




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



PERMIT INFORMATION

Permit Number: C-1981-022 Mine Name: Elk Creek Mine Operator: Oxbow Mining, LLC Operator Address: Mr. Jim Kiger P.O. Box 535 3737 Highway 133 Somerset, CO 81434	County: Delta, Gunnison Operation Type: Underground Permit Status: Active Ownership: Federal
	Operator Representative Present: Jim Kiger
Operator Representative Signature: (Field Issuance Only)	

INSPECTION INFORMATION

Inspection Start Date: September 4, 2013 Inspection Start Time: 08:30 Inspection End Date: September 4, 2013 Inspection End Time: 14:30		Inspection Type: Coal Partial Inspection Inspection Reason: Normal I&E Program Weather: Clear	
Joint Inspection Agency: None		Joint Inspection Contacts:	
Post Inspection Agency: None		Post Inspection Contacts:	
Inspector(s): Brock F. Bowles	Inspector's Signature: 		Signature Date: September 10, 2013

Inspection Topic Summary

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

R - Air Resource Protection**N** - Availability of Records**N** - Backfill & Grading**N** - Excess Spoil and Dev. Waste**N** - Explosives**R** - Fish & Wildlife**R** - Hydrologic Balance**N** - Gen. Compliance With Mine Plan**N** - Other**N** - Processing Waste**R** - Roads**N** - Reclamation Success**N** - Revegetation**N** - Subsidence**N** - Slides and Other Damage**N** - Support Facilities On-site**R** - Signs and Markers**N** - Support Facilities Not On-site**N** - Special Categories Of Mining**N** - Topsoil**COMMENTS**

This was a partial inspection of the Elk Creek Mine conducted by Brock Bowles of the Colorado Division of Reclamation, Mining & Safety. Jim Kiger of Oxbow Mining, LLC was present for the inspection. The weather was sunny and hot with no wind. The Northeast Mains mine seals were removed a few weeks ago. Fresh air was being directed throughout the mine workings by the vent fans to remove all the methane gas. During the methane venting, it was discovered that the carbon monoxide (CO) level in the mine workings was rising. This indicated that the spontaneous combustion event in the gob behind the longwall had re-ignited. The Northeast Mains were then re-sealed. At this time, a new mine degas/venting plan is being devised with MSHA with the goal of removing the long wall and then resealing the Northeast Mains. The water pumps at the temporary Outfall 015B are still in operation pumping approximately 120 gpm to maintain dewatering the mine. The mine workings are normally dewatered internally by pumping water down to the old B-Seam mine workings but due to the high methane levels, these pumps are not in operation. The plan is to resume pumping mine water to the B-seam workings and cease discharging to the surface, but the timeline for this is unclear.

AIR RESOURCE PROTECTION – Rule 4.17:

Coal was not being stacked and no equipment was on the coal stock pile. A water truck was spraying the roads. There were no signs of fugitive dust on site or off.

FISH and WILDLIFE – Rule 4.18:

There are many wildlife tracks in the mud around the shallow pond at the discharge point. Bear prints were in the muddy banks of Elk Creek about two miles above the Elk Creek facilities area (photo 1). Bear scat was also seen in the same 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:

Temporary Outfall 015B was installed to de-water the Northeast Mains behind the mine seals. Dewater

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pumping began on June 3, 2013. The water discharged into a small existing shallow pond below the well pad. The water then flows over the hillside, down the hill to a tributary of Elk Creek. The hillside is naturally well vegetated with an oak brush community. The focus of this inspection was the path of the mine water discharge which included the discharge point, the shallow pond, the hillside below the pond, the Elk Creek tributary and Elk Creek to the facilities area. This entire water path was walked and is approximately 2.3 miles long.

The dead vegetation around the shallow pond appears to be approximately the same extent as reported in the August 6, 2013 inspection (photo 2). The pond contains green algae and the banks are very muddy (photo 3). The soil on the hillside below the pond is saturated and has begun to slide in several areas. At the top of the slide, it appears the soil has slumped 2-3 feet (photo 4). Most of the vegetation where the soil is saturated is dead (photo 5). Water braids through the dense vegetation below the slumped area which created rills and small gullies (photo 6). There does not appear to be erosive damage to the Elk Creek tributary. In some spots of the tributary, sediment deposits were noted on the edges of the stream (photo 7). Elk Creek does not appear to have erosive damage due to the mine water discharge. The water flowing down the tributary and Elk Creek is brown in color and creates a froth in the plunge pools (photo 8). The damage caused by Outfall 015B is all on Forest Service property and is completely within the Elk Creek Mine permit boundary.

The Forest Service is the land owner where the damage for Discharge 015B occurred. I stopped in at the Paonia Forest Service Office to discuss the situation. Levi Broyes and Dan Gray are aware of the dead vegetation but were not aware of the slump below the shallow pond. They were not surprised by the damage because of the geological slides and slumps that characterize the North Fork Valley. They feel that the vegetation will rebound quickly once the water discharge terminates. Dan Gray has been working closely with Oxbow in the design and construction of the access road and well pad. He feels that Oxbow has done a very good job mitigating its impact considering the urgency of the road and pad installation.

The Division recognizes that this has been an emergency situation and that Oxbow is attempting to minimize the impacts. However, a repair plan for the hillside will be necessary to address any damage caused by Outfall 015B. An assessment of damage in the area will take place when the pumping of mine water is complete. The Division will continue to monitor this situation. Oxbow has been submitting discharge monitoring reports for Outfall 015B and the water quality has been within the limits of the permit. Colorado Water Quality Control Division has been notified and is also monitoring the situation.

Pond A did not contain water. Ponds B and D contained water but were not discharging. The sediment traps along the Elk Creek Haul Road were recently cleaned. Ditch D1 and D5 on the East side of the portal area were clean. Ditch D3 still needs to have the debris removed as noted in the August 6, 2013 inspection.

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):

The Bear Creek Road was dry and well maintained. The access roads around the mine facilities areas were well maintained and recently watered.

SIGNS AND MARKERS – Rule 4.02:

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The main entrance sign contained all the necessary information.

DOCUMENTS RECEIVED: None

ENFORCEMENT ACTIONS/COMPLIANCE

No enforcement actions were taken as a result of this inspection and none are pending.

PHOTOGRAPHS



Photo 1 – Bear Tracks on Elk Creek



Photo 2 – Vegetation Around the Shallow Pond



Photo 3 – Shallow Pond



Photo 4 – Top of Slump Area

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Photo 5 – Saturated Soil Below Shallow Pond



Photo 6 – Rills and Small Gullies Below Slump



Photo 7 – Sediment Deposits



Photo 8 – Plunge Pool in Elk Creek

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