



**COLORADO**

**Division of Reclamation,  
Mining and Safety**

Department of Natural Resources

1313 Sherman Street, Room 215  
Denver, CO 80203

Louis Head  
New Elk Coal Company, LLC  
12250 Hwy 12  
Weston, CO 81019

March 16, 2017

**Re: New Elk Mine (Permit No. C-1981-012)  
Review of 2016 AHR**

Dear Mr. Head:

I have the following comments regarding the New Elk 2016 AHR. I also looked at the 2015 AHR and have no additional comments on that report.

#### Sampling Locations

The required water monitoring locations for the New Elk Mine are in the PAP, including the text of Section 2.05 and Table 27. The 2016 AHR does not include data for some of these sites (e.g., NM-20, NM-21), nor is there an explanation as to why this data is omitted. ***Please explain the lack of data for these sites. If they are temporarily or permanently inactive, please explain this in response to this letter and include a discussion in future AHRs. Also, please consider if they should be removed from the monitoring plan in the PAP with a revision.***

#### Monitoring Frequency

Table 27 indicates that PAW-9 should be sampled twice a year, including a laboratory analysis. ***Please explain why there is only data for November.***

***Please explain why the symbol \*\* is used in two different ways.*** On the first page of the letter it indicates sites that have not been implemented. The footnotes of Table 27 indicate that this symbol indicates quarterly monitoring for a year and then a new frequency.

#### List of Water Quality Parameters

***Please explain the lack of data for Total Dissolved Solids and hardness.***



#### Analysis of Surface Water Data

No issues.

#### Analysis of Alluvial Groundwater Data

Dissolved iron and dissolved manganese concentrations exceeded drinking water standards in PAW-2, and dissolved manganese exceeded agricultural standards in PAW-2. Both concentrations increased from above the Development Waste Pile (DWP) in PAW-1 to below the DWP in PAW-2. Because there is no use of alluvial water in the vicinity of the DWP (domestic or agricultural), and because concentrations in alluvial wells below the mine were well below standards, this does not appear to be an urgent problem.

***However, these parameters should be monitored closely in future AHRs. Also in future AHRs, it would be beneficial for NECC to provide an analysis of the impact of the DWP on alluvial water quality and the significance of this impact. It appears that the locations of wells PAW-1 and PAW-2 were selected to determine these impacts.***

#### Analysis of Other Groundwater (Mine Workings and Bedrock Wells)

No issues.

Please feel free to contact me with any questions or comments.

Regards,



Robert D. Zuber, P.E.  
Environmental Protection Specialist II

Cc: Ron Thompson (via e-mail)