

Department of Environmental Protection

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

Colleen M. Castille Secretary

March 10, 2006

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

RE:

Enterprise Recycling & Disposal Class III Landfill

Pending Permit Nos.: 177982-007-SO/T3 and 177982-008-SC/T3, Pasco County

Dear Mr. lafrate:

This is to acknowledge receipt of the additional information dated February 8, 2006 (received February 9, 2006) submitted in support of your permit application, dated August 18, 2005 (received August 23, 2005), prepared by Tetra Tech HAI [HAI], 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>second</u> request for information. Please provide the information listed below promptly. Evaluation of your proposed project will be delayed until all requested information has been received.

Please note that much of the information in the February 8, 2006 submittal was non-responsive to the Department's September 21, 2005 request for information. Consequently, those comments for which substantive responses were not received have been repeated in *italic font*. Additional requests and clarification based on the information received February 9, 2006 may also follow each of these comments. Please be reminded that in the event that complete and sufficient responses are not received to this request for additional information, the Department may deny the pending applications.

The following comments are numbered the same as the Department's September 25, 2005 letter. Additional comments have been added based on the responses and information provided in the February 8, 2006 submittal. 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 <u>4 copies</u> 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 <u>complete package</u>. For revisions to the narrative reports, deletions may be struckthrough (<u>struckthrough</u>) and additions may be shaded <u>shaded</u> or similar notation method. This format will expedite the review process. <u>Please include</u> revision date on all revised pages.

- 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, P1-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, Items marked N/C. No additional information is requested for this item.
- 6. **Application form.** [Rule 62-701.320(7), F.A.C.]
 - a. <u>Item #B.11.</u> No additional information is requested for this item.
 - b. <u>Item #E.13.</u> Please provide proof of publication of the attached Notice of Application. [Rule 62-701.320(8), F.A.C.]
- 7. **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 (Egr Report, §3.3). Please provide a revised Engineering Report that includes this information.
- 8. 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.* See also Comments #11.t and 20.
- 9. Please provide proof of notification of local elected officials required by Rule 62-701.320(8), F.A.C. Response #9 states, "The requirement to notify local officials pertains to new application or applications to substantially modify a landfill." However, Rule 62-701.320(8)(b), F.A.C., states, "An applicant for permit to construct or substantially modify a Class I, II or III landfill shall mail a notice of application to the Chair of the BOCC, the highest ranking official of the municipality, and each State Senator and Representative serving the jurisdiction in which the project is located. This Notice shall be mailed within 14 days of submittal of the application to the Department." Based on Response #9, it appears that these notices have not been mailed to the appropriate officials as required by this Rule.
- 10. Please provide documentation that demonstrates that the setback requirements of Rule 62-701.320(12), F.A.C., are not violated by the proposed construction and operation of the facility. Although Response #10 indicates that this information is provided on Figure 3-1 in the Engineering Report, Figure 3-1 does not indicate the presence of airports (it is titled) "Site Location Map") and the map is not of sufficient scale (1 inch=2,500 ft.) to show locations 5 miles from the site.
- 11. Engineering Report [Rule 62-701.320(7)(d), F.A.C.] Please provide a revised Engineering Report that addresses these comments.
 - a. §3.4, Topography. See Comment #11.t. below.
 - b. §3.4.1, 100-year flood prone areas. Please provide information or a figure from SWFWMD (or the FEMA floodplain map) that shows the floodplain and the facility boundaries. Response #11.b. indicates that Figure 3-4 includes this information. However, Figure 3-4 does not appear to have been generated by FEMA or SWFWMD, appears to only show the "100-year flood extent," and the source for the flood prone areas is not specified.

- c. §3.7, Excavation Operations and Cell Construction.
 - 1) Please provide (or reference) the figure that shows the "excavation setback of 200 feet and... restoration slope of 6H:1V." Response #11.c. indicates that Sheet C-2 shows the 200-ft. setback. However, the setback does not appear to be shown on this sheet.
 - 2) Please provide a Figure 3-7 (Sheet C-2) that shows the excavation sequence as indicated in this section of the Engineering Report.
 - 3) The first paragraph in this section indicates that the landfill excavation slope will be 2H:1V. However, the next paragraph states, "excavation slopes will not exceed 6H:1V." Please clarify this inconsistency. Response #11.c. states, "once ready for use, the cell slopes would be cut back to 2H:1V prior to waste filling operations." Please clarify if the "cell slopes" are the slopes where the soil materials were excavated. Please provide procedures for placing the clay on 2H:1V slopes.
 - 4) Please show the "working face and the 6H:1V excavation slope of the adjacent cell... [and] berm and conveyance..." on the drawings. Please show the 6-foot wide berm used to "prevent stormwater from entering the working face" on the drawings. This information has been deleted from the application (Engineering Report and Operations Plan). Response #11.c. indicates that the references to the 50-ft. overcut, swale and 6H:1V excavation slope have been deleted since "their construction has not been necessary for operation of the facility." Please explain how runoff from the sideslopes is controlled and drainage is managed. Please explain how stormwater is prevented from running onto waste disposal areas.
 - 5) Please provide a table that includes the schedule for excavation, construction, waste disposal and closing for each cell.
 - 6) Response #11.c. states, "Section 3.8 best describes the sequence of <u>operations</u> for the facility. Each cell is excavated immediately prior to certification and waste disposal." [emphasis added] However, during a recent site inspection, the facility operator insisted to the Department that the excavation sequence is not mandated by the facility's operation plan, engineering report or other permit documents. Please clarify if Section 3.8 "best describes" the sequence of construction of the facility.

d. §3.8, Method of Cell Sequence.

- 1) The information indicates that completion of cells 14, 16 and portions of 5 will include building up the pond bottom with "clean soil" to elevation +80 ft. NGVD. Please specify the type of soil proposed to be used. Please be advised that the soils specified must correlate with the soils used in the slope stability analyses.
- 2) Please provide a table that includes the schedule for excavation, construction, waste disposal and closing for each cell.
- 3) No additional information is requested for this item.

- 4) Please provide procedures and plans that show how "stormwater will be diverted to the onsite temporary storage pond until the latter part of the landfill life when Cells 14 & 16 begin to accept waste." (page 3-9) This information may be submitted as part of the Operations Plan. Response #11.d(4) indicates that "the natural topography of property directs stormwater to the temporary pond in the northeast corner. In addition, drainage ditches constructed on the property direct water away from the current working area to the pond." However, the as shown on the predevelopment surveys submitted with the previous permit applications, and the topographic survey provided as Figure 3-3C in this submittal, the topography of the site has been substantially changed and the "natural topography" no longer exists in the eastern portion of the site. Please provide drawings that show the "drainage ditches constructed to direct water away from the current working area."
- e. §3.8.1, Vertical expansion. Please show the "series of swales and other stormwater conveyance[s]" that will be used to prevent side slope erosion. Please clarify "interior temporary sideslopes" and show them on an appropriate Figure or plan sheet.
- f. §3.8.2, Erosion control. This Section states, "the outer edge slope will first receive waste." However, this appears to conflict with the Method of Cell Sequence in Section 3.8. Please submit revisions as appropriate.
- g. §3.8.3, Life expectancy. Please provide copies of the site-specific data that was used to calculate the design life of the facility. Please provide Table 1. Please provide the tonnage received and airspace used for each year of operation for the Enterprise Landfill. Since the facility has site-specific data, this data should be used in determining the design life. Please explain the basis and provide references and calculations supporting the information submitted. [Rule 62-701.330(3)(e), F.A.C.] Please provide copies of the waste records required by Rule 62-701.500(4), F.A.C. Please specify which cells will be constructed and filled within the next 5 year permit period.
- h. §3.9, Waste compaction and application of cover. Please clarify which wastes will be "reduced as appropriate by the chipper/crusher." It does not appear that Sheet C-1 provides an "illustration of the cell closure sequence." Please provide this information. Please be advised that the final cover shall meet the requirements of Rule 62-701.400(7) and (8), F.A.C., as well as Rule 62-701.600, F.A.C. Please revise this section accordingly. Please specify how long the eastern half of the landfill will be "temporarily closed." Please show the storage locations of "recycling materials" on the plan sheets.
- i. §3.10.1, Gas monitoring and control. Please clarify if the facility operation (as well as design) will prevent the contact of surface and groundwater with wastes. Please provide examples of the "immediate corrective actions" that will be taken to "abate any detected onsite odors." Please explain how mulch or crushed concrete will abate landfill odors.
- j. §3.10.1.1, Gas probe locations. Please specify how many gas probes are existing and how many are proposed. Please clarify if the probes will be installed and certified as part of the certifications of construction completion for the cells listed in this section.
- k. §3.10.1.3, Methane gas measurement. No additional information is requested for this item.
- I. §3.10.1.4, Gas contingency plan. No additional information is requested for this item.
- m. §3.10.1.5, Passive gas vents. No additional information is requested for this item.

n. §3.10.2, Leachate control. Please explicitly describe the "strict method of controlling wastes disposed." The information submitted in the application does not appear to be extraordinarily strict, but appears to represent typical industry practice. Please be advised that "rainwater runoff flowing through the fill material" is leachate by definition (see Rule 62-701.200(66), F.A.C.). 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 that "a consistent confining layer above the limestone... across the site" no longer appears to be valid. Please provide a revised design that not only includes a clay liner on the cell bottoms, but also includes a clay liner on the sideslopes, and includes leachate collection and removal.

o. §3.10.3, Stormwater controls.

- 1) Please clarify how stormwater is controlled by "percolation into the soil or by overland flow to the temporary stormwater pond." It does not appear that swales, berms or other method are shown on the plan sheets to divert stormwater to the temporary pond. Please provide a copy of the stormwater management permit that includes the modifications to Pond 2.
- 2) No additional information is requested for this item.
- p. §3.11, Erosion control. Since the facility is designed to fill above grade, please explain how "the site's inherent design as an excavation pit will prevent stormwater from leaving the property." See also Comment #11.0. The plans do not appear to include berms, swales, etc., that direct stormwater away from the waste disposal areas. Please provide specific procedures or designs that demonstrate that that erosion will be controlled and intermediate and initial cover will be maintained.
- q. §3.13, Setbacks and visual buffers. Please clarify if the "boundary lines" are the property boundaries.
- r. §3.14, Foundation analysis. Please provide a revised foundation analysis and lineament study that includes the 2004 subsidence occurrence at the site. See also Comment #15. The information provided by Universal Engineering does not indicate that the subsidence that occurred onsite in 2004 was considered in their evaluation.
- s. §3.15, Certification. No additional information is requested for this item.
- t. <u>Figures</u>. Please provide revised figures and plan sheets that are consistent and include all revisions requested by this comment and Comment #20.
 - 1) Boundary and Topographic Survey of the Pasco County Landfill for Sid Larkin & Son, Inc., dated June 5, 2000. Please provide a signed and sealed copy of this plan sheet. Please specify the date of the contours on this sheet. Response #11.t(2) indicates that the property ownership has not changed since the date of this survey. However, this survey appears to have been prepared for Sid Larkin & Sons and is dated June 5, 2000. Since the permit was not transferred to the current permittee until January 2002, it appears that ownership of the property changed since the date of this survey.
 - 2) <u>Enterprise Recycling and Disposal Facility Cell 1 and 2 Topographic Survey,</u> dated July 27, 2005. This sheet appears to show that the facility may have filled outside the permitted footprint. Please provide a topographic survey of the entire site, that shows all disposal areas, current contours, stormwater ponds, setbacks, etc. See also Comments ##11.t(9), #13, and #20.

- 3) No additional information is requested for this item. Comments regarding Sheets C-1 through C-6 and G-1 are listed below.
- 4) Figures 3-13, 3-15, 3-19, 3-20. See Comment #20, below.
- 5) Figure 3-17. See Comment #20, below.
- 6) Figure 3-18. Please show all benches and terraces on the sequencing plans.
- 7) Sequencing plans (Figures 3-17, 3-18, 3-19, 3-20). Please provide a revised figure that utilizes cross-sectional arrows to show the direction of view for each cross-section. Please provide east-west cross-sections for each cell. See Comment #20, below.
- 8) Figures 3-26, 3-27, 3-28, 3-29, 3-30. Please provide details of the benches. Please provide details of the stormwater control system that will manage stormwater that runs off the landfill slopes. Please provide details of the features that will prevent erosion of the landfill cover soils and will adequately control stormwater at the toe of the landfill.
- 9) <u>Figure 3-3C</u>. Please show the surveyed cell boundaries on this survey. Please show the locations and distances of the residential wells within 500 feet of the site on this sheet.
- 12. Vicinity map. No additional information is requested for this item [Rule 62-701.330(3)(a), F.A.C.].
- 13. Current topographic survey. See Comment #11.t(9), above. [Rule 62-701.330(3)(d), F.A.C.]
- 14. **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 <u>comprehensive</u> 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. The Table of Contents provided appears to have errors based on repagination of the revised Operations Plan.
 - a. §4.0. No additional information is requested for this item.
 - b. <u>§5.1.</u>
 - 1) The information provided in the "Rejected Load Logs" indicates that loads containing oil containers and chemicals/solvents were rejected. Please clarify if these loads were rejected prior to, or after being dumped, and specify the final disposal location of the materials. Please provide contact information for these waste generators if known.
 - 2) Please provide examples of unacceptable wastes items that have been discovered by the video camera and scalehouse personnel and have been subsequently prohibited from disposal in 2004 and 2005. Response #14.b. states, "waste items specifically identified using the video camera at the scalehouse were not tracked." Since the effectiveness of the video system is not known, please explain how the video camera at the scalehouse can be concluded to support the liner and leachate collection exemption.
 - c. §5.3. Please specify the maximum quantity and timeframe for storing batteries, paint, chemicals, etc. Please provide details of the "secured maintenance building."

- d. §5.4. No additional information is requested for this item.
- e. §5.5. The information provided in the "Rejected Load Logs" indicates that loads containing oil containers and chemicals/solvents were rejected. Please clarify if these loads were rejected prior to, or after being dumped, and specify the final disposal location of the materials. Please provide contact information for these waste generators if known.
- f. §5.6. No additional information is requested for this item.
- g. §5.7. Please be advised that waste processing and recycling requires a separate permit unless the activity is incidental to the disposal operation. Based on the description in the Operations Plan, it does not appear that the recycling activity is incidental to the operation. Please provide all information required by Rule 62-701.710, F.A.C. concerning incidental materials recovery and recycling at this site. Please note that if the applicant's intention is to accept loads of "primarily recyclable products," then a separate waste processing facility permit will be required. Please be advised that whole waste tires are not acceptable for disposal in a landfill. Please explain how waste tires would be "reused" onsite.
- h. §5.7.1. No additional information is requested for this item.
- i. §8.0, 8.2, 8.3, 9.0, 10, 10.1, 10.1.1, 10.1.2, 10.2, 10.3, 20.0., 23.0. Please see Comment #11.
- j. §13.0. Please provide a litter control plan that meets the requirements of Rule 62-701.500((7)(i), F.A.C.
- k. §14.0. See Comment #14.I.
- I. §14.1. Since the determination of what constitutes Class III waste is largely based on visual inspection, please explain how a load that is on fire and then is "immediately covered with earth" can be spotted and unacceptable wastes removed. Please clarify what "spills from waste vehicles" are not anticipated. Please specify the disposal facility for contaminated soils.
- m. §15.0. Please provide page 2 of 2 for the training printout for Mickey Hazellief. Please verify if Alfredo Martinez completed training in February 2006. Since only 1 equipment operator, 1 landfill operator and 1 spotter are expected to be at the facility at any time, please explain how the projected approximately 6000 cy/day (2,142,000 cy/year divided by 360 days/year) can be adequately spotted, unacceptable wastes removed and waste compacted during lunch breaks, vacations or in the event of personnel illness. 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 (formerly in Comment #14.n).
- n. §17.0 Please clarify if a concrete crusher will be used at the site.
- o. §17.1. Please specify where oil and antifreeze is stored.
- p. <u>§19.2.</u> Please specify the procedures for, and frequency of, "self inspection of landfill conditions."
- q. §21.0. No additional information is requested for this item.
- r. Appendix A. Please explain why Mr. Jon Larkin is the 24-hour contact for the facility.

s. <u>Appendix 3-B.</u> Please provide procedures in the event that hazardous waste is received at the site. Please provide procedures that must be followed in the event of a fire. Please explain how sorbent material is expected to absorb spills since most of the site is not paved. Please provide procedures for waste handling in the event of fire, inadequate personnel, or other interruptions in operations. Please specify the equipment rental companies that will be used to obtain reserve equipment.

15. 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.
 - 1) No additional information is requested for this item.
 - 2) Since the facility has been operating for several years, the actual unit weight on waste/cover soil should be available to be used in the foundation analyses (settlement, bearing capacity, slope stability). Please provide revised analyses that include actual bulk density information from the site.
 - 3) 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.
 - 4) §3.4. Since there was an occurrence of a sinkhole onsite during the construction of Cell 15/16, please provide an updated sinkhole and lineament investigation.
 - 5) Boring B-03A. No additional information is requested for this item.
 - 6) Test method for vertical permeability. **No additional information is requested for this item.**
- 16. Section 5, Hydrogeological Investigation [Rule 62-701.410, F.A.C.]
 - a. Please respond to Mr. John Morris' memorandum dated March 10, 2006, attached.
 - b. §5.1.6, 5.1.7. Please submit an updated geotechnical investigation (settlement, bearing capacity, slope stability) that considers the subsidence/sinkhole that occurred onsite in 2004. See Comment #15 above.
- 17. Section 6, Stormwater Management [Rule 62-701.400(9), 62-701.500(10), F.A.C.]
 - a. No additional information is requested for this item.
 - b. Please provide revised plan sheets that detail all ditches, berms, swales, benches, downcomer pipes, and other stormwater management devices.
- 18. **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 March 10, 2006, attached.
- 19. **Section 7, Reclamation and Closure Plan.** [Rules 62-701.320(7)(e)1., 62-701.600, 62-701.610, 62-701.620, F.A.C.]
 - a. Please provide a table that includes the schedule for excavation, construction, waste disposal and closing for each cell.

- b. §7.1.1. Please explain why the operator would be placing waste on a "completed cell." Please specify the actions that are included in "reclamation and closure."
- c. §7.1.2. Please provide plans that show and include details for the "drainage enhancements."
- d. §7.1.3. Please provide plans that show and include details for the stormwater designs. This information does not appear to be provided in Section 6. Response #19.e. indicates that the stormwater design has been reviewed by the Department's ERP section. However, ERP/stormwater management permits does not generally evaluate or address the stormwater management on the landfill footprint, but are more focused on the stormwater ponds, conveyances and discharges offsite.
- e. <u>Table 1.</u> Please include dates or timeframes on this table. See also Comment #19.a.
- f. Please respond to Mr. John Morris' memorandum dated March 10, 2006, attached.
- g. <u>Appendix 7-A. Financial Assurance Requirements</u> [Rule 62-701.630, F.A.C.] *Please respond to the Department's letter dated September 21, 2005 concerning financial assurance cost estimates (sent under separate cover).* Although Response #19.g. indicates that responses to these items were included in the February 8, 2006 submittal, it does not appear that the responses to the financial assurance comments were provided.
- 20. **Plan Sheets.** [Rules 62-701.320(6), 62-701.320(7)(f), 62-701.500, F.A.C.]
 - 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 original set did not include a signature and seal.
 - 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. <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.*
 - d. <u>Sheet C-2.</u> Please reference the correct date for the contours shown on this sheet. Please provide a detail for the 6H:1V mine slope and 2H:1V slopes. Please provide drawings that include grades that show the drainage noted on Note 2.
 - e. <u>Sheets C-3, C-4.</u> Please include reference station numbers on plans view sheets. 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.
 - f. Sheet C-4. No additional information is requested for this item.
 - g. <u>Sheet C-5</u>. Please reference the correct date for the contours shown on this sheet. 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.

(Comment #20., cont'd)

h. <u>Sheet G-1.</u> Please reference these details to the appropriate locations on the plan views, and provide revised plan sheets appropriately noted.

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

- 1. **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.
- 2. Please be advised that although the facility is exempt from a liner and leachate collection at this time, this exemption is based on the following conditions: construction of a 3-foot thick, 1 x 10⁻⁵ cm/sec clay layer below the proposed disposal footprint (including exterior slopes); strict waste screening and adequate unacceptable wastes removal; the absence of groundwater contamination at the site; and subsurface conditions that provide adequate support for the landfill and will not result in the direct discharge of leachate into groundwater. In the event that the Department receives information that shows that any of these conditions is no longer applicable, then the Department may withdraw approval of the exemption and require a liner and/or leachate collection and removal system.
- 3. §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.
- 5. Response #20.f. indicates that construction of the 6H:1V slopes "has not been feasible and the cells have been constructed as needed for waste disposal (i.e., approximately 2H:1V slopes)." Please be advised that this change may require a modification of the Pasco County development permit.

Please respond within 30 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 30 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 if you have any questions.

Sincerely,

Susan J. Pelz, P.E. Solid Waste Manager Southwest District

sjp Attachment

CC:

Jennifer Deal, P.E., Hartman & Associates, 201 E. Pine St., Ste. 1000, Orlando, Fl. 32801, w/attachment 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) Chris McGuire, FDEP OGC (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. Jum

DATE:

March 10, 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 #1)

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 Tetra Tech HAI (TTH) on behalf of Angelo's Aggregate Materials, Ltd., received February 9, 2006. The submittals associated with the renewal applications include the following:

- Letter prepared by TTH dated February 8, 2006 providing responses to the Department's letter dated September 21, 2005 ("Response Letter"), including:
 - Revised pages to DEP Form No. 62-701.900(1), pages 4, 6 and 8, undated
 - Revised Engineering Report, dated January 2006
 - Revised Hydrogeological Investigation, dated January 2006
 - Revised Closure Plan, dated January 20, 2006
 - NSPS/Title V Information
 - Responses from Universal Engineering Sciences, dated January 25, 2006
- Construction Drawings for the Enterprise Recycling & Disposal Facility, drawing Nos. C-1, C-2, C-5 and G-1, signed/sealed February 8, 2006
- Document entitled "Water Quality Evaluation Report" (WOER), dated February 2, 2006

My review focused on the hydrogeologic and environmental monitoring aspects of the construction and operation permit applications. 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 memorandum dated September 21, 2005. 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 A – GENERAL INFORMATION

1. **A.5.:** Revised page 4 of the application form for this item was submitted that indicates the facility identification number assigned to this facility (SWD/51/87895). **No additional information is requested.**

SECTION B - DISPOSAL FACILITY GENERAL INFORMATION

2. **B.7.:** Revised page 6 of the application form for this item was submitted that reflects the adjacent residential and industrial land uses. **No additional information is requested.**

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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 #1)

- 3. B.12.: Revised page 6 of the application form for this item was submitted that provides the facility location information. No additional information is requested.
- 4. **B.27.**: Revised page 8 of the application form for this item was submitted that provides stormwater management information. No additional information is requested.
- 5. B.28.: Revised page 8 of the application form for this item was submitted that describes the ERP permit information. No additional information is requested.

SECTION I - HYDROGEOLOGICAL INVESTIGATION REQUIREMENTS (Rule 62-701.410(1), F.A.C.)

- 6. **I.1.b.:**
 - a. Revised page 5-7 of the Hydrogeological Investigation was submitted that indicates piezometer P-13 was abandoned during October 2003. No additional information is requested.
 - b. Revised page 5-8 of the Hydrogeological Investigation was submitted that references Table 5-1. Revised Table 5-1 of the Hydrogeological Investigation was submitted that presents the ground water elevation data measured on March 26, 2001 and May 7, 2001. No additional information is requested.
 - c. Revised pages 5-8 and 5-9 of the Hydrogeological Investigation were submitted that reference the direction of ground water flow in the surficial aquifer during the sampling events conducted between July 2003 and April 2005, and reference that the surficial aquifer has been shown to be generally dry in the southeast portion of the property. No additional information is requested.
 - d. Please submit revisions to the fifth paragraph of Section 5.2.2 of the Hydrogeological Investigation to refer to Table 5-1A. Please submit revisions to Table 5-1A to include the water levels measured at all wells, piezometers and the staff gauge in the temporary stormwater pond during the April 2005 sampling event.
 - 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:
 - 1) Revised slug test results were submitted with legible hand-written comments. No additional information is requested.
 - 2) Although indicated in the Response Letter, the result for the slug out test conducted at P-3a was not included in the materials received February 9, 2006. It is noted that the response to review comment No. 6.e.(4) indicates that a slug out test was not conducted at P-3a. Please review this apparent inconsistency and submit revisions as appropriate.
 - 3) Although indicated in the Response Letter, the revised Table 5-2 was not included in the materials received February 9, 2006. Please submit a copy of the omitted information.
 - 4) Although indicated in the Response Letter, the revised Table 5-2 was not included in the materials received February 9, 2006. Please submit a copy of the omitted information.
 - f. Please submit revisions to the ground water velocity calculations provided on revised page 5-10 of the Hydrogeological Investigation to include a range of ground water velocities calculated using the maximum/minimum values for hydraulic conductivity and hydraulic gradient. Please submit additional revisions to Section 5.2.2 of the Hydrogeological Investigation to reference ground water contour maps prepared for the sampling events conducted between July 2003 and April 2005 and indicate on these contour maps what points were used to calculate the hydraulic gradients. Please note that the steepest hydraulic gradient for each contour map should be included in the range of ground water velocity calculations to represent the most conservative conditions.

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 #1)

- g. Revised pages 5-12 and 5-13 of the Hydrogeological Investigation were submitted that provide an updated calculation of vertical ground water velocity. **No additional information is requested.**
- h. The Response Letter and revised page 5-15 of the Hydrogeological Investigation were submitted that reference the supplemental slug tests that were conducted at wells MW-5B, MW-7B and MW-10B. The Response Letter indicates that the results of the slug tests were intended to be inserted into Appendix 5-C of the Hydrogeological Investigation. No additional information is requested.
- i. Please submit a revised ground water surface contour map for the Floridan aquifer wells using the elevations measured July 17, 2003 excluding the water level reported at piezometer P-11 to be consistent with the contour maps for subsequent sampling events. Please submit additional revisions to the fourth paragraph of Section 5.2.4 and the fourth paragraph of Section 5.3.1 of the Hydrogeological Investigation to describe the direction of ground water flow in the Floridan aquifer consistent with the contour maps for the sampling events conducted between July 2003 and April 2005.
- j. Please submit additional revisions to the range of hydraulic gradients measured on the contour maps for the sampling events conducted between July 2003 and April 2005 to be consistent with the response provided to review comment No. 6.i., above, as appropriate.
- k. Please submit revisions to the ground water velocity calculations provided on revised page 5-15 of the Hydrogeological Investigation to include a <u>range</u> of ground water velocities calculated using the maximum/minimum values for hydraulic conductivity and hydraulic gradient. Please submit additional revisions to the fourth paragraph of Section 5.2.4 of the Hydrogeological Investigation to reference ground water contour maps prepared for the sampling events conducted between July 2003 and April 2005 and indicate on these contour maps what points were used to calculate the hydraulic gradients. Please submit a revised ground water surface contour map for the Floridan aquifer wells using the elevations measured July 17, 2003 <u>excluding</u> the water level reported at piezometer P-11 to be consistent with the contour maps for subsequent sampling events. Please note that the steepest hydraulic gradient for each contour map should be included in the range of ground water velocity calculations to represent the most conservative conditions.

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

7. **M.1.b.:** Revised pages 5-21 and 5-24 of the Hydrogeological Investigation were submitted that reference sampling collection in accordance with the Department's SOPs and that the laboratory used for sample analyses will hold the appropriate certificates from the Florida Department of Health, Environmental Laboratory Certification Program. **No additional information is requested.**

8. M.1.c.(1):

- a. Based on the inability to collect representative ground water samples from newly installed wells MW-3 and MW-4, please submit revisions to the well phasing schedule to include wells MW-3B and MW-4B. Please submit revisions to Figures 15A and 17 to include the locations of and proposed construction details for proposed wells MW-3B and MW-4B. Please submit additional revisions to Section 5.3.1 of the Hydrogeological Investigation to discuss the need to install Floridan aquifer monitor wells adjacent to proposed surficial aquifer monitor wells for future cells (Cell 3 MW-11B and Cell 8 MW-14B).
- b. The Response Letter indicated that well MW-1 will remain in the monitor well network until excavation of Cell 8 commences. **No additional information is requested.**
- 9. **M.1.c.(6):** In the event that the response to review comment No. 8.a., above, includes the proposed installation of additional Floridan aquifer monitor wells, please submit additional revisions to Section 5.3.2 and Figures 15A and 17 of the Hydrogeological Investigation, as appropriate.

- 10. **M.1.f.(3):** Please note that the appropriateness of the semi-annual ground water sampling frequency referenced in Section 5.4.5 of the Hydrogeological Investigation will be evaluated up review of the response to review comment Nos. 6.f., and 6.k., above.
- 11. **M.1.g.:** Revised page 5-24 of the Hydrogeological Investigation was submitted that references "evaluation monitoring" and the 30-day period to conduct confirmatory sampling at detection wells. **No additional information is requested.**
- 12. **M.1.h.(2):** Please submit responses to the following review comments referenced to the WQER: 2.0 Ground Water Monitoring Plan
 - a. Please submit revisions to this section to indicate that wells MW-8B, MW-9B and MW-10B were installed prior to the April 2005 sampling event.

3.0 Field Parameters

- b. Please submit revisions to Table 1 to be consistent with the reports of results for the routine sampling events that were submitted to the Department:
- pH was measured at 5.36 S.U. at the end of purging at well MW-7B during the April 2004 sampling event.
- c. Please submit revisions to the second paragraph of this section to compare the field measurements of dissolved oxygen with the purging criterion (<20% saturation) presented in the Department's Standard Operating Procedure FS 2200. Please include a discussion of the variability in concentrations of dissolved oxygen that have been reported for the routine sampling events. Please note that the Department's Standard Operating Procedure (DEP-SOP-001/01, FS 2200 Ground Water Sampling) provides criteria to determine when well purging is complete, including dissolved oxygen no greater than 20 percent of saturation (FS 2212, Section 3.1). Documentation of site conditions to demonstrate why this field parameter has exceeded the purging criterion in this SOP have not been provided in the reports for the sampling events.

4.0 Detections and Exceedances of Sampling Parameters

- d. Please submit revisions to Table 2 to be consistent with the reports of results for the routine sampling events that were submitted to the Department:
- Please include the results for the resampling event conducted at well MW-7B during November 2003;
- Ammonia was reported at 0.5 mg/L at well MW-7B during the April 2004 sampling event; and,
- Phenol analysis was limited to the initial sampling events conducted during July 2003 (wells MW-1, MW-1B, MW-5A, MW-5B, MW-6, MW-7A, MW-7B, MW-8 and MW-10) and April 2005 (wells MW-8B, MW-9B and MW-10B), and the resampling event conducted at well MW-7B during November 2003. Please submit revisions to Table 2 to indicate that phenol was <u>not analyzed</u> during the sampling events conducted during April 2004, October 2004 and April 2005 (excluding the initial sampling event analyses conducted at wells MW-8B, MW-9B and MW-10B, as indicated above).
- e. Please submit revisions to the seventh paragraph of this section to clarify which sampling events included the analysis of phenol (see the third bullet item in review comment No. 12.d., above). Please include a discussion of the results reported for phenol during the resampling event conducted at well MW-7B (November 2003).

5.0 Comparison of Up-Gradient and Down-Gradient Wells

f. Please submit revisions to the first paragraph of this section to be consistent with the response provided to review comment No. 12.c, above, regarding the variability reported for field-measured dissolved oxygen and compliance with SOP FS 2200 regarding the purging criterion for dissolved oxygen.

Page 5 of 5 3/10/06

6.0 Comparison Between Surficial and Floridan Aquifer Zones

g. Please submit revisions to the third paragraph of this section to be consistent with the response provided to review comment No. 12.c., and 12.f., above, regarding the variability reported for field-measured dissolved oxygen and compliance with SOP FS 2200 regarding the purging criterion for dissolved oxygen.

8.0 Interpretation of Ground Water Flow

- f. Please submit a revised ground water surface contour map for the Floridan aquifer wells using the elevations measured July 17, 2003 <u>excluding</u> the water level reported at piezometer P-11 to be consistent with the contour maps for subsequent sampling events. Please submit revisions to the first paragraph of this section to discuss the direction of ground water flow indicated on this revised map.
- g. Please submit revisions to the ground water velocity calculations provided in the second paragraph of this section to include the <u>range</u> of ground water velocities calculated using the maximum/minimum values for hydraulic conductivity and hydraulic gradient. Please submit revised ground water contour maps for the sampling events presented in Tables 3 and 4 to indicate what points were used to calculate the hydraulic gradients. Please note that the steepest hydraulic gradient for each contour map should be included in the range of ground water velocity calculations to represent the most conservative conditions.

11.0 Conclusion

h. Please submit revisions to the first paragraph of this section to provide recommendations for further investigation in the event that the proposed redevelopment of well MW-7B (Section 5.0, first paragraph) does not resolve the elevated pH concentrations.

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

- 13. **P.2.b.(5):** The rationale presented in the "Response Letter" that an updated Closure Plan shall be required as part of a future closure permit application for the facility is correct. However, sufficient details regarding the conceptual Closure Plan and related long-term care activities and frequencies are required at this time to allow the Department to verify that the financial assurance cost estimates provided for these activities are adequate. As previously requested, please submit revisions to Section 7.2 of the Reclamation and Closure Plan to address the following requirements of Rule 62-701.600(5)(f)4, F.A.C., for monitoring, maintenance, correction of deficiencies/problems and replacement of monitoring devices, including their frequency of implementation:
 - final cover condition (regrading areas that have settled);
 - vegetative cover condition (reseeding or sodding areas that have been regraded, and fertilization);
 - ground water monitoring system (monitor well and piezometer maintenance and repair/replacement);
 - landfill gas management system (gas vent maintenance and repair/replacement);
 - access control;
 - stormwater drainage features condition (retention pond maintenance); and,
 - contingency plan for emergencies (fires, severe weather events).

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

jrm



mes E. Christopher, P.E. Charles W. Drake, P.G. William D. Musser, P.E., P.H. Lawrence E. Jenkins, P.S.M. Jon D. Fox, P.E. II M. Hudkins, RE.

Roderick K. Cashle, P.E. Douglas P. Dufresne, P.G. Daniel M. Nelson, R.E.

Andrew T. Woodcock, P.E., M.B.A John P. Toomey, P.E. onfer I. Woodali PF Valerie C. Davis, P.G. Charlés M. Shultz, P.E Sean M. Parks, AICP OEP W. Bruce Lafrenz, P.G. James R. Warner, P.E.

February 8, 2006

Via UPS Overnight

Mr. Steve Morgan Florida Department of Environmental Protection Southwest District 13051 N. Telecom Parkway Temple Terrace, Florida 33637

FLORIDA DEPARTMENT FLUKIUM DEFAKTIVILLE PROTECTION FEB 09 2006

Subject:

Angelo's Aggregate Materials, Ltd.

Enterprise Recycling & Disposal Class III Landfill

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

Pasco County

Dear Mr. Morgan:

On behalf of Angelo's Aggregate Materials, Ltd. (Angelo's), Tetra Tech HAI is submitting for your review responses to the Department's comments, dated September 21, 2005, regarding the above referenced pending permits. Revised documents are attached as necessary to be inserted in the previously submitted application books. For your ease of review, the Department's comments are stated first with our responses following.

GENERAL:

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.

Response: Acknowledged.

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.

Response: Four copies of the revise documents are included in this submittal.

Please provide a summary of all revisions to drawings, and indicate the revision on 3. 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
201 East Pine Street, Suite 1000, Orlando, FL 32801

Tel 407.839.3955 Fax 407.839.3790

www.tetratech.com

See Bornol Report

Morris, John R.

From: Garcia, Miguel -- HAI [Miguel.Garcia@tetratech.com]

Sent: Wednesday, March 08, 2006 1:11 PM

To: Morris, John R.

Cc: Pelz, Susan; Deal, Jennifer -- HAI

Subject: Enterprise Recycling and Disposal Facility - Monitor Well Installation Specifications

John.

Universal Engineering Sciences, Inc. or another certified well installation contractor will be installing a total of four (4) monitor wells at the above site. The scope of work consists of the installation of one (1) surficial aquifer 2-inch PVC monitor well (MW-12A) and three (3) Floridan aquifer 2-inch PVC monitor wells (MW-3B, MW-4B, and MW-12B). Monitor well MW-3B will be installed to a total depth of 35 ft below land surface (bls) with a well point, 15 ft of 0.01-inch screen, 20 ft of riser, using 20/30 standard sand for filter pack 3 ft above top of screen, using 30/65 standard sand or bentonite chips for seal, grouted to surface with Portland cement using the tremie pipe method (or equivalent), fitted with an aluminum aboveground protector, 2 ft x 2 ft concrete pad with a well id tag (if possible). Monitor well MW-4B will be installed in a similar manner, with the exception of 35 ft of riser instead of 20 ft, for a total depth install of 50 ft bls. Monitor well MW-12B will also be installed in a similar manner to MW-3B & MW-4B, but with 60 ft of riser, for a total depth of 75 ft bls. Each well will require development to remove sand and silts prior to groundwater sampling. The included PDF attachment (33101i22) shows the proposed monitor wells specifications for the Floridan wells.

Surficial monitor well MW-12A will be installed to a total depth of 62 ft below land surface (bls) with a well point, 20 ft of 0.01-inch screen, 40 ft of riser, using 20/30 standard sand for filter pack 2 ft above top of screen, using 30/65 standard sand or bentonite chips for seal, grouted to surface with Portland cement using the tremie pipe method (or equivalent), fitted with an aluminum aboveground protector, 2 ft x 2 ft concrete pad with a well id tag (if possible). Prior to installation of each well we will conduct a pilot hole boring with collection of SPT (split spoon) samples to identify subsurface lithology. I would expect we would just have to ream out the SPT boring for use as the monitor well install boring. Please note that well specs (depths) may change based on field conditions encountered during SPT borings. The included PDF attachment (331022N04) shows the proposed monitor wells specifications for the Floridan wells.

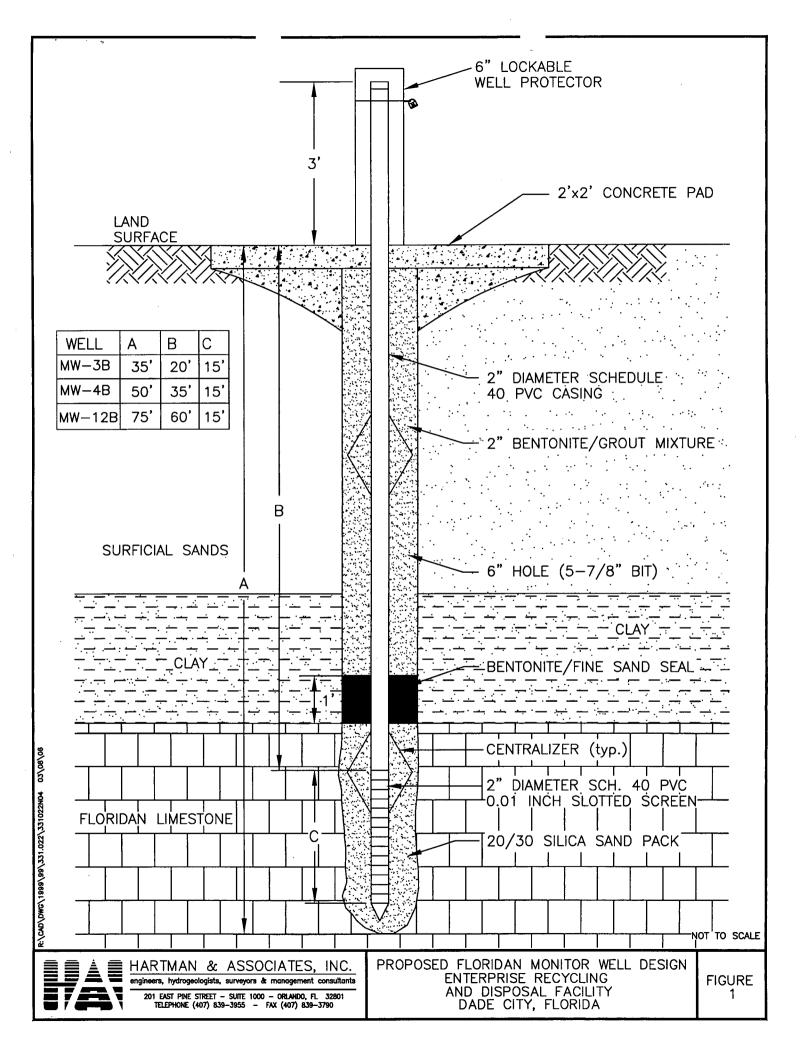
I will be onsite overseeing the collection and identification of the subsurface lithology at each boring location, and the installation of the monitor wells. We expect to complete the installation of monitor wells MW-3B & MW-4B sometime next week. Time permitting, we will complete the installation of monitor wells MW-12A and MW-12B next week, if not we will return at a later date to complete. I expect the wells will be developed the day following well completion, with the initial background sampling completed during the same day or on the following day.

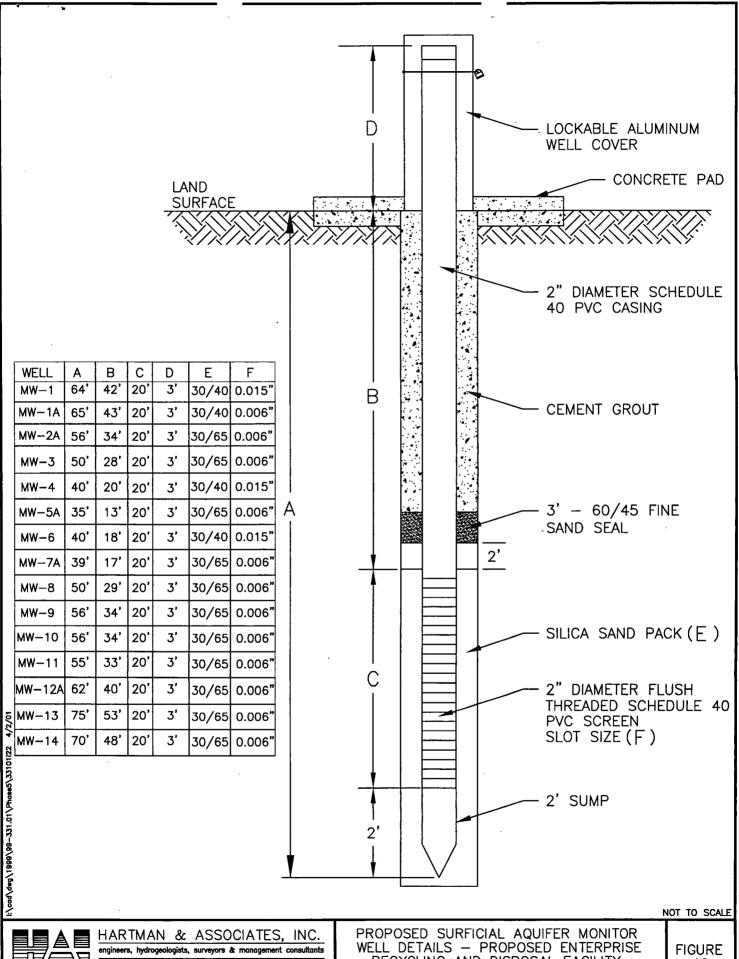
I will fax you a copy of the chain of custody from ENCO laboratories upon completion of the groundwater sampling. Per our conversation on March 1, 2006, I expect this will be sufficient proof of permit compliance in regards to Cell 5, at which time Angelo's will be allowed to dispose of waste in this cell.

If you disagree with any of the proposed specifications above, or if you have any questions, please respond via email.

Sincerely,

Miguel Garcia, P.G. Tetra Tech HAI Tel: 407-839-3955 Cell: 407-341-2035







201 EAST PINE STREET - SUITE 1000 - ORLANDO, FL 32801 TELEPHONE (407) 839-3955 - FAX (407) 839-3790

RECYCLING AND DISPOSAL FACILITY DADE CITY, FLORIDA

16

Morris, John R.

From: Garcia, Miguel -- HAI [Miguel.Garcia@tetratech.com]

Sent: Thursday, March 02, 2006 5:23 PM

To: Pelz, Susan

Cc: Morris, John R.; Deal, Jennifer -- HAI; diafrate@iafrate.com; rbutera1@comcast.net; JPolito@honigman.com

Subject: Enterprise Recycling and Disposal Facility - Teleconference Summary - March 1, 2006, 3:20 PM

Susan,

This email serves as a summary of the telephone discussion between you, me, and John Morris at the above date and time to discuss Specific Condition No. 30 of the Modified Operating Permit #177982-002-SO at the above site. Both you and John agreed that we would not be required to wait 30 days after monitor well installation to begin disposal activities in Cell 5. The FDEP is requiring that Angelo's install, develop, and collect initial background groundwater samples from monitor wells MW-3 & MW-4 prior to beginning disposal activities in Cell 5.

You reiterated the fact that if Angelo's proceeds with waste disposal in Cell 5 prior to fulfilling the above conditions, that are clearly stated in the Operating Permit, Angelo's will be in violation of their operating permit, and will be subject to agency enforcement.

I offered to provide a signed chain of custody (COC) to the FDEP Southwest office upon completion of initial background sampling of these wells, as proof of completion prior to allowing Angelo's to proceed with waste disposal. You agreed with this condition as long as the COC showed which sampling parameters were included in the list of analyzed samples. You also added that the certification for Cell 5 obviously needed to be issued prior to waste disposal. Your expectation was that the Cell 5 Certification would be completed this week or early next week.

We also discussed the proposed schedule for completion of the wells, development, and the initial sampling. At the time, I provided Friday as the earliest date to install the wells, with development on Monday, and initial sampling of the wells on Monday or Tuesday. Neither you nor John had a problem with the short notice of field work, considering the shortage of disposal space in the operating cells at the site. I also offered to provide John with an email with a summary of the proposed monitor well specifications and a confirmation of the installation, development, and sampling schedule.

I provided John with an email summarizing the well specifications this morning. In this email I included that the well installation would be completed on Friday (March 3, 2006), with the development following on Monday, and the background sampling completed on Tuesday.

Please let me know if you disagree with this summary and indicate any changes that you may recall.

Thanks for your assistance.

Sincerely,

Miguel Garcia, P.G. Tetra Tech HAI Tel: 407-839-3955 Cell: 407-341-2035

Morris, John R.

From: Garcia, Miguel -- HAI [Miguel.Garcia@tetratech.com]

Sent: Thursday, March 02, 2006 10:50 AM

To: Morris, John R.

Cc: Deal, Jennifer -- HAI

Subject: Enterprise Recycling and Disposal Facility - Monitor Well Installation - March 3, 2006, 8 AM

John,

Universal Engineering Sciences, Inc. will be installing two monitor wells and a gas probe at the above site. The scope of work consists of the installation of two (2) surficial 2-inch PVC monitor wells. MW-3 will be installed to a total depth of 27 ft below land surface (bls) with a well point, 2 ft sump, 20 ft of 0.01-inch screen, 5 ft of riser, using 20/30 standard sand for filter pack 2 ft above top of screen, using 30/65 standard sand or bentonite chips for seal, grouted to surface with Portland cement using the tremie pipe method (or equivalent), fitted with an aluminum aboveground protector, 2 ft x 2 ft concrete pad with a well id tag (if possible). MW-4 will be installed in a similar manner, with the exception of 15 ft of riser instead of 5 ft, for a total depth install of 37 ft bls. Each well will require development to remove sand and silts prior to groundwater sampling.

Prior to installation of each well we will conduct a pilot hole boring with collection of SPT (split spoon) samples to identify subsurface lithology. Total SPT collection of 64 ft bls is expected. I would expect we would just have to ream out the SPT boring for use as the monitor well install boring. Please note that well specs (depths) may change based on field conditions encountered during SPT borings.

The re-installation of gas probe GP-6 will consist of a 1-inch pvc to 17 ft bls, with 15 ft of 0.02-inch slotted screen. Filter pack will include FDOT pea gravel or equivalent 6-inches above screen, with sand/bentonite slurry to surface, finished with a 2 ft x 2 ft concrete pad with aboveground aluminum protectors, and stop cock and valve fittings.

I will be onsite overseeing the collection and identification of the subsurface lithology at each boring location, and the installation of the monitor wells. We expect to complete the installation of both wells on Friday. I expect the wells will be developed on Monday, with the initial background sampling following on Tuesday.

I will fax you a copy of the chain of custody from ENCO laboratories upon completion of the groundwater sampling. Per our conversation yesterday, I expect this will be sufficient proof of permit compliance in regards to Cell 5, at which time Angelo's will be allowed to dispose of waste in this cell.

Let me know if you have any questions or if you need any additional information.

Sincerely,

Miguel Garcia, P.G. Tetra Tech HAI Tel: 407-839-3955 Cell: 407-341-2035

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION SOUTHWEST DISTRICT

CONVERSATION RECORD .

	Subject <u>Enterprise perve</u> ant
Date 9/27/05	Permit No
Time 150-245 pm	
M <u>Sennifu</u> Deal	County
Representing 3	
[] Phoned Me Was Called	[] Scheduled Meeting [] Unscheduled Meeting
Other Individuals Involved in Conversation	v/Meeting
Summary of Conversation/Meeting	Need extern part of site
	62-701320(13) AMON SCIBACIC
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- WILL EXTENCT X-SECT TO	110000 711
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	Signature
(continue on another sheet, if necessary)	Title Su Mg
PA-01	

PA-0 1/96 pap

Morris, John R.

From:

Jennifer L. Deal, P.E. [Jennifer.deal@tetratech.com]

Sent:

Friday, September 23, 2005 1:59 PM

To: Cc: Morris, John R. Pelz, Susan

Subject:

Groundwater Sampling, Enterprise Landfill

John,

On behalf of Angelo's Aggregate Materials, Ltd., this is to notify you of the upcoming semi-annual groundwater monitoring event and quarterly gas monitoring for the Enterprise Recycling & Disposal Facility in Dade City, Florida. The sampling is scheduled to begin on Monday, October 10, 2005. Three days will be required to complete the sampling. If you have any questions, please give me a call. Thank you.

Jennifer L. Deal, P.E. Tetra Tech HAI 201 E. Pine Street, Ste. 1000 Orlando, Florida 32801 407-839-3955



Department of Environmental Protection

Jeb Bush Governor Southwest District 3804 Coconut Palm Drive Tampa, Florida 33619

Colleen M. Castille Secretary

September 21, 2005

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

RE: Enterprise Recycling & Disposal Class III Landfill
Pending Permit Nos.: 177982-007-SC and 177982-008-SO, Pasco County

Dear Mr. Iafrate:

This is to acknowledge receipt of your permit application and supporting information, dated August 18, 2005 (received August 23, 2005), prepared by Tetra Tech HAI [HAI], 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>first</u> request for information. Please provide the information listed below promptly. Evaluation of your proposed project will be delayed until all requested information has been received. The following information is needed in support of the solid waste application [Chapter 62-701, Florida Administrative Code (F.A.C.)]:

The following information is needed in support of the solid waste applications [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 <u>4 copies</u> 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 <u>complete package</u>. For revisions to the narrative reports, deletions may be struckthrough (<u>struckthrough</u>) and additions may be shaded <u>shaded</u> or similar notation method. This format will expedite the review process. <u>Please include</u> revision date on all revised pages.
- 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.

"More Protection, Less Process"

- 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. Several items have been noted on the application form as "N/C." For all items marked "N/C," please provide the specific title, date, preparer and location of the information in the document referenced, including subsequent revisions. Please be advised that if the referenced documents are not currently located in the Department's files, copies of these documents may be requested to verify that the information referenced is still valid. [Rules 62-701.320(10)(c) and 62-701.320(5)(b), F.A.C.]
- 6. Application form. [Rule 62-701.320(7), F.A.C.]
 a. <u>Item #B.11.</u> This item indicates that two spotters are used at the facility. It appears that the facility will receive approximately 6000 cy/day (2,142,000 cy/year divided by 360 days/year). Please provide calculations that demonstrate that two spotters are adequate for this waste acceptance rate.
 - b. <u>Item #E.13.</u> Please provide proof of publication of the attached Notice of Application. [Rule 62-701.320(8), F.A.C.]
- 7. **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 (Egr Report, $\S 3.3$).
- 8. Please provide plans that meet the requirements of Rule 62-701.320(7)(f), F.A.C. The plans submitted did not include a cover sheet and clearly show all necessary details. See also Comments #11.t and 20.
- 9. Please provide proof of notification of local elected officials required by Rule 62-701.320(8), F.A.C.
- 10. Please provide documentation that demonstrates that the setback requirements of Rule 62-701.320(12), F.A.C., are not violated by the proposed construction and operation of the facility.

11. Engineering Report [Rule 62-701.320(7)(d), F.A.C.]

- a. §3.4, Topography. Please clarify which figure is intended to be Figure 3-3. Sheets titled, "Boundary and Topographic Survey of the Pasco County Landfill for Sid Larkin & Son, Inc," dated June 5, 2000, "Enterprise Recycling and Disposal Facility Cell 1 and 2 Topographic Survey," dated July 27, 2005, and "Cell 15 As Built Survey," dated June 14, 2005 were provided after Figure 3-2. However, none of these sheets is annotated as Figure 3-3.
- b. §3.4.1, 100-year flood prone areas. Please provide information or a figure from SWFWMD (or the FEMA floodplain map) that shows the floodplain and the facility boundaries.

- c. §3.7, Excavation Operations and Cell Construction. Please provide (or reference) the figure that shows the "excavation setback of 200 feet and... restoration slope of 6H:1V." Please provide Figure 3-7. The first paragraph in this section indicates that the landfill excavation slope will be 2H:1V. However, the next paragraph states, "excavation slopes will not exceed 6H:1V." Please clarify this inconsistency. Please clarify the reference to Cell 1 being used as "the original temporary stormwater pond." Please provide procedures for placing the clay on 2H:1V slopes. Please show the "working face and the 6H:1V excavation slope of the adjacent cell... [and] berm and conveyance..." on the drawings. Please explain the reference to "the current working cell shall be overcut by 50 feet...." Please show the 6-foot wide berm used to "prevent stormwater from entering the working face" on the drawings. Please provide a table that includes the schedule for excavation, construction, waste disposal and closing for each cell.
- d. §3.8, Method of Cell Sequence.
 - The information indicates that completion of cells 14, 16 and portions of 5 will include building up the pond bottom with "clean debris" or "clean fill" to elevation +80 ft. NGVD. Please clarify if the "clean debris" or "clean fill" proposed to be used is soil or may include concrete rubble. It does not appear that the slope stability analyses have included concrete rubble in the calculations. In the event that concrete rubble is proposed, additional geotechnical investigation and/or calculations may be required.
 - 2) Please provide a table that includes the schedule for excavation, construction, waste disposal and closing for each cell. It appears that the excavation Phases do not correlate with the proposed landfill sequencing. For example, although the landfill Sequence 2 indicates that a portion of Cell 5 (Phase 8) is the next cell to be filled after Cell 15, the excavation sequence indicates that Phase 6 (Cell 3) would be the next area to be excavated (assuming a sequential excavation plan).
 - 3) Please specify which "ponds constructed for completed cells within the buffer areas will approximately replace the... northeast temporary pond."
 - 4) Please provide procedures and plans that show how "stormwater will be diverted to the onsite temporary storage pond until the latter part of the landfill life when Cells 14 & 16 begin to accept waste." (page 3-9) This information may be submitted as part of the Operations Plan.
- e. §3.8.1, Vertical expansion. Please provide Figure 3-10. Please show the "series of swales and other stormwater conveyance[s]" that will be used to prevent side slope erosion. Please clarify "interior temporary sideslopes" show them an appropriate Figure or plan sheet.
- f. §3.8.2, Erosion control. Please explain the references to excavation to "6H:1V sidewall slopes" and "2H:1V slope for outer cell boundaries." Please show the "outer edge slopes" on the plan sheets. Please explain how the "fill should be placed to a height of one-half the vertical height of the slope" on the western slope.

- g. §3.8.3, Life expectancy. Please specify the "similar landfill" whose "quarterly reports" provided the basis for the design life. Please provide Table 1. Please provide the tonnage received and airspace used for each year of operation for the Enterprise Landfill. Since the facility has site-specific data, this data should be used in determining the design life. Please provide the basis for assuming 2,142,000 cy/year will be received at the facility. Please explain the basis and provide references and calculations supporting the information submitted. [Rule 62-701.330(3)(e), F.A.C.]
- h. §3.9, Waste compaction and application of cover. Please specify which wastes are "bulky [and] incompressible." Please clarify which wastes will be "reduced as appropriate by the chipper/crusher." Please be advised that since this facility is unlined, the Department does not authorize the acceptance of shredded/chipped/grinded or otherwise size-reduced mixed wastes for disposal at this facility. It does not appear that Sheet C-1 provides an "illustration of the cell closure sequence." Please provide this information. Please be advised that the final cover shall meet the requirements of Rule 62-701.400(7) and (8), F.A.C., as well as Rule 62-701.600, F.A.C. Please revise this section accordingly.
- i. §3.10.1, Gas monitoring and control. Please provide procedures for the "daily surveys of the landfill" (this may be included in the Operations Plan). Please clarify how landfill gas will be "surveyed" by the site manager. Please include DEP in notifications of gas exceedances. Please clarify if the facility operation (as well as design) will prevent the contact of surface and groundwater with wastes. Please provide examples of the "immediate corrective actions" that will be taken to "abate any detected onsite odors."
- j. §3.10.1.1, Gas probe locations. Please specify how many gas probes are existing, how many are proposed and a schedule for installation.
- k. §3.10.1.3, Methane gas measurement. Please clarify the reference to "landfill closure permits." Please revise this section to specify that the action level for methane in structures is 25% of the LEL.
- 1. §3.10.1.4, Gas contingency plan. Please specify the frequency that methane will be monitored in "nearby structures" if the levels in the probes are greater than 100% LEL. Please include DEP in the notifications that gas in structures is greater than 25% LEL.
- m. §3.10.1.5, Passive gas vents. Please provide documentation from the Department's Air Section that indicates that NSPS and/or Title V permits are not required.
- n. §3.10.2, Leachate control. Please explicitly describe the "strict method of controlling wastes disposed." The information submitted in the application does not appear to be extraordinarily strict, but appears to represent typical industry practice. Please be advised that "rainwater runoff flowing through the fill material" is leachate by definition (see Rule 62-701.200(66), F.A.C.).

- o. §3.10.3, Stormwater controls.
 - 1) Please clarify how stormwater is controlled by "percolation into the soil or by overland flow to the temporary stormwater pond." It does not appear that swales, berms or other method are shown on the plan sheets to divert stormwater to the temporary pond. §3.10.2 states, "no liner or leachate control system is required... based on an existing natural clay layer underlying the landfill." Since there is an underlying clay layer, it is not clear how stormwater is controlled by "percolation." Please clarify.
 - 2) Please note that Department staff observed water leaving the property on the northeast corner of the site during its inspection in August 2005. Similarly, the Department received complaints concerning the discharge of water from the Enterprise facility during summer 2004. Please provide a current topographic survey that shows the north and east property boundaries, all disposal areas, berms, and swales used to control stormwater, to demonstrate that stormwater does not discharge from the property.
- p. §3.11, Erosion control. Since the facility is designed to fill above grade, please explain how "the site's inherent design as an excavation pit will prevent stormwater from leaving the property." See also Comment #11.0.
- q. §3.13, Setbacks and visual buffers. Please clarify if the "boundary lines" are the property boundaries. Please clarify if the landscaping has been completed.
- r. §3.14, Foundation analysis. Please provide a revised foundation analysis and lineament study that includes the 2004 subsidence occurrence at the site. See also Comment #15.
- s. §3.15, Certification. Please specify the testing frequency for the density tests for each lift of the clay layer.
- t. <u>Figures</u>. Please provide revised figures and plan sheets that are consistent and include all revisions requested by this comment and Comment #20.
 - 1) Boundary and Topographic Survey of the Pasco County Landfill for Sid Larkin & Son, Inc., dated June 5, 2000. Please provide a signed and sealed copy of this plan sheet. Please specify the date of the contours on this sheet.
 - 2) Enterprise Recycling and Disposal Facility Cell 1 and 2 Topographic Survey, dated July 27, 2005. Please provide a Figure # on this sheet. This sheet appears to show that the facility may have filled outside the permitted footprint. Please provide a topographic survey of the entire site, that shows all disposal areas, current contours, stormwater ponds, setbacks, etc. See also Comments #13, and #20.
 - 3) Please provide Figures 3-6 through 3-10 and Figures 3-21 through 3-25.
 - 4) Figures 3-13, 3-15, 3-19, 3-20 do not appear to show the current configuration of the site (e.g., scalehouse, septic tank location, etc.). Please provide revised figures that show the asbuilt configuration of the site.

- 5) Figure 3-17 does not clearly distinguish between the proposed excavation contours and sequence elevation contours. Please revise accordingly.
- 6) Figure 3-18. Please show all benches and terraces on the sequencing plans. Please explain Phase 5A. This Phase does not appear to be described in the sequence narrative or shown on the plan sheets. Please explain the discontinuity in the 95 ft. contour line near Pond 2. Please include the dashed line type in the legend.
- 7) Sequencing plans (Figures 3-17, 3-18, 3-19, 3-20). Please provide a revised figure that utilizes cross-sectional arrows to show the direction of view for each cross-section. Please provide east-west cross-sections for each cell.
- 8) Figures 3-26, 3-27, 3-28, 3-29, 3-30. Please specify the top slope of each lift such that the lift will drain appropriately. Please clarify Note 1 on Figures 3-28 and 3-29 that indicates that the lifts will be "graded slightly to promote stormwater runoff to the swale." There does not appear to be a swale shown on these figures. Please provide details of the benches.
- 12. Please provide a vicinity map (not more than a year old) that shows the one-mile radius around the landfill site, clearly identifies nearby roads, water bodies and other significant features and includes a legend identifying the land use associated with the various codes shown on the figures. Please note that all significant features shall be labeled [Rule 62-701.330(3)(a), F.A.C.].
- 13. Please provide a current topographic survey. [Rule 62-701.330(3)(d), F.A.C.]
- 14. 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.
 - a. <u>§4.0.</u> Please specify the "two working pieces of equipment" that are required for "all stages of landfill operation."
 - b. §5.1. Please specify how many loads and the hauler/generator for all loads "turned away" in 2004 and 2005. Please provide examples of unacceptable wastes items that have been discovered by the video camera and scalehouse personnel and have been subsequently prohibited from disposal in 2004 and 2005. Please specify who will remove the unacceptable wastes and when.
 - c. §5.3. Please specify the maximum quantity and timeframe for storing batteries, paint, chemicals, etc. Please provide details of the "secured maintenance building."

- d. §5.4. Please clarify if industrial wastes and excavated wastes (from old dumpsites or landfills) are considered to be unacceptable wastes. Please revise this section as appropriate.
- e. §5.5. Please clarify if random load checks will be conducted once per day. Please clarify if unauthorized materials that are "immediately... reloaded onto the customer's vehicle for removal from the site" are logged before reloading. Please provide a list (name of hauler/generator, type of unacceptable waste) of all loads rejected and reloaded onto customers' trucks in 2004 and 2005.
- f. §5.6. Please clarify if asbestos loads are received at prearranged times/days.
- g. §5.7. Please be advised that waste processing and recycling requires a separate permit unless the activity is incidental to the disposal operation. Please provide all information required by Rule 62-701.710, F.A.C. concerning incidental materials recovery and recycling at this site. Please note that if the applicant's intention is to accept loads of "primarily recyclable products," then a separate waste processing facility permit will be required. Please be advised that whole waste tires are not acceptable for disposal in a landfill.
- h. §5.7.1. Please clarify if recovered materials report will also be provided to DEP quarterly.
- i. §8.0, 8.2, 8.3, 9.0, 10, 10.1, 10.1.1, 10.1.2, 10.2, 10.3, 20.0., Please see Comment #11.
- j. §13.0. Please provide the criteria for determining that blowing litter has becomes "a problem."
- k. $\underline{\underline{\$}14.0.}$ Please provide waste handling procedures in the event of a fire.
- 1. $\underline{\S{14.1.}}$ Please explain how a hot load that is "immediately covered with earth" can be spotted and unacceptable wastes removed. Please clarify what "spills from waste vehicles" are not anticipated. Please specify the disposal facility for contaminated soils.
- m. §15.0. Please provide training certificates for all site personnel. Please explain how "the driver [will] reload the [unacceptable] waste into the vehicle." Since only 1 equipment operator, 1 landfill operator and 1 spotter are expected to be at the facility at any time, please explain how the projected approximately 6000 cy/day (2,142,000 cy/year divided by 360 days/year) can be adequately spotted, unacceptable wastes removed and waste compacted during lunch breaks, vacations or in the event of personnel illness.
- n. §17.0 Please specify the frequency for the processing the wood wastes. 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.
- o. §17.1. Please provide details and show the "permanent equipment fueling facility" on the plan sheets. Please provide a schedule for construction. Please specify where oil and antifreeze will be contained. Please specify the used oil contractor that will remove the used oil and antifreeze, and specify the frequency for removal.

- p. §19.2. Please specify the procedures for, and frequency of, "self inspection of landfill conditions." Please clarify if load checking reports are included in the landfill operating records.
- q. §21.0. Please clarify the reference to "mixed areas."
- r. Appendix A. Please explain why Mr. Jon Larkin is the 24-hour contact for the facility.
- s. Appendix 3-B. Please provide procedures in the event that hazardous waste is received at the site. Please provide procedures that must be followed in the event of a fire. Please explain how sorbent material is expected to absorb spills since most of the site is not paved. Please provide procedures for waste handling in the event of fire, inadequate personnel, or other interruptions in operations. Please specify the equipment rental companies that will be used to obtain reserve equipment. Please provide copies of these agreements. It has been the Department's experience that during or after emergency conditions (e.g., hurricanes in 2004) or other operational or market conditions, that reserve equipment (e.g., generators, trucks, trailers) are difficult to obtain and may adversely impact the operation of the landfill. Please explain how these conditions will be accommodated.
- 15. 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. The report by Universal Engineering Sciences dated May 5, 2000 includes information that appears to no longer be valid.
 - 1) Page 1 indicates that the report was based on an assumption of "debris fill... about 60 feet thick." However, Sheets C-2 and C-5 show the waste thickness will be approximately 89 feet thick at some locations.
 - 2) Since the facility has been operating for several years, the actual unit weight on waste/cover soil should be available to be used in the foundation analyses (settlement, bearing capacity, slope stability). Please provide revised analyses that include actual bulk density information from the site.
 - 3) §3.5 indicates that the slope stability analyses assumed 4H:1V slopes. Although the final slopes are proposed to be 4H:1V, the working face (see Egr Report §3.8 and Op. Plan §8.1) is proposed to be 3H:1V. It does not appear that the slope stability analysis conducted in 2000 included this configuration. Please provide a revised analysis as appropriate. Please include all printouts, assumptions, figures, references, assumptions, etc., used in support of the analysis.
 - 4) §3.4 indicates that "loss of drilling fluid circulation while advancing a borehole" may be an indication of sinkhole activity. It appears that this loss of circulation occurs in several of the boring logs (B-05, 53 ft bls; B-06, 53 ft bls; B-07, 23 ft. bls; and B-09, 48 ft. bls). Based on these occurrences and since there was an occurrence of a sinkhole onsite during the construction of Cell 15/16, please provide an updated sinkhole and lineament investigation. Although the Hydrogeological Investigation, Section 5, §5.1.6., indicates that the loss of circulation occurred at the "contact between clay and limestone," the boring logs in Section 4 (Geotechnical investigation) do not appear to support this conclusion.

- (Comment #15.a, cont'd)
 - 5) Please provide a boring plan sheet that includes boring B-03A.
 - 6) Please specify the test method that was used to determine the vertical permeability.
- 16. Section 5, Hydrogeological Investigation [Rule 62-701.410, F.A.C.]
 a. Please respond to Mr. John Morris' memorandum dated September 21, 2005, attached.
 - b. §5.1.6, 5.1.7. Please submit an updated geotechnical investigation (settlement, bearing capacity, slope stability) that considers the subsidence/sinkhole that occurred onsite in 2004. See Comment #15 above.
- 17. Section 6, Stormwater Management [Rule 62-701.400(9), 62-701.500(10), F.A.C.]
 - a. Please clarify if stormwater was pumped from the temporary pond (cell 16) to the borrow pit or Pond 1 during construction of Cell 15 or portions of the temporary pond (cell 14). If stormwater was pumped to the borrow pit or Pond 1, please provide the sampling results required by stormwater permit #51-0172489-007, Specific condition #20.
 - b. Please provide revised plan sheets that detail all ditches, berms, swales, benches, downcomer pipes, and other stormwater management devices.
- 18. 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 September 21, 2005, attached.
- 19. **Section 7, Reclamation and Closure plan.** [Rules 62-701.320(7)(e)1., 62-701.600, 62-701.610, 62-701.620, F.A.C.]
 - a. Please provide a table that includes the schedule for excavation, construction, waste disposal and closing for each cell.
 - b. $\S{7.1.1.}$ Please explain why the operator would be placing waste on a "completed cell."
 - c. §7.1.2. Please clarify the reference to Cell 1 at the "northeast corner" of the property. Please provide plans that show and include details for the "drainage enhancements."
 - d. §7.1.3. Please revise the rules referenced to delete Chapter 62-25 which was replaced by Chapter 62-330, F.A.C. Please provide plans that show and include details for the stormwater designs. This information does not appear o be provided in Section 6.
 - e. <u>Table 1.</u> Please include dates or timeframes on this table. See also Comment #19.a.
 - f. Please respond to Mr. John Morris' memorandum dated September 21, 2005, attached.
 - g. Appendix 7-A. Financial Assurance Requirements [Rule 62-701.630, F.A.C.] Please respond to the Department's letter dated September 21, 2005 concerning financial assurance cost estimates (sent under separate cover).

- 20. Plan Sheets. [Rules 62-701.320(6), 62-701.320(7)(f), 62-701.500, F.A.C.]
 a. Please provide all drawings, signed and sealed by a registered professional engineer.
 - b. Please provide revised drawings that include current 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. <u>Sheet C-1.</u> Please provide an explanation for each of the symbols shown in the legend. Please note which ponds are already constructed, and which are proposed. Please verify the orientation of cross-section B-B. Please include the dashed line type for Cell 5A on the legend.
 - d. Sheet C-2. Please provide a detail for the 6H:1V mine slope and 2H:1V slopes. Please provide drawings that include grades that show the drainage noted on Note 2.
 - e. Sheets C-3, C-4. Please include reference station numbers on plans view sheets. 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.
 - f. Sheet C-4. Please provide a narrative that discusses when and how the 14H:1V slope is constructed.
 - g. Sheet C-5. 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.
 - h. <u>Sheet G-1.</u> Please reference these details to the appropriate locations on the plan views, and provide revised plan sheets appropriately noted.

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

- 1. 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.
- 2. Please be advised that although the facility is exempt from a liner and leachate collection at this time, this exemption is based on the following conditions: construction of a 3-foot thick, 1×10^{-5} cm/sec clay layer below the proposed disposal footprint (including exterior slopes); strict waste screening and adequate unacceptable wastes removal; the absence of groundwater contamination at the site; and subsurface conditions that provide adequate support for the landfill and will nor result in the direct discharge of leachate into groundwater. In the event that the Department receives information that shows that any of these conditions is no longer applicable,

Mr. Dominic Iafrate
Angelos Aggregate Materials, Ltd.

then the Department may withdraw approval of the exemption and require a liner and/or leachate collection and removal system.

- 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.

"NOTICE! Pursuant to the provisions of Section 120.60, F.S. if the Department does not receive a complete response to this request for information within 45 days of the date of this letter, the Department may issue a final order denying your application. You need to respond within 45 days after you receive 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 45 days to develop, you should develop a specific time table for the submission of the requested information for Department review and consideration. Failure to comply with a time table accepted by the Department will be grounds for the Department to issue a Final Order of Denial for lack of a timely response. A denial for lack of information or response will be unbiased as to the merits of the application. The applicant can 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)744-6100 ext. 386 if you have any questions.

Sincerely,

Susan J. Pelz, P.E. Solid Waste Manager Southwest District

sjp Attachment

cc: Jennifer Deal, P.E., Hartman & Associates, 201 E. Pine St., Ste. 1000, Orlando, Fl. 32801, w/attachment

Donna Huber, Pasco County Development Review, 7530 Little Road, Suite 230, New Port Richey, FL 34654

Richard Tedder, P.E., FDEP Tallahassee (email) Chris McGuire, FDEP OGC

Fred Wick, FDEP, Tallahassee

Douglas Hyman, P.E., FDEP Tampa, ERP

Florida Department of

Environmental Protection

Memorandum

TO:

Susan Pelz, P.E.

FROM:

John R. Morris, P.G.

DATE:

September 21, 2005

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 (RAI #1)

I have reviewed portions of the permit application 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 Tetra Tech HAI (TTH) on behalf of Angelo's Aggregate Materials, Ltd., received August 23, 2005. The submittals associated with the renewal applications include the following:

- Document entitled "Enterprise Recycling and Disposal Facility, Class III Landfill Permit Renewal Application, Pasco County, Florida," prepared by TTH, dated August 2005, included the following information also prepared by TTH unless otherwise noted:
 - Transmittal letter dated August 18, 2005;
 - Section 1 DEP Form No. 62-701.900(1), signed/sealed August 16, 2005;
 - Section 2 Ownership Documents;
 - Section 3 Engineering Report, revised July 2005;
 - Section 4 Geotechnical Report, prepared by Universal Engineering Sciences, dated May 5, 2000;
 - <u>Section 5</u> Hydrogeological Investigation and Ground Water Monitoring Plan (HIGWMP), revised July 2005;
 - Section 6 Stormwater Management;
 - Section 7 Reclamation and Closure Plan, revised August 15, 2005;
 - Appendix 7-A Financial Responsibility.

My review focused on the hydrogeologic and environmental monitoring aspects of the applications. Please have the applicant submit responses to the following review comments that provide revised submittals, or replacement pages to the submittals, that use a strikethrough and <u>underline</u> 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 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 A – GENERAL INFORMATION

1. **A.5.:** Please submit a revised application form for this item that indicates the Department's WACS facility identification number assigned to this facility (SWD/51/87895).

SECTION B - DISPOSAL FACILITY GENERAL INFORMATION

- 2. **B.7.:** Please submit a revised application form for this item that also reflects the adjacent residential and industrial (County landfill) land uses.
- 3. **B.12.**: Please submit a revised application form for this item that provides the requested information..
- 4. **B.27.:** Please submit a revised application form for this item that provides responses to the "type of treatment" and "name and class of receiving water" sections.

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Page 2 of 4 9/21/05

5. **B.28.**: Please submit a revised application form for this item that provides the requested information.

<u>SECTION I – HYDROGEOLOGICAL INVESTIGATION REQUIREMENTS</u> (Rule 62-701.410(1), F.A.C.) 6. **I.1.b.**:

- a. Please submit revisions to Section 5.2.1 of the HIGWMP to clarify the status of piezometer P-13. In the event that this piezometer has been abandoned, please indicate the date of abandonment in the revision of this section.
- b. Please submit revisions to the fourth paragraph of Section 5.2.2 of the HIGWMP to reference Table 5-1 (rather than Table 1) for ground water elevation data. Please submit revisions to Table 5-1 to include the ground water elevation data measured on March 26, 2001 and May 7, 2001 as indicated in this paragraph of Section 5.2.2.
- c. Please submit revisions to the fifth paragraph of Section 5.2.2 of the HIGWMP to describe the direction of ground water flow indicated on the contour maps prepared for the surficial aquifer provided for the sampling events conducted during July 2003, November 2003, April 2004, October 2004 and April 2005. Please submit additional revisions to this paragraph of Section 5.2.2 to describe the apparent westward direction of ground water flow indicated on the contour map prepared for the surficial aquifer for the October 2004 sampling event. Please submit additional revisions of this paragraph of Section 5.2.2 to describe the apparent seasonal occurrence of the surficial aquifer as indicated by water level data collected at wells MW-8, MW-9 and MW-10.
- d. Please note that new Table 1A (should be re-numbered as Table 5-1A?) referenced in the fifth paragraph of Section 5.2.2 of the HIGWMP to summarize ground water elevations for the last two sampling events was not provided. Please submit revisions to this new table to include water level measurements from <u>all</u> the sampling events conducted at the facility between July 2003 and April 2005, including all wells, piezometers and the staff gauge in the temporary stormwater pond.
- e. It appears that the slug test data summarized in Table 5-2 and presented in Appendix 5-C in the HIGWMP prepared July 2005 is inconsistent with the information presented in Appendix 5-C of the HIGWMP revised April 2001. Please submit revisions to the Section 5.2.2, Table 5-2 and Appendix 5-C as appropriate to address the following items:
 - 1) Slug test results provided in Appendix 5-C include unclear or illegible hand-written comments (P-2 slug out, P-7 slug out and P-3a slug in)
 - 2) Selected slug test results included in Appendix 5-C of the HIGWMP revised April 2001 were omitted from the same Appendix in the HIGWMP prepared July 2005 (P-2 slug in 3/27/00, P-3a slug out, P-5 slug in, P-8 slug in and P-8 slug out)
 - 3) The annotation provided for slug test data in Table 5-2 appears to be inconsistent with the slug tests described in comment No. 6.e.(2), above. For example, the horizontal hydraulic conductivity value reported for P-2 (2.49 ft/day) is indicated in Table 5-2 to represent the result for a slug in test only, however it appears that this value is the average of the slug in (0.8 ft/day) and slug out (4.19 ft/day) tests reported for P-2 in Appendix 5-C of the HIGWMP revised April 2001. Additionally, the horizontal hydraulic conductivity value reported for P-7 (2.64 ft/day) is indicated in Table 5-2 to represent the result for a slug in test only, however it appears that this value is the average of the slug in (1.58 ft/day) and slug out (3.69 ft/day) tests reported for P-7 in Appendix 5-C of the HIGWMP revised April 2001.
 - 4) The horizontal hydraulic conductivity value provided in Table 5-2 for P-3A (0.3 ft/day) appears to be inconsistent with the slug in (1.16 ft/day) and slug out (0.16 ft/day) tests reported for P-3A in Appendix 5-C of the HIGWMP revised April 2001.

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 (RAI #1)

- f. Please submit revisions to the eighth and ninth paragraphs of Section 5.2.2 of the HIGWMP to also describe the range of hydraulic gradient values for the surficial aquifer observed for the contour maps prepared for the sampling events conducted at the facility between July 2003 and April 2005. Please submit revisions to the ground water velocity calculations provided in this section for the surficial aquifer to include this range of hydraulic conductivity values.
- g. Please submit revisions to Section 5.2.3 of the HIGWMP to evaluate water levels measured during the sampling events conducted at the facility between July 2003 and April 2005 and provide an updated calculation of vertical ground water velocity across the confining unit.
- h. The data provided in Table 5-2 and cross-sections presented at Figures 5 through 7 of the HIGWMP appear to indicate that P-8 was the only piezometer completed in the limestone sediments of the Floridan aquifer. Please submit revisions to Section 5.2.4 of the HIGWMP to provide the results for additional slug tests to more fully characterize the horizontal hydraulic conductivity of the Floridan aquifer at the facility.
- i. Please submit revisions to Sections 5.2.4 and 5.3.1of the HIGWMP to also describe the direction of ground water flow for the Floridan aquifer observed for the contour maps prepared for the sampling events conducted at the facility between July 2003 and April 2005. Please submit additional revisions to this section to describe the apparent variability in the direction of ground water flow observed at the facility and indicate if there is a predominant direction of flow and also describe the rationale used for selecting a predominant direction of ground water flow.
- j. Please submit revisions to Section 5.2.4 of the HIGWMP to describe the range of hydraulic gradient values for the Floridan aquifer observed for the contour maps prepared for the sampling events conducted at the facility between July 2003 and April 2005.
- k. Please submit revisions to Section 5.2.4 of the HIGWMP to provide a calculation of the range of ground water velocity values for the Floridan aquifer at the facility using site-specific data for hydraulic conductivity and hydraulic gradient. Please also submit references that describe the range of effective porosity values that are representative of the lithology encountered in the Floridan aquifer at the facility.

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

7. **M.1.b.:** Please submit revisions to Sections 5.4.1 and 5.4.3 of the HIGWMP to delete references to Department-approved CompQAPs. Please submit revisions to these sections to assert that field activities associated with sample collection activities will be conducted in accordance with the Department's SOPs and that the analytical laboratory used for sample analyses will hold the appropriate certificates from the Florida Department of Health, Environmental Laboratory Certification Program.

8. **M.1.c.(1)**:

a. It is the Department's understanding that the monitoring plan proposed for the facility was based on the occurrence of the surficial aquifer along the eastern portion of the property (at an elevation below 130 ft NGVD as indicated in Section 5.3.1 of the HIGWMP). Accordingly, detection wells completed in the surficial aquifer were proposed at 500-foot intervals to meet the well spacing requirements of Rule 62-701.510(3)(d)3, F.A.C. As noted in the Department's review comments provided to permit modification No. 177982-006 to permit No. 177982-002-SO, the surficial aquifer appeared to be seasonally present or absent in the southeast portion of the property based on the water levels recorded at wells MW-8, MW-9 and MW-10, and the resulting permit modification included the revision of the monitoring plan to install Floridan aquifer monitor wells MW-8B, MW-9B and MW-10B. Please submit revisions to Section 5.3.1 of the HIGWMP to discuss the need to install Floridan aquifer monitor wells adjacent to proposed surficial aquifer monitor wells for future cells (Cell 3 – MW-11B, Cell 5 – MW-3B and/or MW-4B, Cell 8 – MW-14B).

- b. Based on a telephone conversation with Miguel Garcia (TTH) on September 1, 2005, it is the Department's understanding that existing well MW-1 is now proposed to be abandoned as part of the excavation of Cell 5. If this understanding is correct, please submit revisions to item Nos. 4 and 5 in the first paragraph of Section 5.3.1 of the HIGWMP to indicate that well MW-1A will be installed prior to filling in Cell 5 rather than prior to filling in Cell 8. If this understanding is correct, please also submit revisions to the second paragraph of Section 5.3.1 of the HIGWMP to indicate that well MW-1 will be abandoned prior to filling in Cell 5.
- 9. **M.1.c.**(6): In the event that the response to review comment No. 8.a., above, includes the proposed installation of additional Floridan aquifer monitor wells, please submit revisions to Section 5.3.2 of the HIGWMP and Figures 15A and 17, as appropriate.
- 10. **M.1.f.(3):** Please note that the appropriateness of the semi-annual ground water sampling frequency referenced in Section 5.4.5 of the HIGWMP will be evaluated up review of the response to review comment Nos. 6.f., and 6.k., above.
- 11. **M.1.g.:** Please submit revisions to Section 5.4.4 of the HIGWMP to replace the references to "assessment monitoring" with "evaluation monitoring" to be consistent with Rule 62-701.510(7), F.A.C. Please submit additional revisions to this section of the HIGWMP to indicate that confirmation sampling may be conducted by the permittee within 30 days of receipt of the laboratory results.
- 12. **M.1.h.(2):** Please submit the evaluation of the monitoring plan required by Rule 62-701.510(9)(b), F.A.C., along with the responses to RAI #1. Please note that this rule citation requires the monitoring plan evaluation to be updated at the time of permit renewal. Please also note that the submittal of the monitoring plan evaluation report in Specific Condition No. 38 (no later than April 1, 2006) was intended to be coordinated with the submittal of the permit renewal application in Specific Condition No. 4 (no later that 180 days before expiration of the permit). As the permit No 177982-002-SO expires on October 5, 2006, the renewal application and the monitoring plan evaluation were due to be submitted by April 2006, but since the renewal application was submitted early, an updated monitoring plan evaluation is also required early.

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

- 13. **P.2.b.(5):** Please submit revisions to Section 7.2 of the Reclamation and Closure Plan to address the following requirements of Rule 62-701.600(5)(f)4, F.A.C., for monitoring, maintenance, correction of deficiencies/problems and replacement of monitoring devices, including their frequency of implementation:
 - final cover condition (regrading areas that have settled);
 - vegetative cover condition (reseeding or sodding areas that have been regraded, and fertilization);
 - ground water monitoring system (monitor well and piezometer maintenance and repair/replacement);
 - landfill gas management system (gas vent maintenance and repair/replacement);
 - access control;
 - stormwater drainage features condition (retention pond maintenance); and,
 - contingency plan for emergencies (fires, severe weather events).

I can be contacted at (813)-744-6100, extension 336, to discuss the comments in this memorandum.

jrm

62-110.106 (6) Public Notice of Application and Proposed Agency Action Publication of a notice of application shall be required for those projects that, because of their size, potential effect on the environment or natural resources, controversial nature, or location, are reasonably expected by the Department to result in a heightened public concern or likelihood of request for administrative proceedings. If required, the notice shall be published by the applicant one time only within fourteen days after a complete application is filed and shall contain the name of the applicant, a brief description of the project and its location, the location of the application file, and the times when it is available for public inspection. The notice shall be prepared by the Department and shall comply with the following format:

State of Florida

Department of Environmental Protection

Notice of Application

The Department announces the receipt of an application for permit from Angelo's Aggregate materials, Ltd., Mr. Dominic Iafrate, President, for construction and operation of a Class III landfill, referred to as the Enterprise Class III Landfill, located at 41111 Enterprise Rd., Dade City, Pasco County, Florida.

This application is being processed and is available for public inspection during normal business hours, 8:00 a.m. to 5:00 p.m. Monday through Friday, except legal holidays, at the Department of Environmental Protection, Southwest District Office, 3804 Coconut Palm Drive, Tampa, Florida 33619-8318.

Enterprise Recycling and Disposal Facili Class III Landfill Permit Renewal Applicat

Pasco County, Florida

Prepared For

Angelo's Aggregate Material

August 2005

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Southwest District Permitting Application

New Site

Site Name:		_		
Site ID:				
County:				
Type/Subcode:				
Fee submitted:	() correct	() inc	correct	
Total Fee Required \$	Need \$	Refund \$		
2-permit Applica	Existing Site	ſ	_	
Site ID:	177982 00)1	000	
Project Name:	tamise CIII Op	Renewal 1	SC 73	Renewal
Type/Subcode:	50 73		SC 73	
Fee submitted:	177982 00 tapuse CIII Op 50 73	00 (*)	* 600c	
Total Fee Required \$	-			
·	Applicant Information	on		
Name:	Dominic Infant	l e		
Role:	Applicant			
Company:	ngelo's Aganeo	Ate Matura	els	
Address:				
City:	file	Zip Code:		
Phone:				
Fee verified by:	PELZ		· /	
Application Assigned To:	PELZ	Date:8/2	4/05	