Appendix C: 19 NMAC 8.2, Subpart 20, Section 2009

Introduction

New Mexico's Mining and Minerals Division (MMD) enforces the state's federally approved SMCRA primacy program. BMP regulations for coal mining and reclamation operations in New Mexico may be found under 19 NMAC 8.2 Subpart 20 Section 2009 which addresses general requirements for minimizing changes to the prevailing hydrologic balance in both the permit and adjacent areas. Section 2009 of Subpart 20 is presented below:

19 NMAC 8.2.20.2009 HYDROLOGIC BALANCE: GENERAL REQUIREMENTS

2009.A Surface coal mining operations shall be planned and conducted to minimize changes to the prevailing hydrologic balance in both the permit and adjacent areas and prevent material damage outside of the permit area in order to prevent adverse changes in that balance that could result from those operations. [11-29-97]

2009.B Changes in water quality and quantity, in depth to ground water, and in the location of surface water drainage channels shall be minimized so that the approved postmining land use of the permit area is not adversely affected. [11-29-97]

2009.C In no case shall Federal and State water quality statutes, regulations, standards, or effluent limitations be violated. [11-29-97]

2009.D Operations shall be conducted to minimize water pollution and, where necessary, sediment ponds or other treatment facilities shall be used to control water pollution.

(1) Each person who conducts surface coal mining operations shall emphasize mining and reclamation practices that prevent or minimize water pollution. Methods listed in paragraph 2009.D(2) and (3) shall be capable of containing or treating all surface flow from the disturbed areas and shall be used in preference to the use of sediment ponds or water treatment facilities.

(2) Acceptable practices to control sediment and minimize water pollution include, but are not limited to:

(i) stabilizing disturbed areas through land shaping, berming, contour furrowing or regrading to final contour;

(ii) diverting runoff;

(iii) achieving quickly germinating and growing stands of temporary vegetation;

(iv) regulating channel velocity of water;

(v) lining drainage channels with rock or revegetation;

(vi) mulching;

(vii) selectively placing and sealing acid-forming and toxic-forming materials; and

(viii) selectively placing waste materials in backfill areas.

(3) In addition, unless demonstrated to the Director otherwise, all acceptable practices for controlling and minimizing water pollution at underground mines shall include, but not be limited to:

(i) designing mines to prevent gravity drainage of acid waters;

(ii) sealing all underground mine openings;

(iii) controlling subsidence; and

(iv) preventing acid mine drainage.

(4) If the practices listed in paragraph 2009.D(2) are not adequate to meet the requirements of paragraph 2009.D(1), the person who conducts surface coal mining operations shall comply with the requirements of Section 2010, unless the Director issues a waiver under paragraph 2009.E. [11-29-97]

2009.E The Director may waive the requirements of this Section for regraded areas if the operator can demonstrate to the Director that the runoff from the regraded area is as good as or better quality than the waters entering the permit area and erosion from the regraded area has been controlled to the satisfaction of the Director.

(1) To provide for baseline data for waters entering the permit area, the operator shall operate and maintain monitoring on all drainages leading into the permit area, in a manner approved by the Director, in order to obtain and evaluate occurrences and changes in water quality and quantity during the life of mining operations.

(2) In order to ensure that runoff from the regraded area is in no way a hazard to the environment of the adjacent areas, the waters draining off of the regraded area shall not:

(i) exceed the values of Total Suspended Solids, Iron, Manganese, pH and those parameters listed in paragraph 2009.E(3)(I) from the baseline analyses from the water entering the permit area;

(ii) create an increase in sediment load into the receiving streams;

(iii) create any environmental harm or threat to public health and safety; and

(iv) degrade, pollute or otherwise diminish the characteristics of existing streams and drainages so as to cause imminent environmental harm to fish and wildlife habitats.

(3) Baseline data shall be collected from waters in drainages entering the permit area and runoff from regraded areas shall be collected during any precipitation event that produces such runoff. The operator shall demonstrate to the Director that the runoff from the regraded area has as good as or better chemical quality than the baseline analyses from waters entering the permit area.

(i) In addition to paragraph 2009.E(2)(I), chemical analysis of the runoff from the regraded area and baseline data from waters entering the permit area shall include, but not limited to, the following parameters:

Arsenic (As)	Phosphorus (P)	Carbonate (CO3)
Boron (B)	Potassium (K)	Bicarbonate (HCO3)
Calcium (Ca)	Selenium (Se)	Nitrate (NO3)
Chloride	Sodium (Na)	Sulfate (SO4)
Cadmium (Cd)	Uranium (U)	Total Dissolved
Fluoride	Vanadium (V)	Solids (TDS)
Lead (Pb)	Radioactivity	Sodium Adsorption
Magnesium (Mg)	Radium Ra226	Ratio (SAR)
Radium Ra228		

(ii) The Director may require additional tests and analyses as he deems necessary.

(iii) If the operator can demonstrate that the analysis of any particular parameter are of little or not significance in the permit or adjacent areas, then such parameter(s) may be waived upon approval by the director.