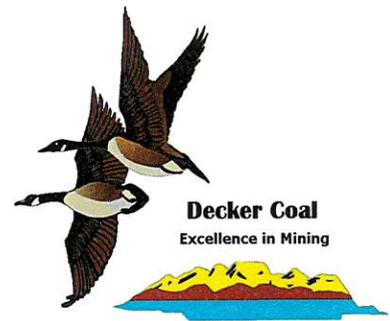


February 1, 2019

Mr. Chris Yde
Department of Environmental Quality
Industrial and Energy Minerals Bureau
1218 E 6th Avenue
Helena, MT 59601



Permit ID: C1983007
Revision Type: Amendment
Permitting Action: Completeness Deficiency 1 Response
Reference #: Amendment AM2 - addition of the East Decker Northeast Extension - Response to Completeness Deficiencies #1

Dear Chris:

Decker Coal is submitting this response to address the first round of Completeness Deficiencies for the East Decker AM2 Permit Amendment. Decker Coal received the AM2 Round 1 deficiency letter on December 18, 2018. The response to each item is described in detail in an attachment to this Cover Letter, Response Summary for Decker AM2 Round 1 Completeness Deficiencies. The responses are listed by rule number, in the same format the deficiencies were received. A detailed list of changes to the MQAP is listed in the document ***ED MQAP List of changes for AM2 Round 1 Completeness*** which has been uploaded to the ePermit in the Reclamation/Protection of Hydrologic Balance/MQAP Section (314). A detailed list of changes to the Probable Hydrologic Consequences (PHC) is listed in the document ***314 List of changes for AM2 Round 1 Completeness*** which has been uploaded to the ePermit in the Reclamation/Protection of Hydrologic Balance/Probable Hydrologic Consequences Section (314(3)).

The second listed item under ARM 17.24.305(1)(a) requests a consistent naming convention for all AM2 maps. Map names were revised to a format of EX XXX_XX (Brief Description)_AM2, and a spread sheet detailing all of the changes to the Map names that have been submitted with the Completeness Deficiency Response 1 submittal is also attached to this Cover Letter.

Please call or email if we can provide any additional information or if there are any questions.

Sincerely,



Bill Pruitt
Environmental Coordinator
Email: b.pruitt@aecoal.com
Phone: (406) 757-2629

AM2 Completeness 1 Response,
February 1, 2019
Page 2

Attachments:

AM2 Completeness Deficiency 1_Response Summary
AM2 Completeness Resp 1 Map Files Revised

Response Summary for Decker AM2 Round 1 Completeness Deficiencies

The following changes were made to the AM2 Permit Amendment Submittal to Address the Round 1 Completeness Deficiencies:

1. **ARM 17.24.302(1):** Please include a signed application form for this amendment.
 - Added reserves and disturbed Mineral and disturbed Surface to Mine Site Info
 - Completed AM2 application and uploaded
2. **ARM 17.24.303(1)(b):** Please update the Location.pdf to match the legal description of access.
 - Created and uploaded **303.1.b Location_AM2.pdf**, to replace Location.pdf
3. **ARM 17.24.303(1)(m):** Please correct the notary block for the certified statement to include the year.
 - Uploaded signed and dated document **303.1.m Decker AM2 Certified Statement 1_14_19**
4. **ARM 17.24.303(1)(p)(i):** If private mineral estate has been severed from the private surface estate, identify and submit the materials as required in the subsections of this rule.
 - Uploaded **303.1.p Status_of_Private_Mineral_Estate_AM2** to address private mineral estate
5. **ARM 17.24.303(1)(x):** Please provide the proposed public notice as required.
 - A Draft Public Notice **AM2 Permit Amendment Public Notice** was uploaded to Admin/Proof of Publication (Section 303).
6. **ARM 17.24.304(1)(b):** Please provide an ethnographic overview. An ethnographic study provides an examination of the study area from an "insiders" point of view. Primarily, that of interested Native American Tribes. This may include land use, sacred areas, plant use, animal use, and ancestral use of an area.

Please consult the following articles for information of what constitutes an ethnographic

study: https://www.nps.gov/archeology/cg/spr_2001/Inclusiv.htm

https://www.nps.gov/archeology/cg/spr_2001/Puzzle.htm

- An Ethnographic and Ethnohistoric Overview of the East Decker Northeast Extension area has been completed by Ethnoscience, Inc. The report is titled **304(1)(d) Ethnographic and Ethnohistoric Overview_AM2**, and has been uploaded to Baseline/ Unique/Special Characteristics & Geologic Formations (304(1)).

7. **ARM 17.24.304(1)(c)**: “Significant or unique scenic and/or geological formations or sites” must be addressed.
 - Uploaded **304.1.c Environmental_Resources_AM2** which addresses significant or unique scenic and/or geological formations or sites
8. **ARM 17.24.304(1)(d)**: Any “special, exceptional, critical, or unique characteristics” must be addressed.
 - Uploaded **304.1.d Environmental_Resources_AM2** which addresses significant or unique scenic and/or geological formations or sites
 - Updated text box which states the following “See Geologic Information.pdf on the Geologic Information Screen in the Baseline Section. See 304 Geologic Information_AM2 and 322 Geologic Information and Coal Conservation Plan_AM2 for geologic formation information.”
9. **ARM 17.24.304(1)(e)**: The monitoring well maps in Section 304 are from 2014 and do not show all monitoring wells. Please update appropriately.
 - **Exhibit 1 in ED MQAP_AM2** located in Reclamation/Protection of Hydrologic Balance/MQAP (314) is a map of the current Hydrology Monitoring Network.
 - **Appendix A-Exhibit 1 in ED MQAP_AM2** located in Reclamation/Protection of Hydrologic Balance/MQAP (314) is a map of the Historical Surface Water Monitoring Sites
 - **Appendix A-Exhibit 2 in ED MQAP_AM2** located in Reclamation/Protection of Hydrologic Balance/MQAP (314) is a map of the Historical Ground Water Monitoring Sites
 - The 3 maps listed above are accessible in dwg format in Maps/Map Summary/CAD Files (305)
10. **ARM 17.24.304(1)(g)**: This rule requires a detailed description of all overburden and mineral materials (all materials other than soil) that will be handled during the mining or back filling operations. While this information is included in the currently approved permit it is required to be updated for this amendment.
 - **Ex 304_1 NE Ext OB Sample Locations** Map has been uploaded in pdf format to Baseline/Geologic Information (304(1)(g)), and the dwg to Map Summary/Maps (305). Uploaded **Table 304-1 NE Extension Overburden Analysis** to Baseline/Geologic Information (304(1)(g)). Uploaded **304.1.g Overburden Analysis_AM2** to Baseline/Geologic Information (304(1)(g)).
11. **ARM 17.24.304(1)(l)(ii)(C), (i), (ii), (iv)**: A statement and description (if applicable) of past mining activities must be included in the application.
 - Uploaded **304.1.l Land_Use_AM2** which describes the premining activities over the permit area.
 - Decker also uploaded **Pre_Mine_Land_Use_am2** which is referenced in the **304.1.l Land_Use_AM2** document
12. **ARM 17.24.305(1)(a)**: Maps Ex_AF_1_surf_am2.pdf and Ex_AF_2_coal_am2.pdf need matching CAD files included in the maps section of the e-permit.
 - **EX 305_1a Surface Owner_am2.dwg** and **EX 305_1b Mineral Owner_am2.dwg** were uploaded to the Map Summary/Maps (305) CAD section. The names of the surface and mineral maps in pdf format were also changed to **EX 305_1a Surface Owner_am2.pdf** and **EX 305_1b Mineral Owner_am2.pdf** to conform to the consistent naming convention.

Please establish a consistent naming convention for all AM2 maps so they will sort better in the e-permit and the map content can be more easily understood. The map name should include the exhibit number, rule number and the map title.

- Removed [7_11_hyd_nwk_16.pdf](#).
- Renamed all maps with a consistent name format of *EX XXX_XX (Description)_AM2*
- The extension *_AM2* was added to all files created or updated with the AM2 submittal
- An Excel spreadsheet listing all Maps that have revised names was created and will be submitted with AM2 Completeness Deficiency 1 response as an attachment to the Cover Letter

Third, all maps must be updated to include the proposed AM2 permit boundary.

- The proposed AM2 permit boundary has been added to all appropriate maps.

Please verify that all DWG files are within the 305 maps section and not scattered throughout the e-permit.

- All DWG maps are located in the Map Summary/Maps/Master CAD Section (305)

13. **ARM 17.24.305(2)(a)**: Please verify that all applicable maps have the appropriate certification as required by ARM 17.24.305(2)(a).
 - [C1983007 AM2 Map Affidavit 1_24_19](#) has been loaded to Maps Summary/Maps (305)
14. **ARM 17.24.308(1)(b)(all)**: This rule must be addressed or applicable section referenced.
 - Uploaded **301.1.b Facilities** to demonstrate compliance with ARM 17.24.609 and applicable rules of subchapter 10, explaining the construction, modification, use, maintenance, and removal of the following facilities (unless retention of such facilities is necessary for postmining land use as specified in ARM 17.24.762): dams, embankments, impoundments, OB storage, all facilities.
15. **ARM 17.24.313(1)**: A previous deficiency for TR3 concerned the elimination of Appendix 12-3 from permit documents. The response to the deficiency stated that the reference had been added back into the section. The Appendix 12-3 and the reference are not included. Please incorporate Appendix 12-3 in the proposed submittal.
 - [Appendix 12-3 Geomorphology of Major Drainages_am2](#) was created and uploaded to Reclamation/Drainage Basin Reclamation Plan (Section 313). This document provides extensive detail on each of the Major Drainages in the East Decker Post Mine Topography, following the format of the original Appendix 12-3 document in the East Decker Permit.
16. **ARM 17.24.314(1)**: The PHC submitted with the application does not address the proposed amendment. The PHC must be written to address the proposed mining and the relevant adjacent areas as defined in this rule. West Decker data and mining are not relevant to the proposed action. Maps must be current, legible, and cover the proposed amendment area and all relevant adjacent land.
 - The PHC has been revised and updated to ensure that it addresses the proposed mining and the relevant adjacent areas as defined in this rule. Maps are current, legible, and cover the proposed amendment area and all relevant adjacent land.
 - A detailed list of all changes to the PHC, [314 List of changes for AM2 Round 1 Completeness](#), has been uploaded to Reclamation/Protection of Hydrologic Balance/PHC (314)

17. **ARM 17.24.314(2)**: The plan for control of surface and ground water drainage is mainly focused on West Decker. West Decker is hydrologically isolated from AM2 activities and as such is not relevant. Please rewrite the appropriate sections to address the amendment being submitted.

Appendix C is titled "West Decker Sediment Control Plan" and has no information on East Decker at all.

- The PHC has been revised and updated to ensure that it addresses the proposed mining and the relevant adjacent areas as defined in this rule, as stated in the previous deficiency response.

ARM 17.24.314(2)(d): Please provide a Monitoring and Quality Assurance Plan (MQAP) incorporating the AM2 application area.

- The MQAP has been revised and updated to ensure that it addresses all required areas.
- A detailed list of all changes to the MQAP, *ED MQAP List of changes for AM2 Round 1 Completeness*, has been uploaded to Reclamation/Protection of Hydrologic Balance/MQAP (314)

18. **ARM 17.24.314(3)**: The determination of hydrologic consequences relies heavily on the baseline study completed for the initial mine application. While this is useful data, the initial application did not include the AM2 area. Because AM2 proposes to excavate an alluvial valley floor, and most of the proposed disturbance is on the north side of Deer Creek, the initial baseline study does not adequately address potential hydrologic consequences of the proposed action.

- Sections 2.1.1, 2.1.2 and 2.1.3 of the PHC discuss in detail the discharge rates, future drawdown, and groundwater recovery levels of all coal seams and the Deer Creek alluvium.
- Appendix E of the PHC is a 3-dimensional groundwater model simulating drawdown and recovery in the Deer Creek alluvium and the coal seam aquifers for multiple scenarios.

19. **ARM 17.24.314(3)(a)**: The PHC references 26 tables and 9 figures, which do not appear to be present. Please provide the referenced materials.

- All PHC Tables, Figures, Appendices and Exhibits are listed in the PHC Table of Contents, and are loaded in the same order as the Table of Contents in Reclamation/Protection of Hydrologic Balance/PHC (314).
- All PHC Exhibits have been created in dwg format and are loaded in the Map Summary/Maps/ CAD Files (305) Section.

20. **ARM 17.24.317(1)**: The currently permitted diversion narrative document is missing and must be included.

- Uploaded *317 Diversions Middle Creek and Coal Creek_AM2* describing Middle and Coal Creek diversions, and *317 Diversions Deer Creek_AM2* describing the Deer Creek diversion in detail.
- Renamed the Middle Creek diversion extension design, the design to extend the diversion to the East around Pit 20, to *App 317_1 Middle Cr Diversion Extension*. This extension will be constructed prior to additional mining from Pit 14. There is also a landowner consent to construct erosion control at the discharge point of the Middle Creek extension, *App 317_2 Middle Creek Diversion Ext Landowner Consent* which was uploaded to the Diversion section of the permit, 317.

21. **ARM 17.24.321(1)**: This rule must be addressed in this section, or applicable references must be provided.
- An updated narrative, *321 Transportation Plan_AM2*, addressing 321(1)(a through g) has been uploaded to Operations/Transportation Facilities Plan (321).
22. **ARM 17.24.321(2)**: This rule must be addressed in this section, or applicable references must be provided.
- An updated narrative, *321 Transportation Plan_AM2*, addressing 321(2) has been uploaded to Operations/Transportation Facilities Plan (321).
23. **ARM 17.24.322(2)(a)(all), (b), (c)**: These rules must be addressed in full in this section. An example can be found in the West Decker permit.
- The Section: *322 Geologic Information and Coal Conservation Plan_am2* was moved from Section 304 to Operations/Coal Conservation Plan (322).
 - Comment was added to the Section 322 Text Box: Please see Baseline/Geologic Information (Section 304) for the following Geology Information: *Appendix 322_1 Drill Hole Summary*; *304.1.g Overburden Analysis* Narrative; *Exhibit 304_1* for Overburden Drill Hole Location Map; *Table 304_1* for Overburden Analysis; *Appendix 322_2* for Coal Quality Summary; *Exhibit 4_1* for original permit OB sample locations; *Exhibit 322_1* for Drill Hole Location & X-Section Location Map; *Exhibit 322_2 & 3* for Geologic X-Sections; *Exhibit 322_4 through 7* for Seam Thickness Maps; *Exhibit 322_8 through 11* for Floor Structure Maps. All of this information covers both the original East Decker permit area, and the East Decker Northeast Extension area.
 - A new Section *304 Geologic Information* was added to Baseline/Geologic Information (304) to help clarify where all Geologic information is located.
24. **ARM 17.24.325(1)**: The referenced document, "AVF 325 Exhibit 5-3" (PHC Pages 10, 30, 38) is missing.
- A copy of the Deer Creek AVF assessment, *dck_AVF_Assessment*, is included in its entirety and is located in Baseline/Alluvial Valley Floors (325)
 - The Deer Creek AVF assessment was submitted to DEQ in January of 2016, approximately 36 months prior to this submittal, and an AFV determination for Deer Creek has not been received by Decker Coal Company at this time.
 - This deficiency is apparently referring to a typographical error in the Deer Creek AVF assessment. *325 Exhibit 5-2* is a map of the Hydrologic Monitoring in the Deer Creek area included in the AVF Assessment. The following page in the document is another Exhibit, *Pontentiometric Surfaces and Water Quality Variation*, and is also identified in the Title Block as *325 Exhibit 5-2*. The Exhibit number is incorrect, this Exhibit should be labelled *325 Exhibit 5-3*. Decker Coal would be happy to provide a corrected copy of the AVF, and will contact DEQ to discuss the arrangement of providing the revised document.
25. **ARM 17.24.724(all)**: Please include necessary materials to adequately address ARM 17.24.724 in the permit.
- Additional Comment has been added to 724: *See section 17.24.313(1)(h) for discussion of revegetation Success criteria.*
26. **ARM 17.24.726(1)**: Please include necessary materials to adequately address ARM 17.24.726 in the permit.
- Additional Comment has been added to 726: *See section 17.24.313(1)(h) for discussion of Vegetation Measurements.*

Other Items Updated or Revised with this submittal:

- Updated Insurance Certificate
- Uploaded ***EX 11_4 Surface Drainage_mr78*** to replace EX 11_4 Surface Drainage_TR3, a more recent Surface Drainage map

Decker Coal Company

Permit C1983007

Permit Amendment AM2

Map and Appendix File Names Revised with Completeness Response #1

APP 313_2 Bond_TR3.dwg

Decker Cult Survey Sites.dwg

EX 11_1 Mine Sequence_am2.dwg

EX 11_1 Mine Sequence_am2.pdf

EX 11_2 Total Area_AM2.dwg

EX 11_2 Total Area_AM2.pdf

EX 11_14 Pit 15 Ditch.dwg

EX 11_14 Pit 15 Ditch.pdf

EX 11_15 Mid Crk P14 Cutoff.dwg

EX 11_15 Mid Crk P14 Cutoff.pdf

EX 12_10 Middle and Coal Creek Profiles.dwg

EX 12_10 Middle and Coal Creek Profiles.pdf

EX 12_3 OB Storage_AM2.dwg

EX 12_3 OB Storage_AM2.pdf

EX 12_7 Post Mine Drainage_AM2.dwg

EX 12_7 Post Mine Drainage_AM2.pdf

EX 12_8 Coal Creek Post Mine Sheet 1.pdf

EX 12_8 Coal Creek Post Mine Sheet 2.pdf

EX 12_8 Coal Creek Post Mine.dwg

EX 12_9 Middle Creek Post Mine Sheet 1.pdf

EX 12_9 Middle Creek Post Mine Sheet 2.pdf

EX 12_9 Middle Creek Post Mine.dwg

EX 305 1a Surface Owner_am2.dwg

EX 305 1a Surface Owner_am2.pdf

EX 305 1b Mineral Owner_am2.dwg

EX 305 1b Mineral Owner_am2.pdf

EX 313_10 Reclamation Schedule_am2.dwg

EX 313_10 Reclamation Schedule_am2.pdf

EX 313_2 East Topo_am2.dwg

EX 313_2 East Topo_am2.pdf

EX 313_4 Bond Surface.dwg

EX 313_4 Bond Surface.pdf

EX 313_5 Bond 2018 Disturbance.dwg

EX 313_5 Bond 2018 Disturbance.pdf

Decker Coal Company

Permit C1983007

Permit Amendment AM2

Map and Appendix File Names Revised with Completeness Response #1

EX 313_6 Bond Earthwork.dwg

EX 313_6 Bond Earthwork.pdf

EX 313_7 Bond CutFill.dwg

EX 313_7 Bond CutFill.pdf

EX 313_8 Bond Topsoil.dwg

EX 313_8 Bond Topsoil.pdf

Ex 322_12 Coal Thickness and Floor Maps.dwg

Ex 322_13 Geol x sections.dwg

EX 9 Field Map_am2.dwg

EX 9 Field Map_am2.pdf

EX AF4 Coal Mining Time Frames_am2.dwg

EX AF4 Coal Mining Time Frames_am2.pdf

Middle Creek Diversion Extension.DWG

Middle Creek Diversion Extension.pdf
