

2012 NOV 26 PM 2: 31 904-642-8990 • fax 904-646-9485 14775 Old St. Augustine Road • Jacksonville, Florida 32258

November 26, 2012

Mr. Michael Bogin, P.E. Florida Department of Environmental Protection Northeast District Office 7825 Baymeadows Way, Suite 200B Jacksonville, Florida 32256-7590

Re: Trail Ridge Landfill

Incremental Side Slope Closure - Phase 3 - Side Slope Units 24 - 47

FDEP Permit No. 0013493-017-SO

ETM No. E11-019-P3

Dear Mr. Bogin:

In response to the request that you sent to me via email on 11-20-2012, I have revised and clarified the Certification of Construction of a Solid Waste Management Facility and the Deviation Memorandum.

Please remove the Solid Waste Management Facility and the Deviation Memorandum from the Quality Assurance and Control Document (dated: November 9, 2012) and replace with the revised attachments.

If you have any questions regarding this construction, please feel free to give me a call at (904) 265-3163 or email me at Lockwoods@etminc.com.

Sincerely,

ENGLAND, THIMS & MILLER, INC.

Scott Jordan Lockwood, P.E.

Project Manager

Attachment:

Revised Certification of Construction of a Solid Waste Management Facility Revised Deviation Memorandum

| cc: | Jeff Foster, P.E. | COI | w/attachments |
|-----|---------------------|------|-------------------|
| | Greg Mathes | TRLF | w/attachments |
| | Eric Parker | TRLF | w/attachments |
| | Jim Purvis | TRLF | cover letter only |
| | Juanitta Clem, P.E. | ETM | cover letter only |
| | Tina Meskel, P.E. | MAE | cover letter only |
| | Sam Lansdale | MAE | cover letter only |



Department of Environmental Protection

Bob Martinez Center 2600 Blair Stone Road Tallahassee, Florida 32399-2400 DEP Form # 62-701.900(2)

Form Title Certification of Construction Completion of a Solid Waste Management Facility

Effective Date May 19, 1994

Certification of Construction Completion of a Solid Waste Management Facility



DEVIATIONS MEMORANDUM

From: Scott Jordan Lockwood, P.E.

Re: Trail Ridge Landfill Incremental Closure – Phase 3

Date: November 21, 2012

Note:

- 1. As an explanation, the deviations shown on the asbuilt survey prepared by Robert M. Angas Associates, Inc. (RMA) is meant that many of the asbuilt elevations that are shown on the asbuilt survey do not exactly match the final closure design elevations or stations. As an example, if at Terrace 1 the permitted design elevation is 147.50 and the Asbuilt survey elevation shows elevation 147.54. In this example the deviation is 0.04 higher than the permitted design or perhaps the stations vary by tenths. These kind of differences occur throughout the Asbuilt survey and thus are considered to be deviations.
- 2. A Deviation letter from Meskel & Associates, Engineering (MAE), the QA / QC Geotechnical consultant, is included in Appendix B listed under the table of contents of the Appendix B-1 Initial Cover Layer. This letter referenced as "Deviation from the QA / QC Plan Shear Strength Testing Intermediate and Vegetative Cover Soils" state that the shear strength test ASTM D-4767 method is not appropriate for these materials (see full explanation in the referenced letter). Because the geotechnical testing of shear strength is outside of ETM's area of expertise, we defer to MAE for the appropriate testing method and therefore we take no exception.
- 3. Due to settlement, the area adjacent to Phase I (Profile 1) was adjusted so that the clay was sloped from Profile 1 northerly toward the existing clay that settled within a previous closure. This area is shown on the Asbuilts prepared by Robert M. Angas Associates, Inc.
- 4. Due to settlement, the area adjacent to Phase IV (Profile 18) was adjusted so that the clay was sloped from Profile 18 northerly toward the existing clay that settled within a previous closure. This area is shown on the Asbuilts prepared by Robert M. Angas Associates, Inc.
- 5. Due to a side slope seepage during construction, a 4" HDPE stand pipe was installed through the clay layer in Phase I Terrace 1 adjacent to D-27 and in Phase IV- Terrace 2 adjacent to northerly. These seeps were subsequently repaired by ERC during construction.

Bogin, Michael

From: Scott Lockwood [LockwoodS@etminc.com]
Sent: Wednesday, November 21, 2012 8:56 AM

To: Bogin, Michael

Cc: Bogin, Michael
Raulerson, Emerson

Subject: RE: Trail Ridge Landfill Phase 3 Closure Certification

Michael

In response to your comments that you sent via email, I have responded in red below.



This message may contain confidential information. If you have received this message by mistake, please inform the sender by sending an e-mail reply. At the same time please delete the message and any attachments from your system without making, distributing or retaining any copies. Although all our e-mail messages and any attachments upon sending are automatically virus scanned we assume no responsibility for any loss or damage arising from the receipt and/or use.

From: Bogin, Michael [mailto:Michael.Bogin@dep.state.fl.us]

Sent: Tuesday, November 20, 2012 3:57 PM

To: Scott Lockwood **Cc:** Raulerson, Emerson

Subject: Trail Ridge Landfill Phase 3 Closure Certification

Scott,

I have initially reviewed the Trail Ridge Landfill Phase 3 Closure construction completion report (Report) and, so far, I have the following comments:

 The Certification of Construction Completion form states that "Deviations are shown on the attached as-Built Survey prepared by Robert M. Angas Associates, Inc. and as outlined in the attachments (refer to attachment for details)." However, the as-Built Survey does not indicate any deviations and the Report does not specify any attachments. Therefore, please provide more specific details related to the deviation locations.

The Deviations that are shown on the Asbuilt Survey is meant that the elevations that are shown on the Asbuilt survey does not exactly match the final closure design. As an example, if the permitted design elevation at Terrace 1 is 147.50 the Asbuilt survey elevation is 147.54. In this example the deviation is 0.04 higher than the permitted design. These kind of differences will be throughout the Asbuilt survey. The Outlined attachment is meant to refer to the "Deviations Memorandum" dated November 9, 2012, which is the third sheet in the book.

The Certification of Construction Completion form states that "Please find attached in the Appendix A, a
deviation letter from Meskel and Associates Engineering for Shear Strength testing method between
Intermediate and Vegetative Cover Soil." Since Appendix A was not labeled, it was impossible to find it. Please
address.

We apologize for the confusion. The testing summary which was completed by the QA / QC Geotechnical consultant, Meskel & Associates, Engineering (MAE), is actually included in Appendix B. The second page of Appendix

B has a table of contents, which includes a reference under B-1 for the Deviation letter (Shear Strength Testing – Initial and Vegetative Cover Soils).

3. A deviation letter from Meskel and Associates Engineering for Shear Strength testing method between Intermediate and Vegetative Cover Soil was found in Appendix B. Please clarify is it the same letter that referenced in the Certification of Construction Completion form. Also, please note that this deviation letter was submitted as a request to ETM to grant a deviation; however, a response from ETM was not presented. Please address.

The Deviation letter from Meskel & Associates, Engineering (MAE), the QA / QC Geotechnical consultant, is included in Appendix B and it is the same letter referred to on the Certification Form. The letter reference "Deviation from the QA / QC Plan – Shear Strength Testing – Intermediate and Vegetative Cover Soils as mentioned in response to question 2. Because the area of testing shear strength is outside of ETM area of expertise we defer to MAE for the appropriate testing method. Therefore our response is that we take no exception. We can place this on a memorandum, if you prefer.

4. Some deviations are presented in the Deviations Memorandum from Scott Lockwood, P.E., some deviations (as noticed above) scattered through the Report. Please combine all deviations descriptions in one location.

The Deviations on the Asbuilts are explained above. The Deviations memorandum is the third sheet in the attachment and the Deviations for the Shear Strength testing is part of MAE's report. I can list this deviation on the Deviation Memorandum but it would still refer to the letter provided by MAE.

Thank you.

Michael Bogin
Engineering Specialist IV
Florida Department of Environmental Protection
Northeast District
Division of Waste Management
8800 Baymeadows Way West, Suite 100
Jacksonville, FL 32256
Phone: (904)256-1579

Please take a few minutes to share your comments on the service you received from the department by clicking on this link <u>DEP Customer Survey</u>.