

SCS ENGINEERS, PC

September 23, 2010
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MEETING MINUTES

SUBJECT: **Pre-Construction Meeting for Cell 2I Construction
Friday, September 17, 2010 at 10:00 am**

1. MEETING ATTENDEES

Mike Gurley, CMS Landfill
Brad Green, CMS Landfill
Cotton Spry, CMS Landfill
Fred Brown, Earnhardt Grading
Wilson Warlick, Earnhardt Grading
Richie Deason, Atlantic Coast Consulting, Inc.
Tim Schreiber, Atlantic Coast Consulting, Inc.
Taylor Herbertson, Atlantic Coast Consulting, Inc.
Albert Glenn, SCS Engineers, PC

2. CONTACTS

A. Owner

Primary Contact

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B. Contractor

Primary Contact

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Superintendent

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C. Engineer

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D. CQA Consultant

Primary Contact

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E. Surveyor

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2. COORDINATION WITH OTHER CONTRACTORS

- A. Environmental Specialties International, Inc. - HDPE Liner and Drainage Geocomposite Installation.

3. PAY APPLICATIONS

- A. Pay Applications submitted to the Owner by the 25th of each month.

4. QUESTIONS OR CLARIFICATIONS

- A. Forward questions or clarifications requests concerning the Construction Drawings and Specifications and for coordination to the Engineer.

B. Contact CQA Consultant concerning CQA questions, testing data, scheduling testing, and for inspection of in-place material.

C. Forward contractual questions to the Owner.

5. TOPICS FOR DISCUSSION

A. Questions Concerning Construction Drawings, Specifications or CQA Plan.

1. The soils and material specifications and conformance testing requirements are different than what was used for the previous constructed landfill cells. Special attention should be made by the CQA Consultant and Contractor to the new CQA Plan that is part of the Contract Documents and Technical Specifications.

B. Borrow Source.

1. Summary of initial conformance testing results for the landfill soil liner were discussed. Initial conformance testing for the landfill soil liner soils meets or exceeds the $\leq 1 \times 10^{-7}$ cm/sec permeability requirements.

2. Morehead Road Soil Borrow Area.

a. Contractor in conjunction with CQA Consultant determine adequate soils for structural fill and protective cover. Soil samples will be attained using Contractor equipment. Coordinate extents of area used for soil borrow with Owner.

b. Discussed that prompt attention needed to verify material for the protective cover. Also discussed the conformance testing requirements for the protective cover, especially the permeability requirements. Possible optional source for protective cover material is from the Vulcan Quarry. Albert Glenn and ACC to check on availability and conformance testing.

c. Install all required Erosion and Sedimentation (E&S) Control measures per the Construction Drawings.

C. Contractor Submittals

1. Remaining shop drawings and material submittals to include:

- i. Aggregate.
- ii. Asphalt paving.
- iii. Side-slope pumps and controls.
- iv. Electrical.

D. Progress Meetings

1. Progress meetings will be held every two (2) weeks at 7:00 a.m. on Tuesdays.
2. Tentative meeting dates: 1st meeting – October 5, 2nd meeting – October 19, 3rd meeting – November 2, 4th meeting – November 16, 5th meeting – November 30

E. Surveying

1. Provide record drawings (paper and digital) showing:
 - Existing surface prior to subgrade preparation.
 - Top of subgrade surface including perimeter berms and roadways.
 - Top of soil liner surface and limits.
 - Top of protective cover surface and limits.
 - All surfaces will include surface breaks (e.g. toes, crests, ridges, and valleys).
 - Geomembrane liner limits.
 - Geomembrane anchor trench centerline and location of edge of liner markers.
 - Leachate piping and riser piping locations and elevations.
 - Leachate forcemain, electrical conduit, control panel, and valve locations.
 - Stormwater channels and erosion and sedimentation control structures, locations, and elevations.
 - Access road extents.
 - Document deviations from the Construction Drawings.
2. The following surfaces and items listed in number 1 above shall be surveyed by a PLS and provide record drawings for the CQA certification report:
 - Top of subgrade surface (within landfill footprint).
 - Top of soil liner surface and limits including depth verification table.
 - Top of protective cover surface and limits including depth verification table.
 - All surfaces will include surface breaks (e.g. toes, crests, ridges, and valleys)
 - Geomembrane liner limits.
 - Geomembrane anchor trench centerline and location of edge of liner markers.
 - Leachate piping and riser piping locations and elevations.
 - Leachate forcemain, electrical conduit, control panel, and valve locations.
3. Soil liner and protective cover survey depth verification locations will be on a 50 foot by 50 foot grid and at surface breaks.
4. All other surfaces and items listed in number 1 above can be surveyed and provided by the Contractor using Contractor survey equipment.

F. CQA Services – CQA Consultant

1. CQA field and laboratory testing method, frequency, and acceptance criteria should be in accordance with the Construction Drawings, Technical Specifications, and CQA Plan.
2. Discussed that the HDPE liner, drainage geocomposite and protective cover specifications and conformance testing requirements are different than what was used for the previous constructed landfill cells. Special attention should be made by the CQA Consultant and Contractor to the new CQA Plan that is part of the Contract Documents and Technical Specifications.
3. Status of conformance testing for HDPE liner, drainage geocomposite and protective cover. Discussed that additional HDPE liner and drainage geocomposite conformance testing may be required beyond what has already been completed. Richie Deason with ACC is going to check to see what has been completed and whether additional tests are required.

G. Location to stockpile boulders/rocks from excavation.

1. The boulders/rocks excavated from the Morehead Road Soil Borrow will be transported and stockpiled in the lower area (excavated area) of the Borrow Area.
2. Discussed what to do with the boulders uncovered during excavation that are unable to be moved. It was determined to evaluate the quantity and size and provide a solution at a later date.

H. Altering existing sediment basin.

1. SCS Engineers will check storage capacity of existing sediment basin and determine if large enough. If required, change in sediment basin will be provided to Earnhardt Grading.