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September 11, 2020

Daniel Cunningham Division of Reclamation, Mining and Safety 1313 Sherman St., Rm. 215 Denver, Colorado 80203

Re: New Elk Mine Permit C-1981-012 TR-75 Adequacy Response

Dear Mr. Cunningham:

This letter is in response to the Adequacy Review for Technical Revision 75 Application. Each DRMS question is listed and NECC response is found below. A field survey completed by NECC is attached.

**NEW ELK COAL** 

COMPANY

**General Questions** 

# **DRMS** question

1. It appears 19 acres is referenced as the maximum area of exposed refuse at the Refuse Disposal Area (RDA) at any one time during construction. As the RDA moves up in benches, the length between the back wall and top of the benches will shorten, however the width of the RDA seems to expand. New Elk Coal Company (NECC) will need to demonstrate that the maximum exposed refuse at any one time is going to be no larger than 19 acres. Or, please commit to maintaining no more than 19 acres of uncovered refuse at any point during construction of the RDA.

## NECC response

The current footprint of the RDA is constrained by a ridgeline on the east and the ridgeline of the borrow area on the southwest. The back wall above the RDA is relatively uniform in slope. NECC does not believe that the width of the RDA footprint will expand as the depth of the RDA from front to back becomes smaller over time, and the Division has not provided any documentation or information to support the proposition that "the width of the RDA seems to expand." The actual NECC survey of the pile resulted in 18.59 acres (pers. communication w/ Ron Thompson) and was assumed at 19 acres for

the purposes of this revision. This is a reasonable estimate for the purposes of calculating reclamation costs to address the Division's concern regarding cover material. Furthermore, the current condition of exposed refuse will be reduced in the relative near future with the reclamation of the face of bench five. Rough calculations derived from Figure 6 of the approved permit application indicate approximately 18.65 acres of footprint exposure for bench 9 and 17.6 acres of exposure for the top bench 12. Additionally, the Division is required to review the New Elk permit every 2.5 years as part of the midterm review and the permit renewal process. As part of these reviews, the reclamation cost estimate is reviewed and updated with new unit costs. Should a slight adjustment in the acreage of exposed refuse, whether up or down, be necessary or desirable, NECC believes it would be handled with much more certainty and accuracy during those permit reviews.

# **DRMS** question

2. Proposed revised page 2.05-58b references a field study conducted of the borrow area and back wall of the RDA that demonstrates adequate salvageable cover material is available. NECC will need to provide documentation and evidence that sufficient cover material exists in the proposed borrow area and back wall area.

# NECC response

A field study completed by NECC is attached. In summary, NECC believes the proposed borrow has an adequate amount of salvageable cover material, as well as topsoil that can be used for this reclamation project.

# **DRMS** question

3. As the RDA expands, a material balance log will need to be maintained that demonstrates sufficient cover material is available for reclamation of the RDA. Please provide a plan for tracking the material balance available for cover material for the RDA and commit to providing the results of this material balance with the annual reclamation report.

# NECC response

The purpose of TR-75 was in response to the Division's order to revise the permit to address the Division's concern that adequate cover material was not available on-site to reclaim the refuse pile in the event that the permit was revoked and the reclamation bond forfeited.

First, there is no indication that the RDA will "expand". To the contrary, NECC believes and evidence suggests that the maximum exposure for the RDA footprint is the current condition. As discussed in the response to question #1 above, the footprint of the RDA

will remain approximately the current size as the pile continues to be utilized and constructed under active operations. Under a temporary cessation of operations (the current status), the RDA footprint remains unchanged and the cover material lies insitu in the borrow area and on the back wall. Documentation and reporting is currently required by the rules through the inspection requirements of Rule 4.09.1(11) and 4.10.2. Rule 4.09.1(11)(a)(4) which provides that the "Placement and compaction of fill materials" be documented and reported. During the course of active operations, should they occur in the future, cover material will be harvested in the same manner as was done successfully for the first four benches of the RDA. Please refer to the 3rd guarter 1999 RDA waste pile report dated 9/16/1999 found in your document management system, specifically page 3 the report. That report clearly documents the source location of the cover material for the fourth bench "salvaged from the northwest corner of the RDA". In addition to the operator independently conducting waste pile inspections as required by the Rules, the Division conducts monthly inspections at the mine site and as part of their regular course of duties, should be confirming any reclamation work being conducted while physically present during those partial and complete inspections. NECC points to the March 16, 1999 DRMS inspection which documents the observations made by the Division during that inspection. For observations and documentation of reclamation work completed at the third bench at the RDA, please refer to the Division's inspection dated 5/8/1991.

In summary, NECC through TR-75, is requesting approval for a borrow area for a source of cover in the event of early reclamation of the RDA. NECC already has approval for construction of the RDA under active operations and it is the responsibility of NECC to complete the reclamation plan as approved, with the depth modification requested in TR-75. NECC believes that inspections required by the Rules by both NECC and the Division is sufficient to account for cover material volumes present, quantities harvested and used in reclamation, and present for future use.

# **DRMS** question

4. The proposed borrow area current contour map, has two yellow lines that run perpendicular to each other and stop in the middle of the RDA. Please identify these two lines or remove them and then submit a new map.

# NECC response

The yellow lines have been removed. A new figure 10 is included with this response.

## DRMS question

5. The proposed borrow area final contour map, has a stockpile area that is above the 100 year ditch. This area is not discussed in the application. NECC will need to clarify what will be stored in this area.

## NECC response

The stockpile area is discussed on page 58d. This area is meant to be an operational stockpile area to facilitate reclamation operations. It is not meant to be a long-term storage area of any kind. If topsoil is stored in this location, it would be temporary, short-term storage and it will be marked with signs as required by Rule 4.02.7 to clearly differentiate this material from cover material. Even though the entire RDA surface is an operational area, NECC believes it is prudent to have a stockpile area for use during topsoil and cover harvesting operations. The location of this operational or "working" stockpile area will need to be transient as the pile grows during active operations. A new figure 10a is included with this response.

# **DRMS** question

6. Rule 4.10.4(5) states, "The Division may allow less than 4 feet of cover material based on physical and chemical analyses which show that the requirements of 4.15 will be met." NECC presented the Developmental Waste Pile (DWP) and an adjacent AML reclamation project vegetation establishment where a lesser cover material depth was used as evidence that a reduced cover depth at the RDA would likely allow compliance with Rule 4.15. What is the source of the cover material that was used on the DWP, and is the material similar to the cover material proposed to be used for the RDA?

## NECC response

The following is a direct quote from an email from Ron Thompson when asked about his recollection of the reclamation of DWP-1:

"To the best of my recall as I was not directly involved with the reclamation of the lower bench DWP-1, the material came from the side slopes of the RDA in 1990. That same year AML reclaimed the waste piles east of the prep plant with the same sourced material. The material was trucked direct to both areas and never stockpiled.

Reclamation of the top bench of DWP-1 in 2005 came from the topsoil stockpile north of the river just west of the plant (also material from the RDA) and borrowed subsoil from re-sloping areas in the west portal to accomplish final grade for final reclamation."

Quarterly waste bank inspections from 1997 do not indicate where the cover material was sourced for the final reclamation of the upper portion of the DWP. Division inspection reports also do not document the source of this cover material.

The borrow area itself is heavily vegetated currently. NECC believes that cover material derived insutu from the immediate area of the RDA is perfectly suited for use. There is ample evidence that cover material harvested from this area or the area of the back wall is suitable with regard to revegetation standards. Soils present are produced from the natural weathering of the bedrock material and the breakdown of natural vegetation, litter, and organic material found in the area. In fact, four benches of the RDA have been covered, topsoiled, and revegetated so far, with the lowest bench reclaimed 30+ years ago and the latest bench reclaimed (bench four) 21 years ago in 1999. If cover material and/or topsoil material was inhibiting to revegetation efforts, it would be reasonable to assume that evidence would be apparent at the RDA or the reclaimed DWP. No such evidence exists nor has any evidence been documented by the Divisions, NECC, or others.

# **DRMS** question

7. Proposed revised page 2.05-58c indicates NECC plans to conduct a revegetation success analysis of the DWP in the future. Please commit to conducting a vegetation analysis of the DWP for success requirements in accordance with Rule 4.15 by the end of 2021 to ascertain the adequacy of the reduced cover material depth.

# NECC response

NECC commits to conduct a vegetation analysis of the DWP for success requirements in accordance with Rule 4.15 by the end of 2022 to ascertain the adequacy of the reduced cover material depth.

# **DRMS** question

8. Page 39 of section 2.05 of the permit application indicates that the RDA will be bonded for 23 acres. This is in conflict with the submitted cost estimate. NECC will need to submit a new estimate to include the full 23 acres or revise Page 39 to be consistent with the proposed revised plan.

## NECC response

Page 39 of Section 2.05 is discussing topsoiling activities. Other than the additional task of topsoiling the borrow area proposed in TR-75, NECC is not requesting changes to previously approved topsoil volumes, acres, or associated cost estimates. NECC believes that when the Division produced the reclamation cost estimate, 23 acres for topsoiling was used to ensure the calculation covered "buffer areas" adjacent to the

RDA, which is not unusual given the constraints of working within the box canyon terrain of the RDA.

9. A bond calculation will be conducted as soon as the necessary information is provided.

## NECC response

No response required.

## DRMS question

10. A comment letter was received from the Office of Archaeology and Historic Preservation in regards to TR-75. The letter contains inaccurate information and the Division does not believe further action is necessary. The letter received and the Divisions response are attached to this letter. DRMS has requested the Office of Archaeology and Historic Preservation reevaluate their findings and will forward you any correspondence we receive back from them regarding this matter.

NECC response

No response required.

Please call me if you have any questions or comments. Sincerely,

Richoles Mason

Nicholas Mason Engineering Technician

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