ANGELO'S RECYCLED MATERIAL'S 41111 ENTERPRISE ROAD

DADE CITY, FL. 33525

PHONE: 352-567-7676

FAX: 352-567-9448 SCALEHOUSE

FACSIMILE TRANSMITTAL SHEET			
To: Susan Pel	Z FROM: John	Arnold	
Susan Pel	DATE: 4 / 13 /	Arnold 07	
PAX NUMBER: 813.63	32. 7665 TOTAL NO. OF PAGES INCL	UDING COVER: 2	
PHONE NUMBER:	synder's reperence nui	MBER:	
RB;	YOUR REPERENCE NUMBER 352-567-7676	R:	
URGENT FOR REVI	ew 🔲 please comment 🔲 please rep	LY DIEASE RECYCLE	
NOTES/COMMENTS:			
,			
SED SECONDO			

WAIVER OF 90 DAY TIME LIMIT UNDER SECTIONS 120.60(2) AND 403.0876, FLORIDA STATUTES

Permit Application Nos. $\underline{177982-008-SC/T3}$ and $\underline{177982-007-SO/T3}$, Enterprise Class III landfill

Applicant's Name: Angelo's Recycled Materials

With regard to the above referenced application, the applicant hereby with full knowledge and understanding of the applicant's rights under Sections 120.60(2) and 403.0876, Florida Statutes, waives the right to have the application approved or denied by the State of Florida Department of Environmental Protection within the 90 day time period prescribed by law. Said waiver is made freely and voluntarily by the applicant with full knowledge and without any pressure or coercion by anyone employed by the State of Florida Department of Environmental Protection.

This waiver shall expire on the 30 day of 60 day of 60

The undersigned is authorized to make this waiver on behalf of the applicant.

Sichature

. John Arnold

Name (Please Type or Print)

ANGELO'S RECYCLED MATERIAL'S 41111 ENTERPRISE ROAD DADE CITY, FL. 33525

ANGELOS

PHONE: 352-567-7676

FAX:352-567-9448 SCALEHOUSE

FACSIMILE TRANSMITTAL SHEET				
TO: Susan Pelz	John Arnold DATE: 3/26/07			
COMPANY: FDEP	DATE: 3/26/07			
FAX NUMBER: 813, 632. 766.5	TOTAL NO. OF PAGES INCLUDING COVER:			
PHONE NUMBER:	sender's reference number:			
RE:	YOUR REPERENCE NUMBER: 352-567-7676			
□ URGENT □ FOR REVIEW □ PLEASE CON	MMENT Please reply Please recycle			
NOTES/COMMENTS: Enterpiise	Clars III Extension			
	United Section 1. United Secti			

WAIVER OF 90 DAY TIME LIMIT UNDER SECTIONS 120.60(2) AND 403.0876, FLORIDA STATUTES

ANGELOS

Permit Application Nos. <u>177982-008-SC/T3</u> and 177982-007-50/T3, Enterprise Class III landfill

Applicant's Name: Angelo's Recycled Materials

With regard to the above referenced application, the applicant hereby with full knowledge and understanding of the applicant's rights under Sections 120.60(2) 403.0876, Florida Statutes, waives the right to have the application approved or denied by the State of Florida Department of Environmental Protection within the 90 day time period prescribed by law. Said waiver is made freely and voluntarily by the applicant with full knowledge and without any pressure or coercion by anyone employed by the State of Florida Department of Environmental Protection.

This waiver shall expire on the 20 day of 40 2007.

The undersigned is authorized to make this waiver on behalf of the applicant.

WAIVER OF 90 DAY TIME LIMIT UNDER SECTIONS 120.60(2) AND 403.0876, FLORIDA STATUTES

Permit Application Nos. $\underline{177982-008-SC/T3}$ and $\underline{177982-007-SO/T3}$, Enterprise Class III landfill

Applicant's Name: Angelo's Recycled Materials

With regard to the above referenced application, the applicant hereby with full knowledge and understanding of the applicant's rights under Sections 120.60(2) and 403.0876, Florida Statutes, waives the right to have the application approved or denied by the State of Florida Department of Environmental Protection within the 90 day time period prescribed by law. Said waiver is made freely and voluntarily by the applicant with full knowledge and without any pressure or coercion by anyone employed by the State of Florida Department of Environmental Protection.

This waiver shall expire on the 30 day of Mark 2007.

The undersigned is authorized to make this waiver on behalf of the applicant.

Signature

Name (Please Type or Print)

Pelz, Susan

From: John Arnold [john.phillip.arnold@gmail.com]

Sent: Wednesday, February 07, 2007 9:56 AM

To: Pelz, Susan

Subject: Angelo's Recycled Materials Class III Landfill

Sue,

As we discussed earlier this week, Angelo's does not expect to construct Cells 9, 10, or 11 of the Class III landfill within the next 15 years. We plan to submit a major permit modification to the FDEP in 2007 that modifies the cell sequence. The modification will propose moving fill operations to the property north of the current fill areas prior to moving west, into cells 9 - 11. We will revise the geotechnical slope stability calculations related to the west slope of cells 9-11 with the major modification package. Please let me know if you have any questions or require any additional information at this time.

Thanks

John Arnold, P.E. Angelo's Recycled Materials Mob. 352.339.1408 Tel. 813.477.1719 Fax. 352.567.9448



November 10, 2006

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION NOV 13 2006 SOUTHWEST DISTRICT

Ms. Susan Pelz Solid Waste Section Florida Department of Environmental Protection 13051 N. Telecom Parkway Temple Terrace, FL 33637

RE: Angelo's Recycled Materials Enterprise Class III Landfill

Operation Permit Renewal Application

Response to 3rd Request for Additional Information

Jones Edmunds Project No. 01030-005-01

Dear Ms. Pelz:

This letter has been prepared to transmit to you the response to the FDEP third request for additional information for the Angelo's Recycled Materials Enterprise Class III Landfill permit renewal. Enclosed you will find four copies of the response documents and associated drawings.

Please contact me if you have any questions regarding this submittal package.

Sincerely,

Mark G. Roberts, P.E.

Project Manager

M:\01030-AngelosRecycled\005-01-RAi3ClassIII\2006-11-09-Ltr-SPelz-DEP-RAi3.doc

Enclosures

xc:

Dominic Iafrate (Angelo's Recycled Materials)
John Arnold (Angelo's Recycled Materials)



November 10, 2006

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

NOV 13 2006

SOUTHWEST DISTRICT TAMPA

Ms. Susan Pelz Solid Waste Section Florida Department of Environmental Protection 13051 N. Telecom Parkway Temple Terrace, FL 33637

RE: Angelo's Recycled Materials Enterprise Class III Landfill

Operation Permit Renewal Application

Response to 3rd Request for Additional Information

Jones Edmunds Project No. 01030-005-01

Dear Ms. Pelz:

This letter has been prepared to transmit to you the response to the FDEP third request for additional information for the Angelo's Recycled Materials Enterprise Class III Landfill permit renewal. Enclosed you will find four copies of the response documents and associated drawings.

Please contact me if you have any questions regarding this submittal package.

Sincerely,

Mark G. Roberts, P.E.

Project Manager

M:\01030-AngelosRecycled\005-01-RAI3ClassIII\2006-11-09-Ltr-SPelz-DEP-RAI3.doc

Enclosures

xc:

Dominic Iafrate (Angelo's Recycled Materials) John Arnold (Angelo's Recycled Materials)



ENTERPRISE CLASS III LANDFILL PERMIT RENEWAL, PASCO COUNTY

RESPONSE TO FDEP THIRD REQUEST FOR ADDITIONAL INFORMATION

Prepared for:

ANGELO'S AGGREGATE MATERIALS, LTD

1755 20th Avenue, S.E. Largo, Florida 33771

Prepared by:

JONES EDMUNDS & ASSOCIATES, INC.

730 NE Waldo Road Gainesville, Florida 32641

Certificate of Authorization #1841

November 2006

Mark Roberts, P.E.

Florida P.E. No. 54187

ENTERPRISE CLASS III LANDFILL PERMIT RENEWAL, PASCO COUNTY

RESPONSE TO FDEP THIRD REQUEST FOR ADDITIONAL INFORMATION



Permit Nos.: 177982-007-SO and 177982-008-SC

November 2006

The following information is provided in response to the Florida Department of Environmental Protection (FDEP), request for additional information prepared by Susan J. Pelz, P.E. (dated August 4, 2006) and John R. Morris, P.G. (dated August 3, 2006). Information is provided in the order requested in the referenced correspondence. In each case, the FDEP request is repeated with the response immediately following.

TABLE OF CONTENTS

PART 1 RESPONSES TO CO	MMENTS FROM SUSAN J. PELZ, P.E.
ATTACHMENT 5.a	REVISED APPLICATION FORM PAGES
ATTACHMENT 6.b	REVISED FIGURES S-1, S-2, S-3, AND S-4
ATTACHMENT 7	REVISED DRAWING SET (FULL-SIZE DRAWINGS
	PROVIDED UNDER SEPARATE COVER)
ATTACHMENT 9.e	TABLE 3.8B
ATTACHMENT 9.i.1	LINEAMENT STUDY
ATTACHMENT 11.b.1	SIDE SLOPE STABILITY CALCULATIONS AND
	REFERENCES
ATTACHMENT 11.b.2	EQUIPMENT LOAD CALCULATIONS
ATTACHMENT 13.b	REVISED STORMWATER CHANNEL CALCULATIONS
ATTACHMENT 16	CURRENT TOPOGRAPHIC SURVEY (PROVIDED
	UNDER SEPARATE COVER)
•	
PART 2 RESPONSES TO CO	OMMENTS FROM JOHN R. MORRIS, P.G.
ATTACHMENT 6.d	REVISED TABLE 5-1b
ATTACHMENT 12.c	DEMONSTRATION ON THE LEVELS OF NATURAL
	DISSOLVED OXYGEN IN THE GROUNDWATER
ATTACHMENT 12.j.1	REVISED HYDROGEOLOGICAL INVESTIGATION AND
•	GROUNDWATER MONITORING PLAN
ATTACHMENT 12.j.2	REVISED FIGURE 15A

REVISED FIGURE 17C

ATTACHMENT 12.j.3

APPENDICES

APPENDIX A	REVISED ENGINEERING REPORT
APPENDIX B	REVISED OPERATION PLAN
APPENDIX C	REVISED CONTINGENCY PLAN
APPENDIX D	REVISED CLOSURE PLAN



Jeb Bush Governor

RE:

Department of Environmental Protection

Southwest District 13051 North Telecom Parkway Temple Terrace, FL 33637-0926 Telephone: 813-632-7600

Colleen M. Castille Secretary

August 4, 2006

Mr. Dominic Iafrate Angelo's Aggregate Materials, Ltd. 1755 20th Ave. S.E. Largo, Fl. 33771

Enterprise Recycling & Disposal Class III Landfill

Pending Permit Nos.: 177982-007-SO/T3 and

177982-008-SC/T3, Pasco County

Dear Mr. Iafrate:

This is to acknowledge receipt of the additional information dated June 2006 (received July 3, 2006) prepared by Jones, Edmunds & Associates (JEA) to continue construction and operation of an existing Class III landfill and related facilities, referred to as the Enterprise Class III Landfill, located at 41111 Enterprise Road, Dade City, Pasco County, Florida.

This letter constitutes notice that a permit will be required for your project pursuant to Chapter(s) 403, Florida Statutes.

Your application for a permit is <u>incomplete</u>. This is the Department's <u>third</u> request for information. It has been <u>345 days</u> since your application was initially received. Please provide the information listed below promptly. Evaluation of your proposed project will be delayed until all requested information has been received.

Please be reminded that in the event that complete and sufficient responses are not received to this request for additional information within the required timeframes, the Department may deny the pending applications. The Department requests that the applicant and applicant's consultant meet with the Department to discuss the remaining issues in order to ensure that the final submittal will be complete and sufficient.

The following information is needed in support of the solid waste application [Chapter 62-701, Florida Administrative Code (F.A.C.)]:

GENERAL:

- 1. The requested information and comments below do not repeat the information submitted by the applicant. However, every effort has been made to concisely refer to the section, page, drawing detail number, etc. where the information has been presented in the original submittal.
- 2. Please submit **4 copies** of all requested information. Please specify if revised information is intended to supplement or replace previously submitted information. Please submit all revised plans and reports as a complete package. For revisions to the narrative reports, deletions may be struckthrough (struckthrough) and additions may be shaded shaded or similar notation method. This format will expedite the review process. Please include revision date on all revised pages.

"More Protection, Less Process"

- 3. Please provide a summary of all revisions to drawings, and indicate the revision on each of the applicable plan sheets. Please use a consistent numbering system for drawings. If new sheets must be added to the original plan set, please use the same numbering system with a prefix or suffix to indicate the sheet was an addition, e.g. Sheet 1A, 1B, Pl-A, etc.
- 4. Please be advised that although some comments do not explicitly request additional information, the intent of all comments shall be to request revised calculations, narrative, technical specifications, QA documentation, plan sheets, clarification to the item, and/or other information as appropriate. Please be reminded that all calculations must be signed and sealed by the registered professional engineer (or geologist as appropriate) who prepared them.
- 5. Application form. [Rule 62-701.320(7), F.A.C.]
 a. It is the Department's understanding that Jones Edmunds & Associates (JEA) has replaced Tetra-Tech HAI (TTHAI) as the engineer of record. If this is the case, please provide a supplemental engineering certification (page 40 of 40) of the application form that certifies the information provided for the application after February 2006. Please clarify if the February 8, 2006 submittal from TTHAI was intended to be replaced by the JEA July 2006 submittal.
 - b. <u>Item E.14.</u> Please provide a revised application form that references the airport information.
- 6. **Prohibitions.** [Rule 62-701.300, F.A.C.] Please provide documentation that demonstrates that each of the prohibitions will not be violated by the construction or operation of this facility.
 - a. Please specify the distance to each of the potable wells that are located within 1000 feet of the site (see Egr Rpt, §3.3). Please provide a revised Engineering Report that includes this information. JEA Figure S-1 shows two potable wells to the north of the "future landfill expansion." Please specify the distance of these wells to the "future landfill expansion" cells.
 - b. JEA Figures S-2 and S-3 do not include the "future landfill expansion" areas as "disposal extent." While the Department acknowledges that the proposed disposal area for the pending 5-year period does not include Cells 12, 13, 14 or 16, the temporary "stormwater" pond (Cells 14/16) receives runoff from uncovered waste as well as leachate seepage from the waste disposal areas and uncontaminated (non-contact) stormwater. Consequently, the prohibitions currently apply to Cells 14 and 16. Please provide revised figures that show the setback distances from potable wells and water bodies that include Cells 14 and 16 as part of the landfill footprint.
- 7. Please provide plans that meet the requirements of Rule 62-701.320(7)(f), F.A.C. The plans submitted did not clearly show all necessary details.
- 8. Airport setbacks/notifications, Rule 62-701.320(12), F.A.C. Please provide the list of airports used to develop JEA Figure S-4.

- 9. Engineering Report [Rule 62-701.320(7)(d), F.A.C.] Please provide a revised Engineering Report that addresses these comments.
 - a. §3.6.3., Effective Barrier. This section indicates that Sheet C-6 shows "an 8-foot high berm" along Enterprise and Auton Roads. However, this berm does not appear to be shown on this sheet.
 - b. §3.7, Excavation Operations and Cell Construction. Please provide a figure that details the construction of the 3-foot clay liner on 2H:1V slopes (i.e., the "iterative process or several horizontal lifts"). Please provide a plan sheet that shows the proposed excavation grades. Please be advised that the clay liner on the slopes will be required to be constructed and certified (and the certification approved by the Department) prior to waste disposal in the affected cell.
 - S3.8, Method of Cell Sequence.
 1) Please clarify if the 3H:1V slopes will be maintained below +125 ft. NGVD or +130 ft. NGVD. (see page 3-8)
 - Please provide procedures and plans that show how "stormwater runoff from the interior of the excavation and filling area will be diverted to the onsite temporary storage pond..." (page 3-10) Please provide drawings that show the "drainage ditches constructed to direct water away from the current working area." It does not appear that swales, berms or other methods to divert stormwater to the temporary pond or away from waste disposal areas are adequately shown on the plan sheets. Please provide specific procedures or designs that demonstrate that that erosion will be controlled and intermediate and initial cover will be maintained. See also §3.8.1., §3.10.3, §3.11, §7.1.2., §7.1.3., Comment #13.
 - 3) Please clarify the anticipated design life of each cell. This section indicates approximately 6 months for each cell, but Table 3.8 indicates that each cell will be used for approximately 1 year.
 - d. §3.8.2, Erosion control. Please revise this section to indicate that as soon as possible following the construction of the clay liner, "begin to fill against the 2H:1V slope with landfill material."
 - e. §3.8.3, Life expectancy. Please clarify if Cell 11 will be constructed and filled in 2011. Sheet C-8 shows Cell 11 being filled within the 5-year permit period.
 - f. §3.9, Waste compaction and application of cover. Please clarify the reference to Sheet C-3 for buildout grade and closure detail. Sheet C-3 appears to be a specific cross-section and not a "grading plan." Please show the storage locations of "recycling materials" on the plan sheets.
 - g. §3.10.1, Gas monitoring and control. Please provide examples of the "immediate corrective actions" that will be taken to "abate any detected onsite odors."

(Comment #9, cont'd)

- h. §3.10.2, Leachate control. Information submitted recently for the Certification of (temporary pond) Cell 14, and previous information submitted for other cell certifications (Cell 15, 16), indicates that limestone has been encountered during construction in some of the disposal areas. Based on this and previous sinkhole occurrence at the site, the original basis for the exemption from liner and leachate collection no longer appears to be valid. Please be advised that the presence of "the continuous 3-foot thick clay layer" is not a sufficient basis for exemption from leachate collection. Please provide information that demonstrates that the exemption from leachate controls in Rule 62-701.400(3) and (4), F.A.C., applies to this facility.
 - 1) The information submitted indicates that the "clay layer and subsurface soils are expected to attenuate and retard any pollutants generated prior to reaching the groundwater." However, calculations supporting this conclusion were not provided.
 - 2) Response #11.n. indicates that the compacted 3-ft. clay layer will have "an average permeability of 1 x 10^{-8} cm/sec.... The range of acceptable permeability values is 1 x 10^{-6} cm/sec to 1 x 10^{-9} cm/sec...." However, Response #11.c(3) states, "the compacted clay layer will have a hydraulic conductivity no greater than 10^{-8} cm/sec." Please specify the required hydraulic conductivity of the compacted clay layer.
 - 3) Response 11.n. states, "the cell floor will not be sloped so the liquid will pond at a constant depth over the cell." This statement does not correlate with the cell floor design shown on Sheet C-2.
 - 4) JEA Attachment 11.n., Water Balance results.
 - a) Since the facility is located in the Southwest Florida Water Management District, please explain why information from St. John's Water Management District was used.
 - b) It appears that the purpose of this evaluation is to determine the maximum head over the liner (clay layer). Please explain why a typical HELP Model analysis was not used.
 - c) This analysis concludes that the maximum head over the liner is approximately 35.55 inches and that the "head begins to dissipate over time. (Response #11.n.)" Please explain how the accumulation of 35.55 inches of leachate over the liner demonstrates that no leachate collection system is needed.
- i. §3.14, Foundation analysis. Please provide a revised foundation analysis and lineament study that includes the 2004 subsidence occurrence at the site.
 - 1) Response #11.r states, "based on the lineament study presented by Universal Engineering in their May 2000 report, the sinkhole that occurred in 2004 appears to be close to one of the lineaments shown in the report. An updated lineament study therefore does not appear to be necessary." However, as shown by the Lineament Trace in (provided in the Universal Engineering January 25, 2006 update in Section 4 of this application), Universal Engineering concluded that "no significant lineament(s) traverse the site. (May 2000, page 6)" Further, a figure showing the location of the subsidence from 2004 "close to" the Universal lineaments was not provided. The conclusion drawn in 2000 that the "potential for sinkhole occurrence at the subject site is low" is no longer valid in light of the fact that a sinkhole occurred onsite in 2004.

Mr. Dominic Iafrate
Angelos Aggregate Materials, Ltd.

(Comment #9.i., cont'd)

- 2) Response #15.a. indicates that the sinkhole that developed in 2004 was a "result of removal of the overlying sand and clay in the area." Since the proposed construction of the disposal cells also requires "the removal of sand and clay in the [cells]," it appears that the proposed construction may also result in the occurrence of sinkholes. Please provide a revised design that will ensure that the prohibitions of Rule 62-701.300(2)(a) and (e), F.A.C., will be met
- 10. Operations Plan (Appendix 3-A). [Rules 62-701.400(9), 62-701.500, 62-701.520, and 62-701.530, F.A.C.] Please provide a comprehensive Operations Plan that incorporates the responses to these comments. Replacement pages with revisions noted may be provided (deletions may be struckthrough [struckthrough] and additions may be shaded shaded or a similar method may be used) with each page numbered with the document title and date of revision. This plan will be reviewed in its entirety after responses are received. Information in some sections of the Operations Plan are similar to the information contained in the Engineering Report. In these sections, comments are not reiterated, but responses should include revised Engineering Report and Operations Plan sections as appropriate. Please provide a revised Table of Contents.
 - a. §5.3. Please specify the maximum quantity and timeframe for storing batteries, paint, chemicals, etc. Please provide details of the storage location for these materials. Please specify the disposal facilities for these materials (see Response #14.c.).
 - b. §5.7. This section indicates that the Class III landfill does not intend to recycle. However, this section also states, "if metals are collected, they will be transported offsite to a permitted recycling facility." Please specify the maximum quantity, timeframe, storage location and method for metals and "incidental recyclable materials" that are "collected."
 - c. §14.0. Please provide waste handling procedures in the event of a fire at the landfill. Please revise Appendix 3-B also.
 - d. $\underline{\S{14.1.}}$ Please show the storage location for contaminated soils on a plan sheet.
 - e. $\underline{\S15.0.}$ Since the wood waste acceptance area is remote from the landfill disposal cells, please clarify if a spotter will be present at the wood waste area when loads are being received to remove unacceptable wastes.
 - f. $\underline{\S17.1.}$ Please provide details (including containment structures) of the used oil and antifreeze storage facility. Please show the location on a plan sheet.
 - g. $\underline{\S19.2.}$ Please specify the procedures for, and frequency of, "self inspection of landfill conditions."
 - h. §24.0, History of Enforcement actions. This section was deleted from the Operations Plan. Please provide the information required by Rule 62-701.320(7)(i), F.A.C. in an appropriate section of the application.

(Comment #10, cont'd)

- i. Additional figures. Please clarify if Figures 3-17 through 3-20 (sequencing plans) and 3-26 through 3-34 (cross-sections) are intended to be deleted from the submittal. It does not appear that these figures are valid. If these figures are intended to remain in the submittal, please provide the following information: Please provide revised drawings that specify the date of the topographic contours. Please provide north-south and east-west cross-sections for each cell. Please show the appurtenant facilities (e.g., scalehouse, maintenance building, etc.) on all appropriate sheets. Please provide plan sheets that show grades and drainage structures, berms, swales, benches, etc., required for appropriate drainage throughout the operation and closure of the facility. Please provide plans that show the construction and filling (each lift) of each cell.
- 11. Section 4, Geotechnical Report. [Rule 62-701.410, F.A.C.]

 a. Please submit an updated geotechnical investigation that considers the subsidence/sinkhole that occurred onsite in 2004. See also Egr Rpt, §3.14, Hydro Report, §5.1.6 and §5.1.7.
 - b. Slope Stability.
 - Please provide a revised analysis that includes 3H:1V slopes. Please include all printouts, assumptions, figures, references, assumptions, etc., used in support of the analysis. Please explain why the revised slope stability analyses did not include a piezometric surface. Please provide figures that show the configurations modeled, failure planes, and factors of safety. Please specify which borings were used for the soil properties. Please specify the properties for each soil layer and provide references. See also §3.4.
 - 2) Response #15.a(3) indicates that the slope stability analysis considered a seasonal high water table elevation of +73 ft. NGVD. However, routine groundwater monitoring reports submitted to the Department have indicated that the groundwater elevations are as high as +81.27 ft. NGVD. Please provide revised slope stability analysis that considers this groundwater elevation.
 - 3) Attachment 15.a.3. The figures provided are difficult to distinguish each soil and waste layer. Please provide figures that clearly depict each layer in the analysis. Please provide appropriate references that support the equipment loading calculations. Please explain why it is assumed that the equipment that will be used at the site is loaders, and not dozers and/or compactors.
- 12. **Section 5, Hydrogeological Investigation** [Rule 62-701.410, F.A.C.] Please respond to Mr. John Morris' memorandum dated August 3, 2006, attached.
- 13. Section 6, Stormwater Management [Rule 62-701.400(9), 62-701.500(10), F.A.C.]
 - a. Please provide revised plan sheets that detail all ditches, berms, swales, benches, downcomer pipes, and other stormwater management devices. See also Comment #9.c.
 - b. Attachment 19.d. Please verify if the runoff coefficient (curve number) in the stormwater calculations is different than that used in the leachate analysis. Please provide revised stormwater channel calculations that include geometries that are consistent with those shown on Sheet C-27.

- 14. Water Quality Monitoring Requirements (Part M). [Rule 62-701.410 and 62-701.510, F.A.C.] Please respond to Mr. John Morris' memorandum dated August 3, 2006.
- 15. **Plan Sheets.** [Rules 62-701.320(6), 62-701.320(7)(f), 62-701.500, F.A.C.] Please be advised that the plan sheets will be reviewed in their entirety after receipt of this information.
 - a. Please provide all drawings, signed and sealed by a registered professional engineer. Although the revised sheets included signature and seal, all sheets in the drawing set were not replaced, and the drawings submitted February 9, 2006 did not include an original signature and seal on sheets C-3, C-4 and C-6. The Department is aware that the applicant has retained a different consultant than the consultant who prepared the original drawings. If signed and sealed drawings cannot be obtained from the original engineer, these drawings should be replaced by signed and sealed drawings from the current consultant.
 - b. Please provide revised drawings that specify the date of the topographic contours. Please provide north-south and east-west cross-sections for each cell. Please show the appurtenant facilities (e.g., scalehouse, maintenance building, etc.) on all appropriate sheets. Please provide plan sheets that show grades and drainage structures, berms, swales, benches, etc., required for appropriate drainage throughout the operation and closure of the facility. Please provide plans that show the construction and filling (each lift) of each cell.
 - c. Please provide station numbers on all plan views to reference to the cross-sections provided. Please provide plan sheets that include contours not greater than 1 year old as the "existing" condition.
 - d. <u>Sheet C-1.</u> Please include the surveyed limits of each cell on this sheet. Please note which ponds are already constructed, and which are proposed. Please specify the date of the contours on this sheet.
 - e. <u>Sheet C-2.</u> Please provide drawings that include grades that show the drainage noted on Note 2.
 - f. Sheets C-3, C-4. Please clarify if Sheets C-3 and C-4 have been replaced by other sheets. If not, please explain why the final cover profile on the south side of Cell 6 does not correlate with the final cover profile over Cell 7. Please show the limits of each cell and each lift on a plan sheet. Please provide details of the benches, terraces and berms. Please explain the purpose of the vertical lines located at approximately ref. station 29+00 and 23+00. The "existing grade" on these sheets does not appear to be valid.
 - g. <u>Sheet C-5</u>. Please explain the purpose of the dashed lines in Cells 6/7/8, and Cell 5. Please clarify the slope of 60H:1V. Please provide details of all stormwater management devices (berms, terraces, downcomers, swales, ponds, etc.), including elevations required for proper drainage. Please provide a detail of the perimeter road. Please provide plan sheets that show grades and drainage structures, berms, swales, benches, etc., required for appropriate drainage throughout the operation and closure of the facility.
 - h. <u>Sheet C-6</u>. Please clarify if Sheet C-6 has been replaced. It appears that this sheet includes inaccurate information.
 - i. <u>Sheet G-1.</u> Please reference these details to the appropriate locations on the plan views, and provide revised plan sheets appropriately noted.

(Comment #15, cont'd)

- j. <u>Sheet C-8</u>. Please clarify how Cell 11 will be excavated, constructed and filled, and how Cell 10 will be constructed and filled in Sequence 8. This information does not appear to correlate with the Engineering Report or Operations Plan.
- k. Sheets C-10 through C-17. Please verify Sections 1/C-27 and 4/C-27. It does not appear that the cross-sections shown on these plan sheets correlate with the information on Sheet C-27. Please explain how the bench at el. +125 ft. NGVD in Cell 15 continues to Cell 1. Please clarify the drainage between Cell 15 and Cell 1.
- 1. <u>Sheets C-9 through C-18.</u> Please provide station numbers on all plan views to reference to the cross-sections provided.
- m. <u>Sheets C-19 through C-25.</u> Please revise these sheets to be consistent with the bottom elevations shown on Sheet C-2 and the "existing" elevations shown on C-10. Please reference the appropriate bench and terrace details on these cross-sections.
- n. Sheet C-27. Please provide all dimensions, slopes, etc., for all details noted as "NTS."
- 16. Current topographic survey. [Rule 62-701.330(3)(d), F.A.C.] Please provide a topographic survey of the entire site, that shows all disposal areas, current contours, stormwater ponds, setbacks, etc., at a 1"=100 ft. scale. The survey provided in Attachment 8 is a boundary survey of the property, and is not a current topographic survey.

The following comments are for information only at this time and do not require an immediate response:

- 1. Please be advised that pursuant to Rule 62-4.070(5), F.A.C., the Department shall take into consideration a permit applicant's violation of any Department rules at any installation when determining whether the applicant has provided reasonable assurances that Department standards will be met.
 - a. Figure 3-3A, Cell 1 and 2 Topographic Survey, prepared by Foresight Surveyors, Inc., dated June 9, 2005 appears to show that waste has been disposed outside the permitted footprint of Cells 1 and 2 (particularly on the eastern side). Filling outside the permitted footprint is a violation of Specific Conditions #9.b., 9.f., 11. of permit number 177982-002-SO and Rule 62-4.160(2), F.A.C.
 - b. The Pickett survey dated October 27, 2005 appears to indicate that waste in some areas of Cell 1 has been filled steeper than 3H:1V. This is a violation of Specific Condition #11.d. of permit number 177982-002-SO and Rule 62-701.500(7)(c), F.A.C.
 - c. A comparison of the Pickett survey dated March 9, 2006 and the permitted final elevations in Cells 1 and 2 indicate that portions of Cells 1 and 2 have been overfilled, e.g., area of +95 ft. contour on the permitted plans (Sheet C-5) is shown with existing elevations at approximately +107 ft. NGVD. Additionally, the existing slopes are approximately 3H:1V, which does not comply with the permitted plans that require 4H:1V slopes. Also the western extent of Cell 1 appears to have expanded beyond the certified limits. Overfilling, filling beyond the limits of the certified cell and not maintaining the required slopes are violations of Specific Conditions #9.b., 9.f. and 11. of permit number 177982-002-SO and Rule 62-4.160(2), F.A.C.

(Informational Comment #1, cont'd)

- d. Groundwater monitoring sampling events conducted from 2003 through October 2005 indicate elevated Dissolved Oxygen (DO) in several wells. Since supplemental information required by SOP FS 2212 has not been provided that demonstrates that the elevated DO is due to ambient groundwater conditions, elevated DO in the groundwater samples is a violation of Chapter 62-160, F.A.C., and Rule 62-701.510, F.A.C.
- 2. Application form, Items #P.3, P.4.g(6), and P.5. The application form indicates that the Closure report is "not applicable." The Department agrees that since the applications are for construction and operation that a closure report, final cover slope stability calculations, and closure operation plan are not required for the facility at this time. However, please note that this information shall be required as part of the closure permit application.
- 3. §7.1.4.. §7.1.4.1., §7.1.4.2. Please be advised that the onsite clayey soils shall meet the borrow source demonstration requirement of Rule 62-701.400(8), F.A.C, in order to be used as the barrier layer in the final cover. This demonstration will be required as part of the closure permit application or permit.
- 4. **\$7.1.4.5.** Please be advised that a specific closure CQA Plan and technical specifications will be required as part of the closure permit application. Please note that the information provided in this section does not meet the requirements of Rule 62-701.400(8), F.A.C.

Please respond within 60 days after you received this letter, responding to all of the information requests and indicating when a response to any unanswered questions will be submitted. If the response will require longer than 60 days to develop, you should develop a specific time table for the submission of the requested information for Department review and consideration. Pursuant to the provisions of Rule 62-4.055(1), F.A.C., if the Department does not receive a timely, complete response to this request for information the Department may issue a final order denying your application. A denial for lack of information or response will be unbiased as to the merits of the application. The applicant may reapply as soon as the requested information is available.

You are requested to submit your responses to this letter together, as one complete package. Please contact me at (813)632-7600 ext. 386 to schedule the requested meeting.

Sincerely,

Susan J. Pelz, P.E.

Solid Waste Program Manager

Southwest District

sjp Attachment

Mark Roberts, P.E., JEA, 730 NE Waldo Rd., Gainesville, Fl. 32641

Donna Huber, Pasco County Development Review, 7530 Little Road, Suite 230, New Port Richey,
FL 34654, w/attachment
Richard Tedder, P.E., FDEP Tallahassee (email)
William Kutash, FDEP Tampa (email)
Fred Wick, FDEP, Tallahassee
Douglas Hyman, P.E., FDEP Tampa, ERP (email)
Mara Nasca, FDEP Tampa, Air (email)
Steve Morgan, FDEP Tampa, SW (email)
John Morris, P.G., FDEP Tampa, SW (email)

Florida Department of

Memorandum

Environmental Protection

TO:

Susan Pelz, P.E.

FROM:

John R. Morris, P.G.

DATE:

August 3, 2006

SUBJECT:

Enterprise Class III Landfill Permit Renewal, Pasco County

Class III Landfill Operation Renewal Application, Pending Permit 177982-007-SO
Class III Landfill Construction Renewal Application, Pending Permit 177982-008-SC

Environmental Monitoring Review Comments (Responses to RAI #2)

I have reviewed portions of the materials submitted to the Department in support of the referenced applications for renewal of the operation and construction permits for the Enterprise Class III Landfill that were prepared by Jones Edmunds & Associates, Inc. (JEA) on behalf of Angelo's Aggregate Materials, Ltd., received July 6, 2006. The submittals provided responses to the review comments presented in the Department's letter dated March 10, 2006. The portions of the submittals that were reviewed included:

- Transmittal letter prepared by JEA dated July 5, 2006:

- Part 1 - Responses to Comments from John R. Morris, P.G., dated July 3, 2006 ("response letter")

- Attachment 6.d. – Document entitled "Enterprise Class III Landfill, Permit Renewal, Pasco County, Landfill Hydrogeological Investigation and Ground Water Monitoring Plan" (HIGWMP), dated June 2006

My review focused on the hydrogeologic and environmental monitoring aspects of the construction and operation permit applications and supporting submittals. Additional information is needed to evaluate the adequacy of the monitoring plan.

Please have the applicant address all of the review comments that do not include the phrase: "No additional information is requested". Please have the applicant submit responses to the following review comments that provide revised submittals, or replacement pages to the submittals, that use a strike through and underline format, or similar format, to facilitate review. Please also have the applicant include the revision date as part of the header/footer for all revised pages (text, figures, tables, appendices, forms and site plans).

The review comment numbers presented below are consistent with my previous memoranda dated September 21, 2005, and March 10, 2006. To facilitate the review process, those comments that were fully addressed by previous submittals have been deleted from this memorandum. The information requests have been referenced to sections of the permit application form and are also referenced to the sections of the supporting documents where appropriate, as presented below:

DEP FORM NO. 62-701.900(1), SOLID WASTE MANAGEMENT FACILITY PERMIT FORM SECTION I – HYDROGEOLOGICAL INVESTIGATION REQUIREMENTS (Rule 62-701.410(1), F.A.C.) 6. I.1.b.:

d. The response letter provided revised Section 5.2.2 of the HIGWMP that referenced Table 5-1A (ground water elevations recorded between June 2003 and October 2004) and referenced new <u>Table 5-1B</u> (ground water elevations recorded during the <u>April 2005</u> sampling event). Please note that the HIGWMP included a <u>Table 5-1A</u> that provided ground water elevations recorded on <u>May 29, 2005</u>. Please submit additional revisions to the HIGWMP to provide <u>Table 5-1B</u> with a notation that the ground water elevations were recorded on <u>April 29, 2005</u>.

Page 2 of 4 8/3/06

- e. Please submit additional revisions to Section 5.2.2, Table 5-2 and Appendix 5-C of the Hydrogeological Investigation as appropriate to address the following items:
 - 2) The response letter indicated no raw data was available to defend the slug out test conducted at P-3a. Table 5-2 of the HIGWMP was revised to delete the hydraulic conductivity result for the slug out test at this location. No additional information is requested.
 - 3) The response letter indicated Table 5-2 was included in the HIGWMP. No additional information is requested.
 - 4) The response letter indicated Table 5-2 was included in the HIGWMP. No additional information is requested.
- f. The HIGWMP provided revisions to the surficial aquifer ground water velocity calculations in Section 5.2.2 and new Tables 5-2A ad 5-2C, and indicated the locations where hydraulic gradients were calculated on new Figures 5-1a and 5-1c. **No additional information is requested.**
- i. The HIGWMP provided new Figure 5-1b that revised the ground water surface contours for the Floridan aquifer wells using the elevations measured July 17, 2003 excluding the water level reported at piezometer P-11. The HIGWMP included revisions to Section 5.2.4 and Section 5.3.1 regarding the predominantly southward direction of ground water flow in the Floridan aquifer at the facility. **No additional information is requested.**
- j. The HIGWMP provided new Figures 5-1a through 5-1d that indicated the locations where hydraulic gradients were calculated that were referenced in revised Section 5.2.4. No additional information is requested.
- k. The HIGWMP provided revisions to the Floridan aquifer ground water velocity calculations in Section 5.2.4 and new Tables 5-2A and 5-2C, and indicated the locations were hydraulic gradients were calculated on new Figures 5-1b and 5-1d. **No additional information is requested.**

SECTION M – WATER QUALITY AND LEACHATE MONITORING REQUIREMENTS (Rule 62-701.510, F.A.C.)

- 8. M.1.c.(1):
 - a. The HIGWMP provided construction details, locations and phasing schedule for new proposed Floridan aquifer wells MW-3B, MW-4B, MW-11B and MW-14B in Section 5.3.1, revised Figure 15A and new Figure 17C. Please note that the proposed "contingent" sampling of individual Floridan aquifer wells based on the occurrence of sufficient ground water to collect a sample from the adjacent surficial aquifer well is not consistent with Rule 62-701.510(3)(d)4, F.A.C., that well screens shall be located to readily detect representative ground water samples within the saturated thickness of the uppermost aquifer within the zone of discharge. Based on the results of routine monitoring events conducted at the facility, it appears that the Floridan aquifer represents the uppermost aquifer and that the surficial aquifer is more limited in areal extent and seasonal persistence than described in the original HIGWMP. Accordingly, it is the Department's intention to prepare Specific Conditions in the new operating permit that require routine sampling of the Floridan aquifer wells, with supplemental sampling of the existing surficial aquifer wells when sufficient water is present to allow sample collection. This comment is provided for informational purposes and does not require a response. No additional information is requested.
- 9. **M.1.c.**(6): The HIGWMP provided construction details, locations and phasing schedule for new proposed Floridan aquifer wells MW-3B, MW-4B, MW-11B and MW-14B in Section 5.3.1, revised Figure 15A and new Figure 17C. **No additional information is requested.**

- 10. **M.1.f.(3):** Based on the revisions to Sections 5.2.2 and 5.2.4 of the HIGWMP that provided maximum ground water velocity calculations for the surficial and Floridan aquifers, respectively, the Department does not object to the proposed semi-annual frequency for routine ground water sampling. **No additional information is requested.**
- 12. **M.1.h.(2):** The response to comment #12 states that revision of the document entitled "Water Quality Evaluation Report" (WQER), prepared by Tetra Tech HAI, dated February 2, 2006 "is not within the scope of this RAI response." This statement is inconsistent with Rule 62-701.510(9)(b), F.A.C., that requires the technical report that summarizes and interprets water quality results and water level measurements be submitted every two years and shall be <u>updated at the time of permit renewal</u>. However, to minimize the inconvenience to the applicant by requiring the document prepared by Tetra Tech HAI to be revised by JEA, please provide responses to the following comments that are referenced to sections of the WQER:

2.0 Ground Water Monitoring Plan

a. The response letter indicated that wells MW-8B, MW-9B and MW-10B were installed and developed by April 15, 2006. **No additional information is requested.**

3.0 Field Parameters

- b. The response letter provided a summary of pH results during purging of well MW-7B. No additional information is requested.
- c. The reference in the response letter to FS 2212, Section 3.2 of the Department's SOPs regarding alternate purging criteria for dissolved oxygen if the conditions in FS 2212, Section 3.1 cannot be met is noted. However, the response letter did not address nor provide all the supplemental documentation items listed in FS 2212, Section 3.2 (bullet items on the bottom of page 9/top of page 10). Please conduct dissolved oxygen measurements within the screened interval of each of the monitor wells with a downhole dissolved oxygen probe and submit the results as part of the responses to this review comment to characterize if elevated dissolved oxygen values are naturally occurring or related to sample collection.

4.0 Detections and Exceedances of Sampling Parameters

- d. The response letter referred to new Table 5-6 that summarized the results of the sampling events conducted between July 2003 and April 2005, including the resampling event conducted at well MW-7B during November 2003. **No additional information is requested.**
- e. The response letter clarified which sampling events included the analysis of total phenolics and speculated that the results reported for well MW-7B may be related to leaching of plasticizers from the PVC pipe due to interaction with caustic, grout-contaminated water. No additional information is requested.

5.0 Comparison of Up-Gradient and Down-Gradient Wells

f. The response letter indicated field measured dissolved oxygen has been variable in upgradient and downgradient wells. **No additional information is requested.**

6.0 Comparison Between Surficial and Floridan Aquifer Zones

g. The response letter indicated field measured dissolved oxygen has been variable in surficial and Floridan aquifer wells. **No additional information is requested.**

8.0 Interpretation of Ground Water Flow

h. (Please note this comment was incorrectly referenced as #8.f., in the memorandum dated March 10, 2006). The response letter referred to new Figure 5-1b in the HIGWMP. No additional information is requested.

Enterprise Class III Landfill Permit Renewal, Pasco County Class III Landfill Operation Renewal Application, Pending Permit 177982-007-SO Class III Landfill Construction Renewal Application, Pending Permit 177982-008-SC Environmental Monitoring Review Comments (Responses to RAI #2) Page 4 of 4 8/3/06

i. (Please note this comment was incorrectly referenced as #8.g., in the memorandum dated March 10, 2006). The response letter referred to revised ground water velocity calculations provided in Table 5-2A of the HIGWMP. No additional information is requested.

11.0 Conclusion

j. (Please note this comment was incorrectly referenced as #8.h., in the memorandum dated March 10, 2006). The response letter indicated it was possible that aggressive well development may remove residual grout from around the screen of well MW-7B so it will yield representative ground water samples, however it was also indicated that it was anticipated that the well would need to be replaced. Please conduct the proposed redevelopment activities and submit an evaluation of the potential for well MW-7B to provide representative ground water samples as part of the responses to this review comment. Please also submit the technical justification of construction details for the proposed replacement well in the event that it is determined the redevelopment of well MW-7B is not sufficient. If a replacement for well MW-7B is recommended, please submit appropriate revisions to the HIGWMP (including Sections 5.3.1. and 5.3.2., Figure 15A, and Figure 17C, at a minimum), and designate an unique identification number.

SECTION P - LANDFILL FINAL CLOSURE REQUIREMENTS (Rule 62-701.600, F.A.C.)

13. **P.2.b.(5):** The response letter referred to revisions to Sections 7.2 of the Landfill Closure and Reclamation Plan provided in Appendix A. **No additional information is requested.**:

I can be contacted at (813)-632-7600, extension 336, to discuss the comments in this memorandum.

jrm