

## Roads

A private paved access road from the north end of Weld County Road #59 to the mine site is currently maintained and used by CEC. Snow fences have also been established along this road. While CEC has a Minor Revision in place to apply sand or coal slack on this road under severe winter driving conditions, the need to do so has not arisen over the past few years. If this should change the Division will be notified.

All CEC roads within the permit boundary area, with the exception of the main access road and areas around the maintenance facility have been fully reclaimed. The post-mining land use for the private paved access road is Industrial/Commercial. When the Keenesburg Mine is closed, the other users will continue to use this road for access to their businesses. There will be no further reclamation activities required to release this road from reclamation liability and bond.

## Operations Areas

A tabulation of the calculated existing topsand amounts for all stockpiles is noted as follows:

A1, B1	O BCY
<u>A3, B2</u>	<u>O BCY</u>
	O BCY

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\* cubic yards in-place

The Dugout Pond, perimeter ditches and Sediment Pond 2, however, will remain as permanent site features.

## Maps

Certain maps are included in the Appendices to provide CDMG additional information on the proposed reclamation and closure plan for the mine site, pursuant to CDMG Rule 2.05.3.

- ◆ Existing Surface Features Map (Appendix M-1)
- ◆ Permit Area Map (Appendix A-1)
- ◆ 1996 Vegetation Sampling Locations Map (Appendix L-5) — updated annually
- ◆ Final Reclamation Contour and Drainage Plan (Appendix Q-1)

## Facilities Removal

The following CEC facilities will be removed as time and use dictate.

- ◆ Office, shop and warehouse (and any temporary or portable buildings) ◆ Equipment parking lot
- ◆ Diversion/drainage structures (except the perimeter ditches, the Dugout Pond and Sediment Pond 2)
- ◆ Sewage treatment facility

## TOPSAND

### Quantities Required

B-Pit (24 inches)	0 BCY
Long-term spoil area (15 inches)	0 BCY
Topsand piles A-I, A-3, B-1 and B-2 (6 inches)	0 BCY
Facilities area ( 6 inches)	0 BCY
Access Roads (24 inches)	<u>0 BCY</u>
Total	0 BCY

### Stockpiled Quantities

Topsand piles A-I, B-1, B-2 and A-3	0 BCY
	- <u>0 BCY-from above</u>
Total Remaining	0 BCY surplus

CEC replaced 24 inches of topsand on the A- and B-Pit disturbed areas, as well as on the temporary access and haul roads. The long-term spoil area received 15 inches of topsand, and the facilities area and the topsand piles received six (6) inches of topsand over the in place sub-soils.

Upon completion of the A/MWR disposal operation in either pit area, all waste will be removed or buried to prevent water pollution or adverse visual impacts. Non-salvageable materials will be buried in the pits above the local ground water levels, and at least to four (4) feet below AOC. The final pit highwalls will also be backfilled to AOC. It is noteworthy that there are no acid-forming materials in the coal seam per indications in the sump water data (refer to Section 2.04.7 in this document).

Structures previously used in the CEC mining operation that are outside of the area with a designated post-mining land use of Industrial/Commercial will be removed unless moved to an alternate use designation, and the local ground area will be scarified, topsanded, fertilized and revegetated. Facilities and parking areas within the area designated as a post-mining land use of Industrial/Commercial will not require any additional reclamation work to satisfy reclamation liability and bond release requirements.

## REVEGETATION PLAN

The approved revegetation plan emphasizes native species planting resulting in a diverse, permanent, effective plant community capable of self-regeneration.

### Species and Planting Methods

Plant species proposed for use in revegetation were selected considering local environmental features of soils, nutritional value, slope, elevation, and precipitation, as well as the vegetational potential of the site. The current seed mix is entirely composed of native species. Warm season graminoid species predominate in the mix, as they do in the native area adjacent to the mine. DRMS, CPW and the NRCS have all agreed that sand sage (*Artemisia filifolia*) need not be included in the seed mix. The current seed mix is presented below:

Common Name	Latin Name	Character	Seed Rate #PLS/acre
Sideoats Grama	<i>Bouteloua curtipendula</i>	native warm season	1.5
Prairie Sandreed (Goshen)	<i>Calamovilfa longifolia</i>	native warm season	1.5
Sand Bluestem (Garden City)	<i>Andropogon hallii</i>	native warm season	2.0
Blue Grama (Lovington)	<i>Bouteloua gracilis</i>	native warm season	0.5
Switchgrass (Pathfinder)	<i>Panicum virgatum</i>	native warm season	1.0
Indian Ricegrass (Paloma)	<i>Oryzopsis hymenoides</i>	native cool season	1.5
Yellow Indiangrass (Oto)	<i>Sorghastrum nutans</i>	native warm season	1.5
Thickspike Wheatgrass (Critana)	<i>Agropyron dasystachyum</i>	native cool season	0.3
Little Bluestem	<i>Schizachyrium scoparium</i>	native warm season	0.5
Prairie Coneflower	<i>Ratibida sg.</i>	native forb	0.3
Total # PLS/acre			9.5

After manure spreading, the approved seed mix will be drill seeded through the manure mulch. In small areas requiring reseeding, CEC may employ broadcast seeding methods to stimulate regrowth. Broadcast seeding rates will be twice that of drill seed rates.

Germination of native warm season grasses has proven to be problematic in reclamation. The preeminent factor in successful germination of warm season native grasses appears to be available moisture. The moisture must be in an amount sufficient to allow germination and seedling growth to a stage which will

## 2.05.5 POSTMINING LAND USES

Coors Energy Company will reclaim disturbed lands within the Permit area to three types of post-mining land uses, Rangeland, Renewable Energy Development, and Industrial/Commercial. Rangeland is the primary post-mining land use. Renewable Energy Development shall also be allowed on all areas within the permit except that ground penetrating mounts shall not be used within the footprint of the former B-Pit. Industrial/Commercial post-mining land use will be at the following locations:

1. Hydro-carbon production sites (wells with identified access), approved by Permit revisions [County codes indicate that oil and gas production facilities are a "use by right" in agricultural zone districts (includes the permit area) and therefore no zoning permits or separate approvals are required]; and
2. Facilities area.

## 2.05.6 MITIGATION OF IMPACTS

### 1. Air Pollution Control Plan

Emission Control Permits No. C-12WE438F and 88WE031, issued by the Air Pollution Control Division of the Colorado Department of Public Health and Environment, have been cancelled. Based on emission levels, the ash disposal and reclamation operations are now subject to the Air Pollution Emission Notice (APEN) procedures, administered by the same agency. Coors remains subject to all Rules and Regulations of the Colorado Air Pollution Commission and the Colorado Air Pollution Control Act (25-7-101 et seq.), as a basic condition of the Permit.

### 2. Fish and Wildlife Plan

Coors and the Division have agreed that no major mitigation measures need to be taken to reduce the impact on fish and wildlife. Coors has or will implement a number of objectives for mitigating impacts on birds and animals.

- A. Coors has used guidelines set forth in "Environmental Criteria for Electric Transmission Systems". Drawings of the system are provided in Appendix P-1 and P-2.
- B. The permit area will be fenced to restrict access by large animals.
- C. Hunting will not be allowed within the permit area.
- D. Coors will establish raptor perches in the area if deemed advisable by the Division of Wildlife. There is a colony of burrowing owls in the area and small-eared owls are sited frequently. Depending on the area, there appears to be only a moderate infestation of burrowing animals in the reclamation at this time, and the numerous cottontail