

February 9, 2023

Mr. Brock Bowles
Environmental Protection Specialist
Division of Reclamation, Mining and Safety
1313 Sherman Street, Room 215
Denver, Colorado 80203

Re: New Elk Permit Revision Application (PR-6)

Dear Mr. Bowles,

Please find response to the Colorado Division of Reclamation, Mining and Safety (CDRMS or Division) comments dated December 13, 2022, on the New Elk Coal Company, LLC's (NECC) Permit Revision Application (PR-6). NECC also requests the decision date be extended to March 10, 2023 for this permit revision application.

NECC Response to DRMS comments:

Section 2.03

1. The revised pages submitted are not consistent with the currently approved pages. Information on the current pages will be lost if these new pages are incorporated. Please update the proposed revised pages so they fit seamlessly in with the currently approved pages.
 - a. **NECC Response:** *The revised pages for PR-6 have been updated to fit seamlessly in with the previously approved Section 2.03 (MR-132 Section 2.03).*

Section 2.03.9 – Personal Injury and Property Damage Insurance Information

2. The last insurance certificate the Division has on file is from 2016. Please submit the most recent insurance certificate as part of this application.
 - a. **NECC Response:** *The current insurance certificate is attached for inclusion into the PAP.*

Section 2.03.10 – Identification of other Licenses and Permits

1. No adequacy questions.
 - a. **NECC Response:** *Thank you.*

Section 2.04.3 – Site Description and Land Use

1. The proposed Section 2.04 Table 4 shows that 219.1 acres of affected lands are being added in PR6. Please update the table to show the total amount of affected acres, including the PR6 addition, for the entire permit area.
 - a. **NECC Response:** *The affected land acreage for the permit area and PR6 has been included in the text of Section 2.04.3.*

Section 2.04.7 Hydrology Description

1. The text states on Page 25-a that a total of twelve potential springs and seeps sites were identified within a one-mile buffer of the PR-6 permit boundary. The text also states the parameters of pH, flow, conductivity and temperature of these springs and seeps are presented in Table 12. The location data and field measurements of these new springs and seeps were not included with the PR6 application.

Tables 11a and 12 need to be updated to include the data for the new springs and seeps.

- a. **NECC Response:** The text on Page 25a represents the original text of the permit document. No new springs or seeps have been identified in the PR6 area. The data and field measurements presented are the original measurements made when the springs and seeps were identified back in 1984.*
2. The potential for subsidence associated with the updated mine plan should be thoroughly evaluated, as is required by Rule 2.05.6(6). It is likely that this will involve an engineering study similar to the 2011 Agapito study found in Exhibit 24. The results of this updated study should be referenced when evaluating the PHC.
 - a. **NECC Response:** The potential for subsidence as a result of mining in the PR6 area is included in the Blue Seam Mining Analysis completed by Arcadis and included in the permit document as Exhibit 8(5).*
3. A thorough analysis should be made of the Probable Hydrologic Consequences of the mine plan proposed with PR-6, as is required by Rule 2.05.6(3). It is likely that this will involve at least an addendum to the 2011 Whetstone study found in Exhibit 8(4). The PAP text should be updated with reference to the new study.
 - a. **NECC Response:** An update to the Probable Hydrologic Consequences of the mine plan for the PR6 area is included in the Blue Seam Mining Analysis completed by Arcadis and included in the permit document as Exhibit 8(5).*
4. A revised version of Map 8, Regional Hydrology, has been submitted. During the revision process the map frame was reduced, so that the western end of the permit area has been clipped off. Although the changes proposed with PR-6 are to the east of the current permit area, the information to the west should be retained. Revise Map 8 to restore the coverage of the area to the west.
 - a. **NECC Response:** Map 8 has been revised to include the current permit boundary area to the west of the New Elk surface facilities.*
5. The hydrologic monitoring plan is presented on pages 2.05-104 through -110 of the PAP. The currently approved plan was appropriate for the New Elk mine prior to PR-6, while the mine was inactive; it is not appropriate for an active mine, or for the mine plan proposed with PR-6. Please review and update the hydrologic monitoring plan, in accordance with the performance standards given in Rule 4.05.13.
 - a. **NECC Response:** The hydrologic monitoring plan has been updated based on the Arcadis Blue Seam Mining Analysis as presented in Exhibit 8(5) added to the permit document and pages 2.05-105 and 2.05-108 have been revised. NECC is proposing to add alluvial wells in Apache and Ciruela Canyons (ACAW-1 and CCAW-1) to monitor the PR-6 area. All other monitoring points for the mine will remain as described in the current PAP text.*
6. Please also propose locations for Groundwater Points of Compliance as appropriate. It may be helpful to refer to the Division's Groundwater Monitoring and Protection Technical Bulletin for guidance; the technical bulletin is available from the DRMS website: <https://drms.colorado.gov/programs/coal-regulatory-program/coal-program-guidelines-and-technical-documents/technical>.
 - a. **NECC Response:** NECC proposes to use the groundwater points of compliance at locations*

described in the Arcadis Blue Seam Mining Analysis as presented in Exhibit 8(5).

Section 2.04.11 – Fish and Wildlife Information

1. No adequacy questions.
 - a. **NECC Response:** *Thank you.*

Section 2.05.3 – Operation Plan

1. The following maps need to be updated to show the new PR6 permit boundary: Map 10- vegetation, Map 11 sheet 4, Map 11 sheet 6 and Map 15a.
 - a. **NECC Response:** *The permit boundary for PR6 has been added to Map 10, Map 11 sheet 5 (Map 11-5), Map 11 sheet 6 (11-6), and Map 15a. Map 11 sheet 4 appears to be a plan/profile of the RDA and isn't applicable to PR-6, please correct us if this isn't correct.*
2. Table 19 needs to be update to show the new haul road and its associated structures that were added as part of TR76.
 - a. **NECC Response:** *Table 19 has been updated to include the TR76 haul road and culvert locations.*
3. Page 10 bottom, the language regarding the Apache Canyon air shafts being returned to use was removed for this revision. Are there any plans to return the shafts to use? If there is the potential for reusing them please commit to submitting a technical revision before implementing any plans.
 - a. **NECC Response:** *The Apache Canyon air shafts are not planned for use in the Blue Seam Mine Plan. A Technical Revision will be submitted for approval if these air shafts will be used in the future.*
4. The Exhibit 42 additional materials that were included in the completeness response were labeled as pages 42-1 through 42-4. This is only a partial list of the current Exhibit 42. The current Exhibit 42 has 12 pages detailing 55 structures. The proposed Map 20, sheets 2-7 series shows 166 details. Exhibit 42 needs to be updated to include all the structures listed on Map 20 sheets 2-7.
 - a. **NECC Response:** *All 166 structures are now in Exhibit 42.*
5. On page 111 it states that the current mining plan under the Purgatoire River and associated alluvial valley floor will most likely not be impacted by subsidence. The Blue Seam is roughly 250-300 above the Apache Seam. New information regarding undermining the Purgatoire River in the Blue Seam needs to be addressed and included. This should include depth of the Blue Seam from the Purgatoire River in the areas planned to be over the mining areas. As well as, if/what type of measures taken to prevent impacts to the hydrologic balance.
 - a. **NECC Response:** *The text was revised based on the comment above. The current mine plan for the Blue Seam does not include undermining the Purgatoire River, thus, no additional information has been added to the PAP. The text reference to mining under the Purgatoire River has been deleted. A Technical Revision will be submitted if and when mining is proposed in that area.*

Section 2.05.4 – Reclamation Plan

1. No adequacy questions.

- **NECC Response:** *Thank you.*

Section 2.05.6 – Mitigation of Surface Coal Mining Operation Impacts

1. New information regarding the subsidence section of the permit (Rule 2.05.6(6)) and updated information about mining in the Blue Seam was not included with the PR6 application. The assertion that the proposed Blue Seam mining will not cause subsidence has not been supported. Specific information about the characteristics of the Blue Seam and the proposed mining method needs to be addressed.
 - a. **NECC Response:** *The potential for subsidence as a result of mining in the PR6 area is included in the Blue Seam Mining Analysis completed by Arcadis and included in the permit document as Exhibit 8(5) and is referenced in Section 2.05 page 111 of the PAP.*
2. The currently approved text mentions a minimum depth of cover of 450 feet over the Apache Seam, but does not discuss the depth of cover over the Blue Seam. Based on a review of the revised maps (Map 3 Blue Mine Plan, Map 6A Sheet 5 Blue Seam Depth of Cover, and Map 7 Coal Seam Cross Sections), it appears that the depth of cover above the Blue Seam could be quite shallow, particularly at the point where the proposed workings approach the Purgatoire River. For example, Map 7 shows a depth of cover of 91 feet at A-19, and 82 feet at NE-01-10. Text and maps need be submitted to show the minimum depth of cover to all the Blue Seam workings.
 - a. **NECC Response:** *Cross sections of bore holes included for the existing permit area are presented in Exhibit 8(4) of the PAP. Four bore holes located in the PR6 area are also included with cover depths over the Blue Seam varying from 130 feet to 460 feet. This information and analysis have been included in the new Exhibit 8(5), Blue Seam Mining Analysis and is referenced in Section 2.05 page 71 of the PAP.*
3. Exhibit 24 was referenced in the proposed revised pages for PR-6; however, Exhibit 24 was not updated to include the proposed area of PR6. Please submit an updated Exhibit 24 along with a comprehensive discussion of how the data in the analysis (Exhibit 24) will be applied to the mining plan and subsidence control plan for the proposed PR6 expansion area.
 - a. **NECC Response:** *The potential for subsidence as a result of mining in the PR6 area is included in the Blue Seam Mining Analysis completed by Arcadis and included in the permit document as Exhibit 8(5) and is referenced in Section 2.05 page 111 of the PAP.*

NECC anticipates these responses will satisfy these comments. Please call or email if there are any questions or concerns.

Sincerely,



Nick Mason
Mine Engineer



Attachments

PR-6 Application
Certificate of Insurance dated 5-3-22
Section 2.03
Section 2.04.3; page 2.04-1
Section 2.04.7; page 71
Section 2.05.3; Table 19
Section 2.05.6; Page 105
Section 2.05.6; Page 108
Section 2.05.6; Page 111
Map 8
Map 10
Map 11-5
Map 11-6
Map 15a
Exhibit 8(5) – Blue Seam Mining Analysis
Exhibit 42 – List of Structures