

**LORENCITO CANYON MINE
PERMIT REVISION APPLICATION**

Las Animas County, Colorado

Submitted by

NEW ELK COAL COMPANY, LLC

March 2021

TABLE OF CONTENTS

1.0 INTRODUCTION

- 1.1 Description Of Organization of Permit Document
- 1.2 Geographic Setting
- 1.3 Operations and Reclamation

2.01 GENERAL PERMIT REQUIREMENTS

- 2.01.4 Permit Requirements for New Surface Coal Mining and Reclamation Operations
- 2.01.5 Permit Term
- 2.01.6 Permit Fees

2.03 LEGAL, FINANCIAL, COMPLIANCE, AND RELATED INFORMATION

- 2.03.3 Format and Supplemental Information
- 2.03.4 Identification of Interests
- 2.03.5 Compliance Information
- 2.03.6 Right of Entry and Operation Information
- 2.03.7 Relationship to Areas Designated Unsuitable for Mining
- 2.03.8 Permit Term Information
- 2.03.9 Personal Injury and Property Damage Insurance Information
- 2.03.10 Identification of Other Licenses and Permits
- 2.03.11 Identification of Location of Public Office for Filing of Application
- 2.03.12 Newspaper Advertisement and Proof of Application

2.04 INFORMATION ON ENVIRONMENTAL RESOURCES

- 2.04.3 General Requirements: Site Description and Land Use Information
 - Pre-Mine Land Use
 - Land Use Capabilities and Productivity
 - Historical Mining
 - Las Animas County Land Use Classification
- 2.04.4 Cultural And Historic Resource Information
- 2.04.5 General Description of Hydrology and Geology
- 2.04.6 Geology Description
 - Alluvium/Colluvium
 - Overburden
 - Primero Coal
 - Underburden
 - Physical/Geochemical Properties
- 2.04.7 Hydrology Description
 - Groundwater
 - Depth and Extent of Water Bearing Zones
 - Overburden

- Primero Coal
 - Underburden
 - Aquifer Characteristics and Water Quantity
 - Alluvium
 - Overburden
 - Primero Coal
 - Underburden
 - Water Quality
 - Alluvium
 - Overburden
 - Primero Coal
 - Underburden
 - Windmills
 - Surface Water
 - Watershed Delineation and Drainage Basin Characteristics
 - Flow, Crest, and Storm Events
 - Water Quality Data Summary
 - Surface Water Stations
 - Spring Stations
 - Ponds
 - Alternative Water Supply Information
- 2.04.8 Climatological Information
- 2.04.9 Soils Resource Information
 - Description of Soil Horizons
 - Soils Analysis
- 2.04.10 Vegetation Information
 - Community Descriptions
 - Quantitative Sampling Results
 - Sensitive Species of Plants
- 2.04.11 Fish and Wildlife Resources Information
 - Wildlife Resources
 - Aquatic Resources
 - Threatened and Endangered Species
- 2.04.12 Prime Farmland Investigation
- 2.04.13 Annual Reclamation Report

2.05 OPERATION AND RECLAMATION PLANS

- 2.05.2 Operations Plan - Life of Mine
 - (1) Production Methods and Equipment - Life of Mine
 - (2) Operations Description - Life of Mine
- 2.05.3 Operations Description - First Permit Term
 - (1) Production Methods and Equipment - First Permit Term

- (2)Operation Description - First Permit Term
 - Underground Mines
- (3)Mine Facilities
 - Structures
 - Roads
 - Haul Roads
 - Access Roads
 - Light Use Roads
 - Loadout Facility
 - Signs and Marker
- (4)Ponds, Impoundments and Diversions
- (5)Topsoil
- (6)Overburden
- (7)Underground Mines
- (8)Coal Handling Structures
- (9)Coal Mine Waste and Non-Coal Processing Waste
- (10)Return of Coal Mine Waste to Abandoned Workings
- 2.05.4 Reclamation Plan
 - Backfilling and Grading
 - Topsoil Redistribution
 - Revegetation Plan
 - Land Use of Revegetation Communities
 - Reclamation of Roads
 - Reclamation of Facilities
 - Reclamation of Ponds
 - Reclamation Equipment
 - Seedbed Preparation
 - Disk/Chisel Plowing/Ripping
 - Seed Mixes
 - Rill and Gully Plan
 - Seeding Methods
 - Timing of Seeding
 - Mulching
 - Vegetation Monitoring
 - Land Management
 - Noxious Plant Control
 - Livestock Grazing Controls
 - Revegetation Success Criteria
 - Point-intercept Cover
 - Species Diversity
 - Shrub and Tree Density

- Production
- Acid- and Toxic-Forming Materials
- Sealing of Openings
- Clean Air/Clean Water Acts
- 2.05.5 Postmining Land Uses
 - Coal Mining Activities
- 2.05.6 Mitigation of the Impacts of Mining Operations
 - (1)Air Pollution Control Plan
 - (2)Fish and Wildlife Plan
 - (3)Protection of the Hydrologic Balance
 - Water Quantity
 - Ground Water Quantity
 - Mathematical Inflow Estimation
 - Primero Coal Mines
 - Hydrologic Balance
 - Surface Water
 - Monitoring Plan
 - (4)Protection of Public Parks and Historic Places
 - (5)Surface Mining Near Underground Mining
 - (6)Subsidence Survey, Subsidence Monitoring, Subsidence Control Plan
 - Pre-Existing Structures
 - Mine Facilities
 - Land Use
 - Renewable Resources
 - Hydrology
 - Vegetation/Agronomy
 - Structures
 - Hydrology
 - Natural Slopes
 - Subsidence Monitoring Program
 - Subsidence Survey and Subsidence Predictions
 - Planned Mining Method
 - Geologic Properties
 - Pillar Stability
 - Geologic Structure
 - Historic Mining
 - Angle-of-Draw
 - Subsidence Control

2.06 REQUIREMENTS FOR PERMITS FOR SPECIAL CATEGORIES OF MINING

2.10 MAPS AND PLANS

- 2.10.2 Permit and Adjacent Areas
- 2.10.3 Specific Information Requirements

RULE 3: PERFORMANCE BOND REQUIREMENTS

- 3.02 PERFORMANCE BOND REQUIREMENTS FOR SURFACE COAL MINING AND RECLAMATION OPERATIONS
 - 3.02.2 Determination of Bond Amount
 - 3.02.3 Period of Liability for Performance Bond
 - 3.02.4 Form, Conditions, and Terms of Performance Bonds

REFERENCES