Addendum OP-5a-1

E-mail Correspondence with WDEQ-LQD

From: Moxley, Mark [mailto:mmoxle@wyo.gov]
Sent: Thursday, August 28, 2008 1:09 PM
To: Ethan Brown
Cc: Bautz, Melissa
Subject: RE: Soil Survey at Lost Creek

Ethan,

I just reviewed the soils section of the permit application and I thought it might be good for you to see my draft comments. If you have any questions please feel free to contact me.

Mark Moxley

- RE: Soils, Appendix D-7
- 1. Lands to be affected by the operation (plant site, parking/laydown areas, ponds, roads, wellfields, etc.) must be outlined on the soils map.
- 2. The soils map should be presented at a normal engineering scale (i.e. 1"=400' or 1"=500'). The township, range and county should be clearly noted on the map.
- 3. The soils on lands to be affected by the operation must be mapped at an Order 1-2 level.
- 4. A map must be presented to show topsoil suitability/stripping depths.
- 5. Coarse fragments is one of the criteria listed in Guideline No. 1 for establishing soil suitability. However, where soils resources are limited and marginal in quality LQD recommends that coarse fragments not be used as the determining factor for soil suitability.
- 6. The volumes of soil to be salvaged and stockpiled from the various major affected areas should be listed.
- 7. The person(s) who conducted the soils study should be identified.

From: Bautz, Melissa [mbautz@wyo.gov]
Sent: Thursday, August 28, 2008 8:42 AM
To: Ethan Brown
Cc: Moxley, Mark; Roberta Hoy
Subject: RE: Soil Survey at Lost Creek

Ethan

This seems like a reasonable, good plan to quantify and qualify the soil at Mine Unit 1. I have no problems with this approach. Thank you for the information. Melissa

From: Ethan Brown [mailto:ethan.brown@aata.com]
Sent: Wednesday, August 27, 2008 2:02 PM
To: Bautz, Melissa
Cc: Ping Wang; Roberta Hoy
Subject: Soil Survey at Lost Creek

Hello Melissa,

AATA has the opportunity to complete the Order One survey of the Lost Creek proposed facility site and Mine Unit One this coming week (September $2^{nd} - 5^{th}$). The current plan is to walk the area and dig shallow pits to determine the quantity and distributions of the different soil types in the area. After approximately three days of evaluation, one to two locations per soil type will be chosen for profile excavation. Each profile will be approximately 5 feet deep and will be large enough to allow entry. Based on the previous Lost Creek Sub-Order Three survey, we expect to encounter relatively few soil types in the two areas. Therefore, we anticipate the need for approximately 5 to 10 soil profiles. Samples will be taken from at least one profile in each soil type. The samples will be collected from the middle portions of each main horizon down to the C Horizon. The samples will be sent to Energy Laboratories in Casper Wyoming where they will be analyzed for topsoil suitability. The parameters will include:

pH, EC, Saturation percentage, Texture, SAR, Selenium, Boron, and Coarse fragments.

Because of the limited soil surveying in this area prior to Lost Creek's work, it may not be possible to correlate the soils with existing SCS soil series. Both the State Soil Scientist and the Sweetwater County Soil Scientist have expressed their willingness to help if necessary. However, we have been focusing on topsoil suitability rather than the identification of SCS soil series.

Please let us know if you have any questions or concerns.

Thank You,

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