

Chao, Ming-tai

From: Wayne Sullivan <wsullivan@mesco.com>
Sent: Tuesday, March 05, 2013 12:40 PM
To: Chao, Ming-tai
Subject: RE: Status of rersponses to DWM comments, Wayne County MSWLF, Phase 3, 96-09
Attachments: Preconstruction Notes.doc; CQA Item 24.pdf; CQA Items 17 -19.doc

Categories: Red Category

Ming,

I am still waiting on some lab results for the calcium carbonate. However, I am attaching comments on other items not associated with the leachate collection system. On item 15, we only had the pre-construction meeting that we kept notes. The rest of the meetings were somewhat informal and no notes were kept.

Thanks and have a nice day.

D. Wayne Sullivan
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Fac/Perm/Co ID #	Date	Doc ID#
96-06	03/05/2013	DIN 18636

From: Chao, Ming-tai [<mailto:ming.chao@ncdenr.gov>]
Sent: Monday, March 04, 2013 10:41 AM
To: Wayne Sullivan
Subject: RE: Status of rersponses to DWM comments, Wayne County MSWLF, Phase 3, 96-09

Hey Wayne:

Good morning. I am looking forward to receiving your responses to the 10/03/2012 comment Nos. 12 through 19 and No. 24. Are the responses ready for me to review? Or do you have the tentative schedule for the submittal?

Ming

From: Wayne Sullivan [<mailto:wsullivan@mesco.com>]
Sent: Friday, March 01, 2013 12:25 PM
To: Chao, Ming-tai
Subject: RE: Status of rersponses to DWM comments, Wayne County MSWLF, Phase 3, 96-09

Attached is the PDF

D. Wayne Sullivan
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**PRE-CONSTRUCTION CONFERENCE NOTES
MSW LANDFILL – PHASE 3**

for the

County of Wayne

October 31, 2011

Persons in attendance:

Ester Carlisle, ES&J Enterprises, Inc.
Sandra C. Carroll-Williams, ES&J Enterprises, Inc.
David Page, ES&J Enterprises, Inc.
Jackie Faircloth, ES&J Enterprises, Inc.
Jimmy Holland, 4D Site Solutions
Pat Shillington, E²S
Andrew Wilson, S. T. Wooten
Christine Ritter, NC Division of Waste Management, Solid waste Section
Ming-Tai Chao, NC Division of Waste Management, Solid waste Section
Tim Rogers, Wayne Co. Solid Waste
Randy Rogers, Wayne Co. Solid Waste
Wayne Sullivan, Municipal Engineering Services Co., P.A.

Below is a summary of the items discussed:

Signed contracts were not distributed and will follow at a later date. The Notice to Proceed will be issued effective the 14th of November 2011.

1. All applicable Permits have been obtained except any burning permits which must be obtained by the Contractor.
2. Safety is the responsibility of the Contractor. The Contractor should be familiar with Sections 6.13 through 6.16 of the General Conditions regarding safety, hazard communications and emergencies. The requirements are a mandatory part of the contract. If any County official or Municipal Engineering Services' Construction Observer sees any unsafe conditions, the Contractor will be notified and the situation is to be corrected.

6. **Submission of Project Schedule.** The project schedule will be forwarded to Municipal Engineering within 10 days of the Notice to Proceed. Municipal Engineering will review the schedule and forward copies to the county. The milestones on the schedule will become contract deadlines that if not met will be subject to liquidated damages. See Addendum 2, Item 3.
7. Progress meetings will be held monthly after the Notice to Proceed has been issued. The first meeting will be held in December with the date and time to be determined later. The meeting will be held in the Scale House Conference Room.
8. **Submission of Schedule of Values.** The Schedule of Values will be submitted along with the construction schedule (within 10 days of the Notice to Proceed). The schedule of values will be on the lump sum items in the bid and will become a part of the Pay Request.
8. **Submission of Schedule for Shop Drawings.** The Schedule for Shop Drawing submission shall be submitted along with the construction schedule (within 10 days of the Notice to Proceed).
9. A list of subcontractors shall be submitted along with the construction schedule (within 10 days of the Notice to Proceed).
10. **Materials Stored.** Payment for stored materials will be made less 5% retainage on the monthly pay request. A receipt or bill of sale for the items stored and a sales tax certification shall accompany the pay request.
11. Please be aware that TIME IS OF THE ESSENCE. The Contract allows for 180 days of construction time and an additional 45 days to close the project (submit final pay request and other required closure documents). Since time is of the essence, the Contract contains a clause allowing an assessment of a sum of \$1,000 per day as liquidated damages for each calendar day the project construction is delayed beyond the scheduled completion date. The Contract also contains a clause allowing an assessment of a sum of \$500 per day as liquidated damages for each calendar day the schedule project closure. Please refer to Item No. 6 as to liquidated damages with respect to milestone deadlines.
12. Adjustment(s) to the time of completion will only be allowed by a justifiable change order approved by the Engineer and executed by the Owner. Article 12 of the General Conditions explains the method by which changes in Contract time are processed. A log of weather conditions, days worked and a National Weather Service listing of typical number of days of rain, based on a thirty year average, on a monthly basis is required by Municipal Engineering when considering changes due to unusual weather. Typically, weather delay extensions are only allowed for those days over and above the usual number of days for the subject month. Typically, a "rain day" would not be claimed if work were performed for more than 3 hours during a rainy day.

13. **Changed Conditions (Change Orders).** A change in the construction from the contract will not be permitted unless the change has been approved by Municipal Engineering as stipulated by Article 10 of the General Conditions except in case of an emergency as described by paragraph 6.16. **Changes in contract price shall be at the Contractor's expense without an executed Change Order prior to work being completed.** Requests for Change Orders must have a complete breakdown including a detailed calculation of cost with a written explanation and justification for the change. Change orders submitted without this important data will result in the return of the document to the Contractor for completion.

14. **Requests for Payment.** Preliminary Pay Applications must first be submitted to MESCO's on-site Construction Observer for approval of the quantities claimed for that period. Once this approval has been received, Requests for Payment are to be submitted to Municipal Engineering's Garner office for final approval. Municipal Engineering will certify the request for payment as required by the General Conditions, Article 14, before directing the request to the Owner for payment. Prior to the submittal of the final pay request, the Contractor shall submit to Municipal Engineering Consent of Surety to the Contractor, Certificates of Inspections, Release and Waiver of Claims, Warranties and Guarantees, Operating Manuals and Affidavits certifying that all bills for labor and materials, including subcontractors, have been paid in full.

Note: Pay Requests will be on document included in the contract documents or AIA Document G702 with the continuation sheets containing the Schedule of Values and a Sales Tax Certification will accompany each pay request.

Pay Requests are to be submitted each month with prior approval of Municipal Engineering Services' Construction Observer. Municipal Engineering will submit them to the owner within 5 days of receipt.

15. It is illegal for any person to have firearms at the project site, any type of alcoholic beverages, or drugs other than prescribed by a physician.

16. Everyone at the project site is expected to exhibit proper behavior. Indecent language, acts or dress will not be accepted.

17. Restroom facilities are to be provided by the Contractor.

18. All communications by the Contractor are to be through the Engineer.

19. Survey data on the subgrade and top of cohesive soil must be available to the Engineer prior to constructing the next component of the liner system.

20. The Contract calls for the paving to be done on days that the landfill is closed which are Wednesdays and Sundays; however, with the County's approval, paving can be

done on days that they are open as long as they do not interfere with the daily operations of the landfill.

21. **Final Acceptance of Project.** The Contractor is to notify Municipal Engineering when the project is complete. Upon receipt of notification, Municipal Engineering will perform an on-site review of the construction to verify completion. A list of discrepancies (punch list) will be compiled during the review and will be given to the Contractor. A formal final review shall be coordinated and performed by Municipal Engineering in cooperation with the Contractor in the presence of the Owner upon correction of the discrepancies by the Contractor. Municipal Engineering will coordinate and notify all parties of the time and date of the formal final review.
22. **Record Drawings.** A complete set of working drawings are to be maintained at the construction site by the Contractor. Any changes or deviations from the drawings made in the construction by the Contractor shall be shown on the drawings by the use of red colored pencils or pens. The drawings will be submitted to the Engineer in order to prepare final "RECORD" Drawings.
23. Piezometers have been abandoned.
24. The survey data must be presented as points and each phase of construction has to be taken at the same point. Points on the 3:1 slopes, particularly the cohesive soil, must have an elevation difference of 2.11 feet to represent 2.00 feet of cohesive soil. If requested, MESCO will provide a sample of a past project.

Landfill Gas Collection System

All maintenance, conversion, pumping and daily operation of the landfill gas collection system is provided by the gas developer/contractor. All records of actions taken shall be placed in the operating record. Other operational requirements are as follows:

- 1.) Site Security: The Generator/Flare site has security fence around it so that only authorized people have access to the electrical generation and flaring equipment. Access to the landfill is during normal working hours for the general public. It is secured after hours by gates and fencing.
- 2.) Contingency and Emergency Response: The system has built safety devices that stop the gas flow if excessive heat is detected. If a fire is detected, the local fire department will be called to extinguish it. The gas will not burn without oxygen; therefore, the fires would be restricted to openings exposed to the atmosphere.
- 3.) Operations: During the active life of the landfill, all wells, sumps and infrastructure will be modified when required by landfill operations by the gas developer. The modification will include but not limited to the raising of well heads so that the landfill can be filled vertically.
- 4.) Methane Monitoring Plan: The County will continue to monitor for migrating methane, according to landfill permits, at the boundaries and inside buildings. They will also be responsible for monitoring according to Air Quality Permits and EPA requirements for Green House Gases.
- 5.) Training and Safety: The operation of the system is the responsibility of the gas developer; consequently, the training and safety of their personnel will be the developer's responsibility. The County is responsible for the training and safety of their personnel in the monitoring of methane gas for the various permits and EPA requirements.
- 6.) Condensate Management: The condensate is collect in sumps that are placed around the collection system. Each sump has a pneumatic pump that pumps the condensate to the lagoon. The condensate along with the leachate from the landfill is then pump into Goldsboro's sewerage collection system.
- 7.) Inspection and Maintenance Plan: The County inspects the collection system to satisfy the air quality permit requirements twice a month. The developer is monitoring the system on site and remotely 24 hours a day 7 days a week as long as the system is operating. The maintenance of the system will be the developer's responsibility until the system is decommissioned.
- 8.) Decommissioning Plan: The extraction wells will be converted to passive vents once the system is no longer required for air quality permits and/or electrical generation. Piping that is on the surface will be removed. All other piping will be left in placed so that not to disturb the capping system. Equipment used for the generation of electricity and the flare will also be removed from the site.
- 9.) Revised Closure and/or post-closure cost estimates: The cost of removal of the system other than converting the extraction wells to passive methane vents is the responsibility of the gas developer.

17. The outside survey points shown along the boundary on the as-built drawing is the top of the berm at the anchor trench or the tie-in seam. The next survey point is the bottom of the berm. Neither one of these points are located on a slope greater than 10% which is a slope angle of 5.71 degrees. Furthermore, there is no other survey points on the as-built located on a slope greater than 10%. Consequently, the difference in elevation on the survey points on the sub grade and top of clay will be 2.00+ ft.

18. The lines on the as-built are bottom of slope, tie-in or anchor trench.

19. The interface angle is 18.26 degrees which is less than the friction angle.

