

TECHNICAL MEMORANDUM

Utah Coal Regulatory Program

July 27, 2015

TO: Internal File

THRU: Daron Haddock, Coal Program Manager 

FROM: Cheryl Parker, M.S., P.E., Environmental Scientist III 

RE: GEM Geotechnical Report Resubmittal, Alton Coal Development, LLC, Coal Hollow Mine, C/025/0005, Division Order DO-15A, Task ID #4796

SUMMARY:

The Division has reviewed the letter titled, "Final Approval Underground Mining Amendment," dated June 26, 2015, wherein Alton Coal Development (ACD) replied to the Division's concerns with the GEM Geotechnical report dated June 26, 2105.

The purpose for the additional requested information was for the Division to be able to verify the laboratory results that differed from the original Taylor Geo-engineering (TGE) geotechnical report. The consultant addressed the majority of the Division's concerns and accepts Alton Coal Development geotechnical report.

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TECHNICAL ANALYSIS:

RECLAMATION PLAN

BACKFILLING AND GRADING

Regulatory Reference: 30 CFR Sec. 785.15, 817.102, 817.107; R645-301-234, -301-537, -301-552, -301-553, -302-230, -302-231, -302-232, -302-233.

Analysis:

General

The submitted report meets the minimum requirements of R645-301-553. The following discussion details some considerations that still remain within the provided GEM report but do not hinder the accuracy of the data provided. General comments in the March 31, 2015 letter merit this in depth response.

- Item 1 addressed the Division's concerns in regards to how the samples were selected and controlled.
- Item 2 detailed that the attached GEM Engineering reports included relevant details on the actual reports, however, the reports submitted to not differ from the reports initially submitted to the Division on March 31, 2015. The report sheets failed to detail all information outlined in supplied ASTM D1557-02 under section 12 (i.e. what method was utilized, preparation method, as-received water content, description of rammer, and origin of material). The Division will accept the current report sheets due time constraints on Division staff. In the future, submitted geotechnical reports should include all the bulleted information with the ASTM Report section of the relevant guideline.
- Item 3 addressed the Division's concerns in regards to the classification of the alluvium as a silty sand which differed from the original TGE's classification of a clayey sand.

Findings:

A point of consideration that the Division request is that the most up to date guidelines are followed. For ASTM guidelines, the number immediately following the ASTM designation indicates the year of the original adoption or, in the case of revision, the year of last revision. The Division has on hand ASTM D698-12, D1557-12, and C136/136M-14 while the consultant supplied ASTM D698-00a, D1557-02 and C136-05. The supplied ASTM guidelines indicate the consultant utilized outdated guidelines from 2000, 2002 and 2005 when 2012 and 2014 editions are readily available. ASTM guidelines do not typically contain significant procedure changes between revisions that would drastically alter the results concluded within the GEM report, which allows the Division to accept the GEM June 26, 2015 report. It is generally recommend

utilizing the latest information available and the Division would prefer more up to date guidelines be followed.

In the future:

- The Division would request more detailed information be supplied including the person collection the sample and a description of the sample method utilized.
- Submitted geotechnical reports should include all the bulleted information with the ASTM Report section of the relevant guideline.
- The most readily availed and up to date guidelines will be utilized.

RECOMMENDATIONS:

The report meets the minimum R645-301 rules and is recommend for approval by the Division.

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