



April 17, 2018

Sent via ePermit system

Department of Environmental Quality
Coal Program
1218 E 6th Ave
PO Box 200901
Helena, MT 59620

Permit ID: C1979012
Revision Type: Amendment
Permitting Action: Deficiency Response
Subject: APPAM5; Arrowhead Amendment-**Round 3 Acceptability Deficiency Response**

Dear Chris:

Spring Creek (SCM) is hereby submitting responses to the Round 3 Acceptability Deficiencies of the Arrowhead Amendment (AHA) application. The attachment to this letter lists each deficiency with SCM's response. For convenience of referencing, SCM has numbered the deficiencies from the deficiency letter dated April 10, 2018.

It should be noted that the file [308 AddmA NoxiousWeed 20170131 APPAM5.pdf](#) was moved from the Operations>Operations Plan section and placed in the Operations>Noxious Weed Management section. Noxious weeds are still referred to within the Operations Plan section, but Addendum A is now wholly contained in the Noxious Weed Management sub-section.

Recently MR 235 was approved which includes a life of mine disturbance and mine permit boundary change. When the 3rd round response for AM5 was initiated, the epermit system pulled in MR 235 revisions. Those have been removed from this AM5 response. The AM5 also includes TR1 revised permit materials because that revision was anticipated to be approved before AM5. Once AM5 is determined administratively acceptable, a clean up MR will be submitted to remove references to TR1 and incorporate all minor revisions approved since AM5 was submitted.

If you have any questions or comments, please contact me at (406) 757-4236 or via email at gabriel.johnson@cldpk.com.

Sincerely,

A handwritten signature in black ink that reads "Gabe Johnson".

Gabe Johnson
Environment Engineer
Cloud Peak Energy, Spring Creek Mine

1. ARM 17.24.305(2)(a):

There appears to be several maps tagged as APPAM5 which are not listed on the Map Affidavit submitted for this amendment. Please ensure that all maps that were submitted with AM5 are listed on the Map Affidavit.

This is a duplicate of a Round 1 Acceptability Deficiency Comment on 11/29/2016. Responded to with Round 1 responses, 03/16/2017, #40 on page 12.

2. ARM 17.24.308(1)(f):

The dwg file for the noxious weed map has not been updated with the amendment boundary. Please update the CAD files for the noxious weed map.

The DWG file for the Noxious Weeds has been updated (308 NoxiousWeedMap 20180413 APPAM5.dwg). As stated in prior submittals, the 2.3G image was mailed on a thumb drive to MDEQ on 08/24/2017 since it was too large to load within ePermit and too large to load through the MDEQ File Transfer Service. In order to communicate this to the user of the DWG file, a 2nd informational file (308 NoxiousWeedImage to MDEQ 08-24-17.pdf) was loaded right after the Noxious Weed DWG file to let anyone know that the image is on file with MDEQ.

3. ARM 17.24.313(1):

There were a number of references added to the text to address the concerns of compaction to the alluvial layer, construction timing, and other items.

The references are Appendix L, Attachment H; Appendix K, section 1.3.1; and section 3.5.1 of Appendix J. Please clarify these references by adding a locational cue. For example: Appendix K (Plans for Ponds and Embankments). This will improve the connection between topics since they are not attached to the same sections of the permit.

The titles were added to the above-named references as indicated.

SCC is very concerned about this request to more fully name references. This type of request has the potential to turn into endless comments, which, in the process makes documents "text heavy" and harder to read.

Throughout the entire permit it is assumed that the reviewer has familiarized themselves with the structure of the permit being reviewed in the ePermit system. If this is being precipitated by newer personnel unfamiliar with permit structure, perhaps some "print-screens" of the various ePermit sections would help. SCC could also provide an index of the epermit structure related to the SCC permit materials if that would be beneficial.

4. ARM 17.24.313(1)(c):

A bond calculation must be submitted and approved prior to DEQ ruling the application acceptable. If additional bond is required, it must be in place prior to DEQ making a decision on the amendment application.

Appendix M (Bond Update) has been modified to include the estimated reclamation liability for the AM5 project. The second part of the comment contradicts recent verbal conversations between SCC and the Department about when the surety bond needs to be in place; nevertheless, SCC is committed to having the surety bond in place prior to construction beginning.

5. ARM 17.24.313(1)(h)(x):

There is no supporting documentation for the "Cropland" technical standards included in Table 7 of Addendum 313B. Please include an explanation as to how these numbers were derived.

Cropland technical standards are based on the Baseline Vegetation Inventory for the Arrowhead Amendment Area (WESTECH 2015) which is found in Baseline/Veg/Appendix B4. Table 3.5.2 on page 76 of the PDF file discusses cropland production. Table B3 within Appendix B on page 183 of the PDF file shows the ground cover baseline measurements for cropland.

Croplands within the study area consist of irrigated and non-irrigated pasture grass/alfalfa fields. Based on NRCS data for the relevant soils and productivity data provided by local ranchers, typical non-irrigated hay yields in the study area vary from 1,400 to 2,500 pounds per acre; irrigated hay yields in the study area are approximately 3,800 pounds per acre (see Section 3.5.2 of the baseline vegetation report).

The cropland production technical standard of 2,500 pounds per acre is the approximate mid-point between the lower production value in non-irrigated hay and the higher production value in irrigated hay. Seventy percent cover is the average cover of either introduced perennial graminoids (i.e., smooth brome and crested wheatgrass) or introduced perennial forbs (i.e., alfalfa) as reported in Table B3 of the baseline vegetation inventory.

A footnote has been added to Table 7 within Addendum 313B and to Table 313-6 within Section 313 to clarify the origin of these proposed technical standards.

6. ARM 17.24.317(1):

The proposed Youngs Creek diversion has no narrative explaining how it will be compliant with ARM 17.24.751. As this will be diverting an active channel with fish species present, SCC must address fish passage for this diversion.

This is a duplicate of a Round 1 Acceptability Deficiency Comment on 11/29/2016. The Department accepted the response given with Round 1 responses, 03/16/2017, #67 on page 19.

7. ARM 17.24.324(1)(b):

The discussion includes references to other areas of the permit; however, they are named as attachments and appendices. Please indicate what they are appending or attached to.

The names of Appendix L, Attachment H and Appendix K in this section have been added. However, the same concerns expressed in the ARM 17.24.313(1) comment are apply to this comment as well.

8. ARM 17.24.324(1)(h):

Three reference area locations are now shown on Plate 23, Sheet 2. They are all upgradient of the haul road as requested during the previous deficiency. The legend for this map states there are four reference areas when there are only three. Please update the legend to accurately reflect what is on the map.

This is a duplicate of a Round 1 Acceptability Deficiency Comment on 11/29/2016. The comment was addressed with Round 1 responses, 03/16/2017, #73 on page 21.

9. ARM 17.24.724(3):

There is no supporting documentation for the "Cropland" technical standards included in Table 7 of Addendum 313B. Please include an explanation as to how these numbers were derived.

Please refer to 17.24.313(1)(h)(x) above.