytime evapotranspiration rates;
 - (B) increasing soil moisture from a portion of the root zone down to

the saturated zone due to capillary action;

- (C) mottling of the soils in the root zones;
- (D) existence of an important part of the root zone within the capillary fringe or water table of an alluvial aquifer; or
- (E) an increase in streamflow or a rise in ground water levels shortly after the first killing frost on the valley floor;
- (105) "substantial disturbance" means an impact on land, air or water resources by activities such as
 - (A) blasting;
- (B) mechanical excavation, excluding the use of light, portable field equipment;
 - (C) drilling or enlarging coal or water exploratory holes or wells; and
- (D) construction of roads, structures, trails, aircraft landing and marine docking areas;
- (106) "surety bond" means an indemnity agreement in a sum certain payable to the state, executed by the permittee as principal, and supported by the performance guarantee of a corporation licensed to do business as a surety in Alaska;
- (107) "surface mining activities" means those surface coal mining and reclamation operations incident to the extraction of coal from the earth by removing the materials over a coal seam before recovering the coal, by auger coal mining, or by recovery of coal from a deposit that is not in its original geologic location;
- (108) "surface operations and impacts incident to an underground coal mine" means all activities involved in or related to underground coal mining which are either conducted on the surface of the land, produce changes in the land surface or disturb the surface, air or water resources of the area, including all activities listed in AS 27.21.220 and surface coal mining operations;
- (109) "suspended solids or non-filterable residue", expressed as milligrams per liter, means organic or inorganic materials carried or held in suspension in water which are retained by a standard glass fiber filter in the procedure outlined by the Environmental Protection Agency's regulations for waste water and analyses at 40 CFR 136;
- (110) "temporary" as used for diversions or impoundments means a diversion of a stream or overland flow or an impoundment which is used during coal exploration or surface coal mining and reclamation operations and not approved as part of the approved postmining land use;

- (111) "ton" means 2000 pounds avoirdupois (.90718 metric ton);
- (112) "topsoil" means the A soil horizon layer of the three major soil horizons;
- (113) "toxic-forming materials" means earth materials or wastes which, if acted upon by air, water, weathering, or microbiological processes, are likely to produce chemical or physical conditions in soils or water that are detrimental to biota or uses of water;
- (114) "toxic mine drainage" means water that is discharged from active or abandoned mines or other areas affected by coal exploration or surface coal mining and reclamation operations, which contains a substance that through chemical action or physical effects is likely to kill, injure, or impair biota commonly present in the area that might be exposed to it;
- (115) "unconsolidated streamlaid deposits holding streams" means, with respect to alluvial valley floors, all flood plains and terraces located in the lower portions of topographic valleys which contain perennial or other streams with channels that are greater than 3 feet in bankfull width and greater than 0.5 feet in bankfull depth;
- (116) "underground development waste" means waste rock or related materials, including coal, that are excavated, moved, and disposed of from underground workings in connection with underground mining activities;
 - (117) "underground mining activities" means a combination of
- (A) surface operations incident to underground extraction of coal or in situ processing, such as construction, use, maintenance, and reclamation of roads, above-ground repair areas, storage areas, processing areas, shipping areas, areas upon which are sited support facilities including hoist and ventilating ducts, areas utilized for the disposal and storage of waste, and areas on which materials incident to underground mining operations are placed; and
- (B) underground operations such as underground construction, operation, and reclamation of shafts, adits, underground support facilities, in situ processing, and underground mining, hauling, storage, and blasting;
- (118) "undeveloped rangeland" means, for purposes of alluvial valley floors, land where the use is not specifically controlled and managed;
- (119) "upland areas" means, with respect to alluvial valley floors, those geomorphic features located outside the flood plain and terrace complex, such as isolated higher terraces, alluvial fans, pediment surfaces, landslide deposits, and surfaces covered with residuum, mud flows or debris flows, as well as highland areas underlain by bedrock and covered by residual weathered material or debris deposited by sheetwash, rillwash, or windblown material;

- (120) "valley fill" means a fill structure consisting of any material other than organic material that is placed in a valley where side slopes of the existing valley measured at the steepest point are greater than 20 degrees or the average slope of the profile of the valley from the toe of the fill to the top of the fill is greater than 10 degrees;
- (121) "water pollution" means degradation of water quality below that required by applicable state and federal water quality laws and regulations and this chapter;
- (122) "water table" means the upper surface of a zone of saturation, excluding the capillary fringe, where the body of ground water is not confined by an overlying impermeable zone;
- (124) "surface coal mining operations" under AS 27.21.998(17)(A) include leaching and other chemical and physical processing of coal whether or not performed on-site;
- (125) "community or institutional building" means a structure, other than a public building or an occupied dwelling, that
 - (A) is used primarily for meetings, gatherings, or functions of local civic organizations or other community groups;
 - (B) functions as an educational, cultural, historic, religious, scientific, correctional, mental health care, or physical health care facility; or
 - (C) is used for public services; in this subparagraph, "public services" includes water supply, power generation, and sewage treatment;
- (126) "cumulative impact area" means the area, including the permit area, within which impacts resulting from the proposed operation may interact with the impacts of all anticipated mining on surface water and ground water systems; in this paragraph; "anticipated mining" includes the entire projected lives through bond releases of
 - (A) the proposed operation;
 - (B) all existing operations;
 - (C) any operation for which a permit application has been submitted to the commissioner; and
 - (D) all operations required to meet diligent development requirements for leased federal coal, and for which actual mine development information is available; in this subparagraph, "leased federal coal" has the meaning given in 30 C.F.R. 740.5(a);
 - (127) "impounding structure" means a dam, embankment, or other

structure used to impound water, slurry, or other liquid or semi-liquid material;

- (128) "other minerals" has the meaning given in AS 27.21.998;
- (129) "other treatment facility" means any chemical treatment, such as flocculation or neutralization, or mechanical structure, such as a clarifier or precipitator, that has a point source discharge and is utilized
 - (A) to prevent additional contributions of dissolved or suspended solids to streamflow or runoff outside the permit area; or
 - (B) to comply with all applicable federal water quality laws and regulations and with all applicable provisions of AS 46.03 and regulations in effect under that chapter;
- (130) "precipitation event" means a quantity of water resulting from drizzle, rain, snow, sleet, hail, or water emanating from snow cover as snowmelt in a set or specified period of time;
 - (131) "previously mined area" means land
 - (A) affected by surface coal mining operations that were conducted before August 3, 1977; and
 - (B) that has not been reclaimed to the standards of this chapter;
- (132) "refuse pile" means a surface deposit of coal mine waste that does not impound water, slurry, or other liquid or semi-liquid material;
- (133) "registered professional engineer" means an individual with a valid certificate of registration issued under AS 08.48 and 12 AAC 36 as a professional engineer;
- (134) "registered professional land surveyor" means an individual with a valid certificate of registration issued under AS 08.48 and 12 AAC 36 as a professional land surveyor;
- (135) "siltation structure" means a sedimentation pond, a series of sedimentation ponds, or other treatment facility. (Eff. 5/2/83, Register 84; am 12/18/83, Register 88; am 11/18/94, Register 132; am 7/29/98, Register 147; am 4/24/09, Register 190)

Authority: AS 27.21.030 AS 27.21.220 AS 27.21.270

AS 27.21.210