COMPLETENESS REVIEW RESPONSES – NOV. 24, 2010
FOR PERMIT APPLICATION NO. SHSH-1001

Section 1.0 – Introductory, Financial, Compliance and Related Information

1. ***Follow-up to Original Item No. 3: The last ownership tracts listed in the notice are for the NE½ and NW½ of Section 34. It appears this error was corrected but then changed back to ½ rather than ¼. Please correct these errors. (GAW)***

   In Appendix 1.2-3, the last ownership tracts listed in the notice were corrected to reflect the NE1/4 and NW1/4 in South Heart Coal, LLC's October 26, 2010 response.

   Although not requested in the PSC's comments, the second paragraph of Section 1.0 has also been revised to read as follows:

   "The SHLM is being developed by SHC to produce coal for market. The mine plan described in this application has been designed specifically to provide coal to a planned integrated gasification combined cycle (IGCC) power plant that would be located adjacent to the mine. 2014 is currently planned as the year that initial mine development and mining will commence. Ongoing engineering evaluations of the planned commercial-scale gasification plant indicate that a mine production rate of 2.4 million tons of coal per year will be required to fully support the plant. Where there are specific revisions to tonnages, the schedule for mining and reclamation, or any other changes specific to coal delivery that require permit revision, operations revisions to address the changes will be submitted to the PSC for approval."

Section 2.6 – Surface Water Information

2. ***The hyperlinks to Tables 2.6-4 and 2.6-5 are not operable in the Navigation Pane, although they are operable in the Section 2.6 narrative. Please review and correct as necessary. (WTG)***

   The hyperlinks have been restored as requested.

3. ***The entry for SHRES-21A on page 2 of Table 2.6-4 indicates that a water quality sample was collected, but no sample results are shown for this reservoir on page 15 of Appendix 2.6-4. Please review the inconsistency and correct as necessary. (WTG)***

   Table 2.6-4 has been corrected to reflect that no water quality samples were collected from SHRES-21A. Page 15 of Appendix 2.6-4 correctly reports that the site was visited 15 times and that a sample wasn't collected because SHRES-21A was either dry or frozen at the time of the site visit.

Section 3.1.3 – Mine Support Facilities

4. ***Section 3.1.3.1 indicates a wash bay pond will be constructed near the facility area. Please include design plans for the pond and, if this pond will receive surface water runoff the appropriate information required by NDAC 69-05.2-09-09 must be added to Section 3.6. (MDB)***

The text in Section 3.1.3.1 has been updated to provide the information as required by NDAC 09-05.2-09-09 and reads as follows:

"The mine facilities will include an indoor wash bay with internal sump to clean mobile equipment prior to performing preventative maintenance (PMs) and major repairs. Mud, grease, and oils dislodged from the equipment during washing will form a slurry which will be directed into the internal concrete sump. The majority of the solids (mud) will settle out and will be removed from the sump using a small front end loader and transported to the pit for disposal.

The oil and grease washed from the equipment will rise to the top of the water in the indoor sump and will be removed using an oil-grease trap and/or an oil-water separator used for the separation of water and the oil/grease. The water leaving the sump will be transported to the external sump located southwest of the facilities area as shown in Figure 3.1-1 and Figure 3.6.1 as well. This external sump is a storm water management basin structure as shown in Figure 3.6-8 which includes a plan view, cross section and stage-area capacity figure on this incised depressional basin storm water feature.

This external sump has been designed with sufficient capacity to handle both surface water runoff from the facilities area and water from wash bay. Water from the sump will be pumped from the external sump to Pond 1 where the water will be treated and released. Prior to the water being pumped to Pond 1, it will be passed through another oil water separator to remove any remaining oil/grease."

Section 3.5 – Transportation Facilities

5. In Section 3.5.1, Transportation Narrative, please address the issues listed below. (MDB)

a. Plans for the concrete arch bridge are still not complete. The geotechnical information for the foundation is still missing. Since this is an intricate part of MHR #1, the haulroad cannot be constructed as shown in Figure 3.5-7. Please submit all the required information to build the haulroad or remove the bridge and portion of the haulroad which will not be constructed until the bridge is constructed from Figure 3.5-7. If all of the required information cannot be provided at this time, design plans for the bridge need to be removed from the permit and submitted in its entirety for approval prior to construction and the bridge should only be referenced as being submitted in future plans as was done for the 122nd Avenue overpass.

Per review the PSC has stated that NDAC 69-05.2-09-06 does not require geotechnical studies or detailed surveys to be completed prior to permit approval. The text in Section 3.5.1.2 now reads:

"Any changes to these construction designs will be submitted in a revision application for approval prior to construction of the concrete arch bridge."

b. The plans for MHR #3 and MHR #4 are not complete because culvert information is not provided. Please include all of the required information or remove the design plans for the haulroad. The road should be shown for future plans on Figure 3.5-1.

Figures 3.5-9 and 3.5-10 will be removed from the application and the Chapter 3 Table of Contents will reference them as place holders for future revisions/submittals.

c. Please include the necessary narratives and descriptions for the Explosive Storage Roads.

Section 3.5.1.2 will be updated to reflected similar language used to describe the main haul road.

"The Explosive Storage Access Roads (ESAR) will be constructed during the initial phase of mining of Pit 1. The primary purpose of these roads is to provide access to the explosive materials storage area located north of Pit 2. ESAR 1a will begin at the western end of MHR 2, approximately station 39+50 and from this point it will head north until reaching station 66+12 were it joins to ESAR 1b. ESAR 1b will head west along the northern boundary of Pit 2 to approximately station 19+45 and then turn north to access the explosive materials storage area."

d. In Section 3.5.1.5, Culvert and Arch Bridge Design, please update the Narrative for Culverts #6 and #7. With the relocation of the facilities area, the culverts and final purpose have changed.

The narrative will be updated in Section 3.5.1.5.

e. By definition, the access roads leading to the facility are primary roads and require design plans. Please provide the design plans for the facility access roads.

Stationing has been added to Figure 3.5-1 for the access road. A profile design will be completed and submitted as Figure 3.5-4. The profile will include the required design elements including culverts. Additionally, the following text has been added to Section 3.5.1.1.

"Figure 3.5.4 illustrates the typical profile for the facility access road. The Facility Access Road will intersect 122nd Avenue near the Mine Support Facilities. It will head west through the Mine Support Facilities and intersect Main Haul Road 1 (MHR 1) at approximately station 112+50. The facility access road will provide access to the Mine Support Facilities for the mining and service equipment."

f. In Section 3.5.1.1, Haulroad Construction, the hyperlink to Figure 3.5-6 does not work. Also, the label of the figure does not match the title block of the drawing. Please make the necessary corrections.

The html will be updated and necessary corrections made to Figure 3.5-5 and Figure 3.5-6.

Although not requested in the PSC's comments, Figure 3.5-11a has been revised to show the correct location of the Mine Support Facilities and access into the mine.

Section 3.6 – Surface Water

6. ***The narrative in Section 3.6.1 states a sump will be installed to collect storm water runoff from the facilities area. Please include design plans for the sump as required by NDAC 69-05.2-09-09 and label the feature on the Pit Layout and Facilities Map, Figure 3.1.1. By definition, all surface impoundments are required to be designed and certified by a professional engineer. (MDB/MSK)***

   Designs for the sump are included in Appendix 3.6-2 in the SEDCAD reports labeled "SHLM Facilities Area Sump & CC#7". The sump is shown on Figure 3.1-1 and is clearly labeled on Figure 3.6-1. Norwest will also label the sump on Figure 3.1-1. Norwest will provide a profile of the sump with elevations and outlet works specifications, which will match the information associated with the SEDCAD design. This feature is a storm water management basin structure, rather than an impoundment, but Norwest will provide a profile of the sump with elevations and outlet works specifications, which will match the information associated with the SEDCAD design. The new figure will be Figure 3.6-8 which will include the plan view, cross section and stage-area capacity figure on this incised depressional basin storm water feature. This change will force the figure previously labeled 3.6-8 to be relabeled Figure 3.6-9.

   Although not requested in the PSC's comments, the following figures have been revised to correct the PE number:

   - Figure 3.5-2
   - Figure 3.5-3
   - Figure 3.5-5
   - Figure 3.5-6
   - Figure 3.5-7
   - Figure 3.5-8

Section 4.1.3 – Reclamation Costs

7. ***Please include multiple cross sections of the worst case pit and stationing of each cross section in order to calculate the yardage shown in Appendix 4.1-1. This should also include the post-mining topography of the pit area for mass balance check. (MDB)***

   The cross-sections will be generated on 500ft centers and included in the permit application as Figure 4.1-5c.

8. ***Please include a topography map of the worst case scenario pit. The map should be a combination of reclaimed lands behind the pit, undisturbed ahead of the pit and the fill topography within the pit and spoils area. (MDB)***

   A topography map has been created that shows the worst case scenario pit (Figure 4.1-5b). The map will show the topography contours that are associated with the reclaimed lands, undisturbed areas, and the final fill and spoils. Additionally, the following text has been added to Section 4.1.5.

   "Figure 4.1-5b shows the worst case topography for the worst case bond scenario and Figure 4.1-5c shows the cross-sections that were generated in Carlson Mining."

   This change required the renumbering of Figure 4.1-5 to Figure 4.1-5a.

9. ***Please update the worst case scenario narrative to provide additional detail including the year in which the worst case will occur, the area stripped ahead of the mining pits that will require soil respread, the area not reclaimed behind pit, and any variance areas. (MDB)***

   The text in Section 4.1.3.1 currently states that the worst case scenario will occur in Year 2018. Additionally, the following statement will be included:

   "*In Year 2018 there are 22.2 acres ahead of the active mining pit that have been pre-stripped and will require soil respread, 28.9 acres of open pit area and highwall/endwalls, 88.2 acres not reclaimed behind the pit, and no variance areas."*

10. ***Please provide the costs for removing the facilities from the permit as part of the worst-case reclamation cost estimate. The RS Means Guide provides values for the removal of structures. (MDB)***

    The worst-case reclamation cost estimate (Appendix 4.1-1) has been updated to include costs for demolition and removal of the facilities. Only Tables 5 and 6 of this appendix were revised. Section 4.1.4 has also been updated to include the revised bond costs.