

**APPENDIX D**

REGULATORY COMPLIANCE OR MITIGATION  
REQUIRED BY STIPULATIONS OR  
REQUIRED BY STATE OR FEDERAL LAW

RESOURCE	Regulatory Compliance or Mitigation Required by Stipulations or Required by State or Federal Law <sup>1</sup>	MONITORING <sup>1</sup>
Topography & Physiography	Restoring to approximate original contour or other approved topographic configuration	LQD checks as-built vs. approved topography with each annual report.
Geology & Minerals	Identifying & selectively placing or mixing chemically or physically unsuitable overburden materials to minimize adverse effects to vegetation or groundwater	LQD requires monitoring in advance of mining to detect unsuitable overburden.
Soil	Salvaging soil suitable to support plant growth for use in reclamation; Protecting soil stockpiles from disturbance and erosional influences; Selectively placing at least 4 ft of suitable overburden on the graded spoil surface below replaced topsoil to meet guidelines for vegetation root zones	Monitoring vegetation growth on reclaimed areas to determine need for soil amendments. Sampling regraded overburden for compliance with root zone criteria.
Air Quality	Dispersion modeling of mining plans for annual average particulate pollution impacts on ambient air; Using particulate pollution control technologies; Using work practices designed to minimize fugitive particulate emissions; Using EPA- or state-mandated BACT, including: Fabric filtration or wet scrubbing of coal storage silo and conveyor vents, Watering or using chemical dust suppression on haul roads and exposed soils, Containment of truck dumps and primary crushers; Covering of conveyors, Prompt revegetation of exposed soils	On-site air quality monitoring for PM <sub>10</sub> or TSP; Off-site ambient monitoring for PM <sub>10</sub> or TSP; On-site compliance inspections
Surface Water	Building and maintaining sediment control ponds or other devices during mining; Restoring approximate original drainage patterns during reclamation; Restoring stock ponds and playas during reclamation	Monitoring storage capacity in sediment ponds; monitoring quality of discharges; monitoring streamflows and water quality.
Groundwater Quantity	Evaluating cumulative impacts to water quantity associated with proposed mining; Replacing existing water rights that are interrupted, discontinued, or diminished by mining with water of equivalent quantity	Monitoring wells track water levels in overburden, coal, interburden, underburden, & backfill

<sup>1</sup> These requirements, mitigation plans, and monitoring plans are in place for the existing Belle Ayr Mine in their current approved mining and reclamation plan (the No-Action Alternative) and for the Proposed Action.

RESOURCE	Regulatory Compliance or Mitigation Required by Stipulations or Required by State or Federal Law <sup>1</sup>	MONITORING <sup>1</sup>
Groundwater Quality	Evaluating cumulative impacts to water quality associated with proposed mining; Replacing existing water rights that are interrupted, discontinued, or diminished by mining with water of equivalent quality	Monitoring wells track water quality in overburden, coal, interburden, underburden, & backfill
Alluvial Valley Floors	Identifying all alluvial valley floors that would be affected by mining; Determining significance to agriculture of all identified alluvial valley floors affected by mining (WDEQ); Protecting downstream alluvial valley floors during mining; Restoring essential hydrologic function of all alluvial valley floors affected by mining.	Monitoring to determine restoration of essential hydrologic functions of any declared AVF
Wetlands	Identifying all wetlands that would be affected by mining; Identifying jurisdictional wetlands (COE); Replacing all jurisdictional wetlands that would be disturbed by mining Replacing functional wetlands as required by surface managing agency or surface land owner	Monitoring of reclaimed wetlands using same procedures used to identify premining jurisdictional wetlands.
Vegetation	Permanently revegetating reclaimed areas according to a comprehensive revegetation plan using approved permanent reclamation seed mixtures consisting predominantly of species native to the area; Reclaiming 20% of reclaimed area with native shrubs at a density of one per square meter; Controlling erosion on reclaimed lands prior to seeding with final seed mixture using mulching, cover crops, or other approved measures; Chemically and mechanically controlling weed infestation; Direct hauling of topsoil; Selectively planting shrubs in riparian areas; Planting sagebrush; Creating depressions and rock piles; Using special planting procedures around rock piles; Posting reclamation bond covering the cost of reclamation	Monitoring of revegetation growth & diversity until release of final reclamation bond (minimum 10 years). Monitoring of erosion to determine need for corrective action during establishment of vegetation. Use of controlled grazing during revegetation evaluation to determine suitability for postmining land uses.
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Wildlife	Restoring premining topography to the maximum extent possible; Planting a diverse mixture of grasses, forbs and shrubs in configurations beneficial to wildlife; Designing fences to permit wildlife passage; Raptor-proofing power transmission poles; Creating artificial raptor nest sites; Increasing habitat diversity by creating rock clusters and shallow depressions on reclaimed land; Cottonwood plantings along reclaimed drainages; Replacing drainages, wetlands and alluvial valley floors disturbed by mining; Reducing vehicle speed limits to minimize mortality; Instructing employees not to harass or disturb wildlife; Preparing raptor mitigation plans	Baseline & annual wildlife monitoring surveys; Monitoring for Migratory Birds of High Federal Interest
Threatened, Endangered, & Candidate Species	Avoiding bald eagle disturbance; Restoring bald eagle foraging areas disturbed by mining; Restoring mountain plover habitat disturbed by mining; Using raptor safe power lines; Surveying for Ute ladies' tresses; Surveying for mountain plover; Searching for black-footed ferrets if prairie dogs move onto tract;	Baseline and annual wildlife monitoring surveys
Land Use	Suitably restoring reclaimed area for historic uses (grazing and wildlife);	Monitoring of controlled grazing prior to bond release evaluation.
Cultural Resources	Conducting Class I & III surveys to identify cultural properties on all state and federal lands and on private lands affected by federal undertakings; Consulting with SHPO to evaluate eligibility of cultural properties for the NRHP; Avoiding or recovering data from significant cultural properties identified by surveys, according to an approved plan; Notifying appropriate federal personnel if historic or prehistoric materials are uncovered during mining operations; Instructing employees of the importance of and regulatory obligations to protect cultural resources	Monitoring of mining activities during topsoil stripping; cessation of activities and notification of authorities if unidentified sites are encountered during topsoil removal.

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Native American Concerns	Notifying Native American tribes with known interest in this area of leasing action and request for help in identifying potentially significant religious or cultural sites	No specific monitoring program
Paleontological Resources	Notifying appropriate federal personnel if potentially significant paleontological sites are discovered during mining	No specific monitoring program
Visual Resources	Restoring landscape character during reclamation through return to approximate original contour and revegetation with native species	No specific monitoring program
Noise	Protecting employees from hearing loss	MSHA inspections
Transportation Facilities	Relocating existing pipeline, if necessary, in accordance with specific agreement between pipeline owner and coal lessee.	No specific monitoring program
Socioeconomics	Paying royalty and taxes as required by federal, state, and local regulations.	Surveying and reporting to document volume of coal removed.
Hazardous & Solid Waste	Disposing of solid waste and sewage within permit boundaries according to approved plans; Storing and recycling waste oil; Maintaining of files containing Material Safety Data Sheets for all chemicals, compounds, and/or substances used during course of mining; Ensuring that all production, use, storage, transport, and disposal of hazardous materials is in accordance with applicable existing or hereafter promulgated federal, state, and government requirements; Complying with emergency reporting requirements for releases of hazardous materials as established in CERCLA, as amended; Preparing and implementing spill prevention control and countermeasure plans, spill response plans, inventories of hazardous chemical categories pursuant to Section 312 of SARA, as amended; Preparing emergency response plans;	No specific monitoring other than required by these other regulations and response plans.

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