

# COLORADO DIVISION OF RECLAMATION, MINING AND SAFETY COAL PROGRAM INSPECTION REPORT



## **PERMIT INFORMATION**

Permit Number: C-1981-037 Mine Name: GEC Strip Mine Operator: GEC Minerals Operator Address: Dr W Corley 2605 Constellation Drive Colorado Springs, CO 80906	County: Fremont Operation Type: Surface Permit Status: Revoked Ownership: Private  Operator Representative Present: NA		
Operator Representative Signature: (Field Issuance Only)  INSPECTION INFORMATION			

Inspection Start Date: June 18, 20 Inspection Start Time: 12:00 Inspection End Date: June 18, 20 Inspection End Time: 16:30			Inspection Type: Coal Complete Inspection Inspection Reason: Normal I&E Program Weather: Cloudy	
Joint Inspection Agency:		Joint	Inspection Contacts:	
None				
Post Inspection Agency:		Post Inspection Contacts:		
None				
Inspector(s):	Inspector'	's Sig	nature: Signature	Date:
Janet H. Binns	Jan		6/21/2013	

#### **Inspection Topic Summary**

NOTE: Y=Inspected N=Not Inspected R=Comments Noted V=Violation Issued NA=Not Applicable

**NA** - Air Resource Protection

**NA** - Availability of Records

Y - Backfill & Grading

NA - Excess Spoil and Dev. Waste

NA - Explosives
R - Fish & Wildlife
R - Hydrologic Balance

NA - Gen. Compliance With Mine Plan

NA - Other

NA - Processing Waste

R - Roads

**R** - Reclamation Success

R - Revegetation

R - Subsidence

R - Slides and Other DamageNA - Support Facilities On-site

NA - Signs and Markers

NA - Support Facilities Not On-site NA - Special Categories Of Mining

**R** - Topsoil

### **COMMENTS**

Dr. Corley, surface landowner, and Daryl Mergen, his son-in-law, met the inspector at the gate at the north end of the GEC Reclaimed Chen's Hill area. There is a locked green gate erected by a neighboring mine operator at this location. The gate has been damaged and the combination lock has been removed. The mine site is dry. A thunderstorm was moving into the area around 3 pm. Winds and light rain (sprinkles) moved in to the area, but no measurable rainfall fell on the mine area during the inspection.

This was a complete inspection. The Division is conducting a final inspection prior to terminating DRMS jurisdiction on the GEC mine site.

#### FISH and WILDLIFE – Rule 4.18:

Although no deer or elk were observed during the inspection, there were numerous songbirds, and evidence of elk sign throughout the site. The landowner had cattle in the reclaimed tipple area.

#### HYDROLOGIC BALANCE - Rule 4.05

Drainage Control 4.05.1, 4.05.2, 4.05.3; Siltation Structures 4.05.5, 4.05.6; Discharge Structures 4.05.7, 4.05.10; Diversions 4.05.4; Effluent Limits 4.05.2; Ground Water Monitoring 4.05.13; Surface Water Monitoring 4.05.13; Drainage – Acid and Toxic Materials 4.05.8; Impoundments 4.05.6, 4.05.9; Stream Buffer Zones 4.05.18:

Both remaining ponds at the Chen's Hill area are completely full of sediment and no longer function as sediment ponds. The pond at the entrance gate along FCR 92 has a stand of vegetation established on the sediment. The pond along the Magpie drainage was not observed during this inspection.

The reclaimed Duckpond area has held up well. There was no evidence of gully formation in the reclaimed Duckpond location. Contour furrows were still intact and effective in this area.

The reclaimed tipple area is relatively flat and grazed by livestock. No gully formation was noted in the reclaimed tipple area. There are no ponds remaining in the tipple area.

Number of <u>Partial</u> Inspection this Fiscal Year: 0 Number of Complete Inspections this Fiscal Year: 3 The drainage between the northern ends of the east and west pit remains large. The gully on the west side of Chen's hill remains large as well. Drainage from the south and west sides of Chen's hill flow to this area. Runoff from the East Pit, West Pit and east side of Chen's hill drain to the Magpie drainage.

ROADS – Rule 4.03

Construction 4.03.1(3)/4.03.2(3)

Drainage 4.03.1(4)/4.03.2(4)

Surfacing and Maintenance 4.03.1(5) and (6)/4.03.2(5) and (6)

Reclamation 4.03.1(7)/4.03.2(7):

There is one road associated with the GEC mine that is mine related. The remaining access road begins at the east side of Southfield's Pond 5 and connects to Southfield's Monarch fan road. This dirt access road is narrow and unmaintained. Runoff over the road has resulted in narrowing of the road in spots. Portions of the road are rocky as well.

The road to the tipple area is a ranch road maintained by the landowner.

#### RECLAMATION SUCCESS - Rule 4.15, Rule 3:

The mine site is dry. The region has been very dry this spring and numerous wildfires were burning throughout the state. A large wildfire, The Royal Gorge Fire, was burning west of Canon City at the time of the inspection. Vegetation throughout the reclaimed GEC mine site was stunted, though it had greened up. Annual forbs, Red-stem filaree and mustard species, were already drying up. Perennial grasses were growing but less robust than wetter years. Few species were in flower.

Noxious weed species were very infrequent. A small patch of knapweed was noted along the road between the East and West Pits. Occasional Musk thistle individual plants were noted in the East pit. Vegetative diversity was good. The dominant life forms were perennial grasses; wheat grasses, brome grass, wild rye, Needle and Thread grass, as well as native Three-awn, blue grama and Side oats grama. Perennial forbs are present but in lesser frequency than the grass species. Occasional Cheatgrass was noted but in low concentration and not in patches that would be considered an infestation.

There are occasional bare patches within the reclamation. These patches are limited in size and generally not eroding. The bare patches are more commonly observed on Chen's Hill just below the crest of the ridge at the top of the slopes. Some bare patches are located on the flat areas of the reclaimed ridges.

More annuals were noted in the tipple area. The tipple area has been grazed by cattle. Cattle were in the tipple area pasture at the time of the inspection.

#### REVEGETATION – Rule 4.15 Vegetative Cover; Timing:

Vegetation in west end of East pit looked good. The site is very dry. Prickly pear was in bloom. Prairie clover was blooming. The re-established vegetation appeared mostly stable. The south end of the West pit

Number of <u>Partial</u> Inspection this Fiscal Year: 0 Number of Complete Inspections this Fiscal Year: 3 vegetation looks fairly stable. Some gullies still exist on these steeper slopes.

The vegetation is mostly stable throughout East pit, West pit and Chen's Hill. There are some bare spots mostly in the gradation from the steeper slopes to the ridge tops. All gullies encountered appeared fairly old. No new (fresh) gullies were noted.

SUBSIDENCE - Rule 4.20:

No subsidence features were encountered on the reclaimed GEC areas.

SLIDES and DAMAGE - Rule 4.12:

Gullies exist on the steeper reclaimed slopes in the East Pit, West Pit, and Chen's hill. No gullies were observed on the reclaimed Duckpond area. No gullies were observed in the flatter tipple reclamation area.

The large gully between the East Pit and West Pit does not appear to have stabilized based upon recent sedimentation on the road and in the bottom of this feature.

The gully on the north extent of the East and West pits with the damaged concrete check dams does not appear to have deepened or enlarged. The large gully on the west side of Chen's Hill and east of Fremont County Road 92 does not appear to have gotten any deeper.

TOPSOIL – Rule 4.06 Removal 4.06.2; Substitute Materials 4.06.4(4); Storage and Protection 4.06.3; Redistribution 4.06.4:

No topsoil stockpiles remain on the site. All available topsoil was previously utilized during the reclamation process.

**DOCUMENTS RECEIVED: NA** 

**OTHER (SPECIFY): NA** 

#### ENFORCEMENT ACTIONS/COMPLIANCE

This is a revoked site. There is no permittee or permit remaining. All bond monies have been exhausted.

Number of <u>Partial</u> Inspection this Fiscal Year: 0 Number of Complete Inspections this Fiscal Year: 3

## **PHOTOGRAPHS**



Photo 1: East pit looking towards south



Photo 2: South end of West Pit



Photo 3: West pit looking northwards



Photo 4: Gully between West Pit and East pit at north Extent (south of access road)

Number of <u>Partial</u> Inspection this Fiscal Year: 0 Number of <u>Complete</u> Inspections this Fiscal Year: 3



Photo 5: gully located north of access road with broken concrete check dams



Photo 6: East side of Chen's Hill looking northward



Photo 7: West side of Chen's Hill looking northward



Photo 8: North end of Chen's Hill. Bare spot below crest



Photo 9: East side of Chen's Hill looking southwest



Photo 10: Reclaimed "Duckpond" slope looking westward

Number of <u>Partial</u> Inspection this Fiscal Year: 0 Number of <u>Complete</u> Inspections this Fiscal Year: 3



Photo 11: Reclaimed & grazed tipple



Photo 12: Gravel patch at tipple area



Chen's Hill, West Pit and East Pit

Number of <u>Partial</u> Inspection this Fiscal Year: 0 Number of <u>Complete</u> Inspections this Fiscal Year: 3