



COLORADO

Division of Reclamation,
Mining and Safety

Department of Natural Resources

1313 Sherman Street, Room 215
Denver, CO 80203

Interoffice Memorandum

January 31, 2018

From: Leigh Simmons
To: Zach Trujillo

**Subject: Colowyo Mine (Permit No. C-1981-019)
TR-116, second adequacy review**

My review of the material submitted by Colowyo Coal Company (CCC) with the TR-116 application was incorporated into your initial adequacy review letter, dated January 8, 2018.

CCC responded to that review, in a letter dated January 18, 2018.

My comments on that letter are below:

Rule 2.05.6(3) – Protection of the hydrological balance

1. *The Agapito study submitted with TR-116 is dated October 19, 2017. The study is referred to in the text as "AAI (2016)".
Please confirm that the Division has the correct study, and update the permit text to refer to AAI (2017) to avoid future confusion.*

The text and cover page were updated.

This item is resolved.

2. *On proposed revised page 115, the final paragraph of text refers to Figures 2.05.6-1 and -2, which are to be deleted with TR-116.
Please reword the text to remove reference to the deleted figures.*

The text was updated to remove the reference, however on further review a similar reference was found in the first paragraph on proposed revised page 118.

Please reword the text to remove the second reference to the deleted figures.

3. *On proposed revised page 118, the fourth paragraph refers to a cross section in Exhibit 7 Item 22B, which I am unable to locate.
Please provide a copy of Exhibit 7, Item 22B.*

CCC pointed out my misunderstanding.

This item is resolved.



4. *The diagram presented in Figure 9 of Exhibit 7, Item 21 (the AAI study) is erroneous and misleading.
Please append a corrected diagram to Exhibit 7, Item 21, (or insert it into the PAP text, with reference to Exhibit 7, Item 21).*

CCC correctly pointed out the error in my reference – in fact the comment should refer to Exhibit 7, Item 22B, Figure 9. The figure presents a schematic diagram of a monitoring well, with four Vibrating Wire Piezometers (VWPs) at varying depths. The diagram shows a 1-1/2" PVC pipe inside a 5-5/8" borehole. The VWPs are attached to the outside of the pipe, and the annulus is filled for the entire depth of the hole with Cement Bentonite Grout, which I had assumed was an error. On further review of the literature I learned that the fully grouted construction method is well established and has been shown to be effective, (Contreras et al., 2008).

This item is resolved.

5. *At the request of Colowyo Coal Company, and in recognition of the potential conflicts between their construction schedules and the permitting schedules of other state agencies, stipulations 19 and 20 are proposed to be modified, and stipulation 23 is proposed to be added. The proposed text of the stipulations is as follows:*

*ST 19: OBTAIN DEWATERING WELL PERMITS AND SUBMIT A MINOR REVISION.
DEWATERING WELL PERMITS MUST BE IN PLACE, AND A MINOR REVISION BE SUBMITTED AND APPROVED BY THE DIVISION TO UPDATE SECTION 2.03.10 OF VOLUME 1 OF THE PERMIT APPLICATION PACKAGE, BEFORE THE CONSTRUCTION OF ANY DEWATERING WELLS ASSOCIATED WITH THE COLLOM PIT IS ALLOWED TO OCCUR.*

*ST 20: OBTAIN A DISCHARGE PERMIT FOR WATER PUMPED FROM THE DEWATERING WELLS AND SUBMIT A MINOR REVISION.
A DISCHARGE PERMIT FOR WATER PUMPED FROM THE DEWATERING WELLS MUST BE IN PLACE, AND A MINOR REVISION TO THE PERMIT SUBMITTED AND APPROVED BY THE DIVISION TO UPDATE SECTION 2.03.10 OF VOLUME 1 OF THE PERMIT APPLICATION PACKAGE, BEFORE ANY PUMPING FROM WELLS ASSOCIATED WITH THE COLLOM PIT IS ALLOWED TO OCCUR.*

*ST 23: OBTAIN A DISCHARGE PERMIT FOR STORMWATER RUNOFF AND SUBMIT A MINOR REVISION.
A DISCHARGE PERMIT FOR STORMWATER RUNOFF MUST BE IN PLACE, AND A MINOR REVISION TO THE PERMIT SUBMITTED AND APPROVED BY THE DIVISION TO UPDATE SECTION 2.03.10 OF VOLUME 1 OF THE PERMIT APPLICATION PACKAGE, BEFORE ANY DISTURBANCE ASSOCIATED WITH THE COLLOM PIT IS ALLOWED TO OCCUR.*

CCC responded that there is no rule requirement for well permits or discharge permits to be included in the PAP, and proposed reworded text for the three stipulations.

Rule 2.03.10, Identification of Other Licenses and Permits, reads as follows:

Each application shall contain a list of all other licenses and permits needed by the applicant to conduct the proposed surface or underground mining activities.

This list shall identify each license and permit by:

- (1) Type of permit or license;*
- (2) Name and address of issuing authority;*
- (3) Identification numbers of applications for those permits or licenses, or, if issued, the identification numbers of the permits or licenses; and*
- (4) If a decision has been made, the date of approval or disapproval by each issuing authority.*

The text of the stipulations proposed in the January 8, 2018, letter (which is shown above) does not require that the well permit(s) and discharge permit(s) be added to the PAP in their entirety, but that Section 2.03.10 be updated.

There is no reason to change the language of stipulations 19 and 20.

I have not been able to find a copy of CCC's construction stormwater permit in the Division's records, and no reference is made to it in section 2.03.10 of the PAP.

Please provide a copy of #COR03L802 for review, and update section 2.03.10 of the PAP.

Stipulation 23 should retain a reference to section 2.03.10. The proposed text is as follows:

ST 23: OBTAIN AN INDIVIDUAL DISCHARGE PERMIT AND SUBMIT A MINOR REVISION.
AN INDIVIDUAL DISCHARGE PERMIT MUST BE IN PLACE, AND A MINOR REVISION TO THE PERMIT SUBMITTED AND APPROVED BY THE DIVISION TO UPDATE SECTION 2.03.10 OF VOLUME 1 OF THE PERMIT APPLICATION PACKAGE, BEFORE OVERBURDEN STOCKPILING WITHIN THE COLLOM TEMPORARY SPOIL PILE (NOT INCLUDING TOPSOIL REMOVAL, SEDIMENT POND DEVELOPMENT OR ACCESS/HAUL ROAD DEVELOPMENT) CAN OCCUR.

Please comment on the proposed text for stipulation 23.

CCC objected to a clumsily worded note in the closing paragraph of the January 8, 2018 letter, which read:

Please note that despite the modification of these stipulations, the plan to construct the Collom Pit is not valid without the necessary permits to pump and discharge groundwater.

To clarify, the note was intended to address several facts, namely:

- A. That the plan to construct the Collom pit, in its entirety, makes sense if, and only if, CCC is able to dewater the strata surrounding the pit;
- B. That in order to accomplish this legally, CCC must have permits to pump the water from the ground, and to discharge it to surface streams, and;
- C. That DRMS has no authority to issue those permits, or to evaluate CCC's ability to obtain them.

The TR-116 application and the earlier PR-04 application (which spawned stipulations 19 and 20) have been reviewed by the Division on the assumption that the necessary permits will be obtained by CCC, but it should not be inferred that the ultimate approval of TR-116 (or PR-04) second-guesses the permitting process of any other agency.

Any stipulations to the permit speak for themselves and are not paraphrased here.

References:

Contreras, I. A., Grosser, A. T. & Ver Strate, R. H. The Use of the Fully-grouted Method for Piezometer Installation. *GEOTECHNICAL INSTRUMENTATION NEWS* (2008).