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Dept. Of Environmental Protection

April 17, 2015

Mr. Steve Morgan Southwest District FDEP 13051 North Telecom Parkway Temple Terrace, FL 33637-0926

RE:

Enterprise Recycling and Disposal Facility - Cell 6B certification

Response to December 24, 2014 Correspondence

Dear Mr. Morgan,

The materials provided to you in support of the Cell 6B certification were based on my field notes from the time of construction and the dates reported are incorrect. My field notes for the berm construction are from 8/14/13, but were mistakenly drafted as 8/14/12 and transcribed onto Drawing C-5. The letter to Ms. Pelz also suffers from this mistake. Given these mistakes and the concerns expressed in your correspondence, I have had the berm surveyed by Simmons and Bell and asked that Universal Earth Sciences pull a sample of the in-place clay berm for permeability testing.

Measurements of the berm during construction were performed using a measuring tape and survey/level rod. The corner posts installed along the north side of Cell 6B provide a visual guide to see that the berm was constructed along the appropriate line per Drawing C-5. The berm was constructed on top of the certified 3' clay barrier layer, for which a topographic survey was provided to the Department by Simmons and Beal dated 6/7/11 and 10/28/11 (October 28, 2011 Certification Report). The enclosed survey from Simmons and Beal shows that the berm meets the minimum elevation of 84.0', has a top width of at least 5', and runs the length of the north edge of Cell 6B. Since its construction, additional clay material has been added to the berm as needed to repair erosion.

The same on-site clay that was used to construct the 3' barrier layer for Cells 6A and 6B was used to construct the berm. The berm was constructed using the same construction techniques as for the underlying 3' clay layer. The materials were placed in 12-inch lifts with an off-road truck, compacted, and then shaped with a dozer. Since the berm is significantly less than the 1-acre testing protocol for the 3' clay liner, materials tests were not performed at the time of construction. Subsequently, Universal Earth Sciences obtained a field sample of the clay from the berm for permeability testing. The sample was taken approximately 105' west of the northeast Cell 6B corner post (measured with field tape) and pulled from the center of the berm. The vertical permeability (test result enclosed) of the constructed clay berm was measured to be 4.17×10^{-9} cm/sec, which meets the permitted value.

I hope that this correspondence and the documentation from Simmons and Beall and Universal are sufficient to document that the berm has been constructed in general conformance with the permit requirements. No activities will occur in Cell 6B until we receive the appropriate approvals and certification from the Department. Please let me know if you need any additional information. Thank you for providing the time necessary to respond to the Department's request for additional information.

Sincerely

Jønn Arnold, P.E. Vroject Manager



UNIVERSAL ENGINEERING SCIENCES

Consultants In: Geotechnical Engineering • Environmental Sciences Geophysical Services • Materials Testing • Threshold Inspection Building Code Administration, Compliance Inspection & Plan Review 3532 Maggie Blvd., Orlando, FL 32811P:407.423.0504 F: 407.423.3106 UES Project No.:

0830 .1400484.0000

UES Report No.: 1218084 Work Order No.:

Date Typed:

April 9, 2015

REPORT ON

TRIAXIAL PERMEABILITY AND PERCENT PASSING NO. 200 SIEVE (ASTM D-5084 AND ASTM C-117) (AASHTO T-11)

Client:

Angelo's Materials 41111 Enterprise Road Dade City, FL 33525

Project: Angelo's Recycling Material - Enterprise Class III Landfill Cell 6 Pasco County, Florida

Date Sampled: Date Tested:

4/7/15

Sampled By: Tested By: M. Hunter

Rafael Castro

Test No.	Location	Percent	Sample Ran At:		
		Passing No. 200 Sieve	Moisture Content (%)	Dry Unit Weight (pcf)	Permeability K (cm/s)
1	Cell 6 Berm	•	21.3	103.7	4.17 (10-9)

