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Technical Analysis and Findings

Utah Coal Regulatory Program

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PID: C0070005
TaskID: 5178
Mine Name: SKYLINE MINE
Title: VEGETATION UPDATES

Summary

The Division is conducting an oversight evaluation on the Skyline Mine with regard to the reference sites selected to determine revegetation success at the time of bond release. All disturbed areas and reference locations were examined.

During this evaluation, the Division realized that Plate 2.7.1-2 had not been updated to include several new reference sites that had been added over the years through new amendments (Winter Quarters, NOG, the extended Waste Rock Site, or Swens Canyon). Although these locations were identified in supporting reports and appendices, the reference sites were never added to the "Vegetative Reference Area" plate as referred to on page 2-58a of the MRP.

Additionally, a current commitment within the MRP was not being fulfilled, which has resulted in an examination of the necessity to maintain the commitment. Due to ambiguity of the language in the MRP, the Permittee and Division had some disagreement on the details of the commitment. The commitment is on page 4-47 and under the subtitle "4.7.5 Monitoring Procedures, Portal, Train Loadout, Waste Rock Disposal Site, South Fork Breakout Areas and Other Small Areas". It states, "The reference areas will be surveyed by the S.C.S. at five year intervals to determine their condition class".

The Division is of the opinion that the Permittee committed to monitoring or having SCS (previously the Soil Conservation Service, now the NRCS) conduct an inspection of all reference sites on a 5 year schedule to determine the condition class of the site. The reason to determine condition class is to ensure a selected reference site is not degraded in a manner that renders it unacceptable to be used as a reference for revegetation success at the time of bond release.

Subsequently, the Permittee submitted this amendment to reconcile the issues noted above.

Deficiencies Details:

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Environmental Resource Information

General

Analysis:

COMPLIANCE WITH PERMIT
R645-300-143 The permittee will comply with the terms and conditions of the permit, all applicable performance standards

and requirements of the State Program.

Analysis:

Page 4-47 of the MRP states, "The reference areas will be surveyed by the S.C.S. at five year intervals to determine their conditions class." The Division realizes the S.C.S. has gone through many changes and is now the NRCS and also that State and Federal regulation do not require regular monitoring of reference areas. The proposal to remove monitoring on a 5 year basis of those reference sites is reasonable and acceptable if as proposed, they are evaluated during the last two years of liability to determine adequacy for reference comparison. However, because the precise location of the reference area, for each vegetation type, is not currently identified, the Division requests that the Permittee conduct one reconnaissance visit during 2016 to validate the adequacy of the proposed reference site specific to the vegetation community with which it shall be compared. Upon selection of the site, a GPS location shall be collected and located on plate 2.7.1-2. At that time, Plate 2.7.1-2 shall be amended to the MRP and this request shall be reconsidered.

Deficiencies Details:

The amendment does not meet the State of Utah R645-300-143 requirements for complying with the permit. Prior to approval, the Permittee must conduct one reconnaissance visit during 2016 to validate the adequacy of the proposed reference site specific to the vegetation community with which it shall be compared Upon selection of the site, a GPS location shall be collected and located on plate 2.7.1-2.

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Vegetation Resource Information

Analysis:

The amendment does not meet the State of Utah R645-301-321 requirements for vegetation resource information.

Vegetation is described in numerous reports located in Appendix A-2-1 and summarized in Sections 2.7 and 4.7 of the MRP. Reference areas to be used to determine reclamation success are shown on Plate 2.7.1-2.

Plate 2.7.1-2 has been modified in a way that changes the location of the reference areas identified on the previous map. The old reference areas were specific to the vegetation communities against which they were to be measured (Aspen, Spruce, Sagebrush, and Riparian). It was understood that areas seeded with the seed mix specified to the reference vegetation community would be compared to that specific site. With the amended map, it is unclear how reference site selection will be made because the reference areas are given a number and not vegetation type. Due to the size of the reference area, vegetation communities are within transitional ranges and render the specific vegetation community as ambiguous. An agreement between the Division and the Permittee on a specific vegetation reference site is not conclusive and allows potential for future problems at the time of bond release.

If baseline data is not going to be used for success standards, a reference site for each vegetation community must be identified on a map. This includes a location that the Division can specifically locate on the ground for future verification. The MRP indicates these sites are located by steel markers but due to ambiguity in the Welsh report and the map, it is unclear where reference locations are located on the ground. The use of best technology currently available, (submeter accurate GPS recording devices) should be used to document and record each location for ease of future reconnaissance.

Deficiencies Details:

The amendment does not meet the State of Utah R645-301-300 requirements for vegetation resource information. The following deficiency must be addressed prior to final approval:

R645-301-300; R645-301-323.100: Prior to approval, the Permittee must identify precise reference locations that will be used to measure success standards at the time of bond release. These locations must be identified by the vegetation community which they will be referenced. Using best technology currently available, these locations shall be GPS marked to facilitate future navigation to the site.

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