

Morgan, Steve

From: Franklin Coggins [fcoggins@scgov.net]
Sent: Tuesday, April 24, 2007 11:11 AM
To: Pelz, Susan
Cc: Morris, John R.; Morgan, Steve; Gary Bennett; Paul Wingle
Subject: RE: Sarasota Central FLSC

Susan,

It is the desire of Sarasota County to withdraw the Application for a permit to construct flexible leachate storage containers at Central County Solid Waste Disposal Complex.

Thank You

Frank

Frank Coggins
Manager, Solid Waste Operations
941-650-4160
fcoggins@scgov.net

>>> "Pelz, Susan" <Susan.Pelz@dep.state.fl.us> 4/24/2007 11:06:53 AM >>>
Frank,

You can just send me an email indicating that you want to withdraw the application. The tanks can be added into the pending Phase II expansion applications.

thanks,

If you have any questions, please call or email (email is better).

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

13051 N. Telecom Parkway
Temple Terrace, FL 33637
813-632-7600 x 386
susan.pelz@dep.state.fl.us

From: Franklin Coggins [<mailto:fcoggins@scgov.net>]
Sent: Tuesday, April 24, 2007 11:05 AM
To: Pelz, Susan
Cc: Morris, John R.; Morgan, Steve
Subject: Re: Sarasota Central FLSC

Susan,

I talked to Paul and Gary this morning and we agree to suspend the process. We will be exploring installing tanks instead of the Flexible liner system. What do you require for us to withdraw the application?

Frank Coggins
Manager, Solid Waste Operations
941-650-4160
fcoggins@scgov.net

>>> "Pelz, Susan" <Susan.Pelz@dep.state.fl.us> 4/23/2007 4:26:11 PM >>>

5/2/2007

Frank,

As we discussed earlier today, it is the Department's understanding that the County is exploring other options for leachate storage at the Central County landfill complex. As such, we agreed that review of the information submitted 3/29/07 should be suspended until the county determines if it will continue that permitting process.

Please let us know how the County would like to proceed at your earliest convenience.

If you have any questions, please call or email (email is better).

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

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Temple Terrace, Fl. 33637
813-632-7600 x 386
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5/2/2007

Permitting Application - Events

Events Scheduled -41 of 50

Site # Site Name
 Permit # Type/Subtype / Received
 Project # Project Name

> Receive Request: Done

Event	Begin Date	Period	Due Date	Rmn	Status	End Date
Receive Request	11/13/2006	1	11/14/2006		Done	11/13/2006
Fee Verification	11/13/2006	2	11/15/2006		Sufficient Fee	11/15/2006
Completeness Review	11/13/2006	30	12/13/2006		Incomplete	12/13/2006
RESET CLOCK	12/13/2006	1	12/14/2006		Done	12/13/2006
Awaiting Additional Information	12/13/2006	45	01/27/2007		Withdrawn	04/24/2007
STOP CLOCK	04/24/2007	1	04/25/2007		Done	04/24/2007
WITHDRAWN APPLICATION	04/24/2007	1	04/25/2007		Withdrawn	04/24/2007
Publish Notice of Application	11/15/2006	14	11/29/2006		Done	03/20/2007
Return Proof of Publication of Notice of App	03/20/2007	21	04/10/2007		Received	03/29/2007

**RAI No. 1 Meeting Agenda
Flexible Leachate Storage Containers Construction
Central County Solid Waste Disposal Complex – Sarasota County
1:00 pm, Thursday, 22 February 2007**

The proposed list of items for discussion with respect to the first request for additional information (RAI No. 1) are listed below:

- Question 3.

Appendix B – Construction Drawings (p. 3, RAI No. 1)

- Several items in Appendix B – Construction Drawings as requested by the Department (see page 3 of RAI No. 1):

Some comments related to the drawings are difficult to explain, and should be discussed at the meeting requested at the end of this letter.

- Question 11.a. *control points*
- Question 12.a.1.
- Question 12.b1.
- Question 13.a.1.
- Question 13.b.1.
- Question 15.b.

Appendix D – Conveyance pipe Stability Calculation Package (p. 5, RAI No. 1)

- Question 22.

Appendix F – Perimeter Berm Stability Calculation Package, (p. 6, RAI No. 1)

- Question 25.
- Question 26.

Appendix G – Liner System Leakage and lateral Drainage Capacity Calculation Package, (p. 6, RAI No. 1)

- Question 28.

Appendix I – Construction Quality Assurance Plan (p. 8, RAI No. 1)

- Question 37.f., and Question 39.c.

Mr. Frank Coggins, Manager
Sarasota County Solid Waste Operations
4000 Knights Trail Road
Nokomis, Fl. 34275

December 13, 2006

**RE: Sarasota CCSWDC Flexible Leachate Storage Containers Construction
Pending Permit No.: 130542-005-SC/08, Sarasota County**

Dear Mr. Coggins:

This is to acknowledge receipt of your application dated November 9, 2006 (received November 13, 2006) prepared by GeoSyntec Consultants, to construct a flexible leachate storage container (FLSC) system at the solid waste management facility referred to as the Sarasota County Central Solid Waste Disposal Complex.

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 incomplete. This is the Department's first 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.

GENERAL:

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

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

1. **Rule 62-701.320(8), F.A.C.** Please publish the attached Notice of Application and provide proof of publication to the Department.
2. **Rule 62-701.730(4)(b), F.A.C.** Responses to each of the items in John Morris' December 11, 2006 memorandum (attached) are required. You may call Mr. Morris at (813) 632-7600, extension 336, to discuss the items in his memorandum.
3. **Rule 62-701.410(2)(e), F.A.C.** Please provide foundation bearing capacity and subgrade settlements analyses for the FLSC in accordance with Rule 62-701.410(2)(e), F.A.C.

ENGINEERING REPORT (RULE 62-701.320(7)(d), F.A.C.)

4. **§1.1:** Please provide a copy of the pending ERP permit for the storm water management system modification at the facility.
5. **§3.2:**
 - a. The reference to the FLSC facility being built-up relative to the existing ground as shown on Sheet 3 of the permit drawing appears to be a typographic error. Please revise to reference Sheet 5 of the drawings.
 - b. Please provide the supporting calculations for the stated 300,000 gallon storage capacity of each FLSC.
6. **§3.3:**
 - a. Neither the perimeter drainage channel nor weir details on the permit drawings or this section show or explain how the impacted stormwater is pumped from the drainage canal to the impacted stormwater pipeline. Please revise this section and the permit drawings to address this discrepancy.
 - b. Please revise this section to explain how stormwater that accumulates on the FLSC top liner will be removed without damaging the top liner and revise the appropriate construction drawings accordingly to depict the stormwater removal mechanism.
7. **§4.5:** Since a leak in the primary and secondary sump indicates a leak in the FLSC container may be occurring, please provide an explanation and justification for pumping the leaked leachate back into the FLSC.

APPENDIX A - FDEP FORM 62-701.900(6)

8. **Rule 62-701.320(7)(b), F.A.C.** Application Form #62-701.900(6): Please address the following comments regarding the permit application form and provide a revised application form with the following information, where applicable:
 - a. **§B.1.** This application is for construction of the FLSC only. Please revise the narrative description in this section accordingly.
 - b. **§D.1.** The FLSC is a solid waste management unit and therefore the siting prohibitions are applicable to the FLSC. Please revise this section accordingly and address and confirm that the siting prohibitions in Rule 62-701.300(2), F.A.C. will not be violated by the proposed construction or operation of the FLSC.

Appendix B - CONSTRUCTION DRAWINGS (RULE 62-701.730(9), F.A.C.)

Please provide the following additional information and revisions to the facility Construction Drawings. The drawings will be reviewed in their entirety after the responses to this request for information. Some comments related to the drawings are difficult to explain, and should be discussed at the meeting requested at the end of this letter.

9. Sheet 2 of 13 - Site Development Plan

- a. The reference to Detail 12 being located on Sheet 12 is incorrect. Please correct this detail reference. Detail 11 is not located on Sheet 12 and does not appear to be provided in the construction drawings. Please provide Detail 11.

10. Sheet 3 of 13 - Base Grading Plan

- a. Please provide a table of the elevations at the control points shown on this plan sheet.
- b. Please explain the design rationale for having the crest elevation of the division berm 1 foot below the perimeter and separator berm crest elevation.

11. Sheet 4 of 13 - Final Grading Plan

- a. Please provide section details of the liner system at the interface between the division berm and the perimeter and separator berm.

12. Sheet 6 of 13 - Liner System Details I

- a. Detail 1:
 - 1) Please provide section details of the liner system configuration at the elevation of the liner system/gas vent, both without and without a gas vent.
 - 2) The GCL appears to be located outside of the 2'x2' anchor trench. Please verify this and explain this configuration.
 - 3) It appears that the bottom FLSC liner will remain exposed between the top/bottom FLSC extrusion weld and the anchor trench. Please verify this and explain this configuration.
 - 4) Please explain the significance of the 3' area identified at the toe of slope of the FLSC.
- b. Details 2 & 3:
 - 1) It appears that the bottom FLSC geomembrane liner and the primary geomembrane liner will be installed directly on top of the sump gravel. Please verify this and explain how damage to the geomembrane will be prevented and/or revise applicable details accordingly.
 - 2) It appears that the geocomposite drainage layers are not attached or anchored at their end point. Please verify this and explain how the geocomposite drainage layers will remain in place.

13. Sheet 7 of 13 - Liner System Details II

a. Details 4 & 5:

Let's discuss [1) It appears that the perforated HDPE pipes are not wrapped within the gravel sump area. Please verify this and explain how clogging of the pipes by the gravel sump material will be prevented.

2) Please provide a detail of the perforated end caps.

b. Detail 7:

1) From Details 4 & 5, depending on where on the side slopes Section 7 is located, either perforated primary and secondary outflow and instrumentation pipes are installed on top of the geocomposite drainage layer or perforated outflow pipes and solid instrumentation pipes are installed directly on top of geomembrane. Please verify where on the side slope Section 7 is located and revise this figure accordingly.

14. Sheet 8 of 13 - FLSC Piping Layout

a. As depicted on this plan sheet, it does appear that impacted stormwater could be pumped into and out of the leachate FLSCs, as is indicated in Section 3.2 of the Engineering Report. Please explain.

b. Please revise this plan sheet to include the 4" level transducer pipe depicted on Sheet 10.

15. Sheet 10 of 13 - Leachate Management System Mechanical Flow Schematic

a. Please revise the technical specification to specify the 4" SDR 17 leachate transducer pipe depicted on this sheet.

b. The symbol, which appears to depict the submersible pump in the primary and secondary sumps, is inconsistent with the symbol for this pump on Sheet 9. Please revise to correct this discrepancy, as applicable.

16. Sheet 11 of 13 - Leachate Management System Process and Instrumentation Schematic

a. The "LAH", "MAH", and "FAL" identifications on this plan sheet are not included in the instrumentation identification table on Sheet 9. Please revise to correct this discrepancy, as applicable.

17. Sheet 13 of 13 - Miscellaneous Details

a. Please provide a detail showing how impacted leachate is transferred from the perimeter drainage channel to the impacted stormwater pipeline.

Appendix D - Conveyance Pipe Stability Calculation Package, Rules 62-701.320(7)(e) and 62-701.400(4)(a), F.A.C.

The calculations provided in Appendix D including several references to supporting documents that were the source of assumptions, referenced values, and equations utilized for the calculations. However copies of the relevant sections of many of those documents were not provided and therefore the Department was unable to verify the validity of the assumptions, values, and equations utilized in those calculations. Please provide copies of the relevant sections of all references utilized in each of the calculations. The calculations in Appendix D will be reviewed in their entirety upon receipt of the supporting references and the information requested below.

18. The pipe stability calculations do not appear to account for potential loss of strength due to pipe perforations, Please explain and provide revised calculations that account for pipe perforation, as applicable.

19. **Pipe Data:** Based on the inner diameter (5.349 in.) and wall thickness (0.602 in.) provided in Attachment 1 for a 6" SDR-11 pipe, the outer diameter reported in this and other sections of Appendix D (6.625 in.) appears to be in error. Please revise this section and the pipe stability calculations provided accordingly, where applicable.

20. **Wall Crushing:** Based on the compressive strength value (1600 psi) provided in Attachment 1 for HDPE pipe, the compressive strength value reported in this and other sections of Appendix D (1500 psi) appears to be in error. Please revise this section and the pipe stability calculations provided accordingly, where applicable.

21. **Wall Buckling:** The assumed values for Young's modulus and Poisson's ratio appear to be interpolated from the Selig reference provided in Attachment 2, assuming 90% standard Proctor compaction. However Specification 2200-3.07E. indicates that the general fill and subgrade will be compacted to 95% standard Proctor. Please explain this apparent discrepancy and revise this section and the pipe stability calculations provided accordingly, where applicable. Please explain the assumed "average value" for the "Empirical factor."

22. **Summary:** The construction drawings appear to indicate that the 4" SDR-11 HDPE pipes will be constructed adjacent to the 6" pipes within the FLSC. Therefore it does not appear that the 4" pipes "will be subjected to a substantially smaller loading stress...." Please provide pipe stability calculation for the 4" pipe.

Appendix E - Anchor Trench Design Calculation Package

23. **HDPE Geomembrane Material Properties:** The tensile strength utilized for the anchor trench calculations (90 lb/in) is inconsistent with that specified in Specification 2770-Table 2770-1 (72 lb/in). Please revise the anchor trench calculations or the referenced specification to address this discrepancy.

24. **Attachment 2 - Typical Interface Friction Values:** Please provide copies of the references sources for the assumed interface friction values provided in this Attachment.

We
will
re-check
at this

Appendix F - Perimeter Berm Stability Calculation Package, Rule 62-701.410, F.A.C.

25. **FLSC Configuration:** This section indicates that the FLSC perimeter berm has an 8-foot wide crest while the Representative Cross Section shown in Attachment 1 and the perimeter berm stability calculations in Appendix F assume a 7-foot wide crest. The construction drawings show 8-foot wide crest on the perimeter berm and division berm and a 12-foot wide crest on the separator berm. Please revise this section, the calculations in Appendix F, and/or the construction drawings, as applicable based on the perimeter crest widths proposed for the FLSC.

26. **Method of Analysis:** Please provide a copy of the "sliding block methodology" reference utilized for the sliding block analysis.

27. **Attachment 2 - Rotational Foundation Stability Analysis:**

a. The slide analysis information indicates that the unit weight for the berm material was assumed to be 115 lb/ft³, while the Representative Cross Section in Attachment 1 indicates that the unit weight of the berm material is 120 lb/ft³. Please explain this discrepancy and revise the rotational stability analysis and/or Attachment 1, as applicable.

b. Please explain the "Hu" value and the rationale for the value assumed.

c. The assumed water table elevation of 17.5 NGVD in the rotational stability analysis appears to be inconsistent with the 16.5 NGVD water table elevation reported throughout the remainder of this application. Please revise the rotational stability analysis accordingly.

Appendix G - Liner System Leakage and Lateral Drainage Capacity Calculation Package, Rule 62-701.400, F.A.C.

The calculations provided in Appendix G including several references to supporting documents that were the source of assumptions, referenced values, and equations utilized for the calculations. However copies of the relevant sections of many of those documents were not provided and therefore the Department was unable to verify the validity of the assumptions, values, and equations utilized in those calculations. Please provide copies of the relevant sections of all references utilized in each of the calculations. The calculations in Appendix G will be reviewed in their entirety upon receipt of the supporting references and the information requested below.

28. Sheet 7 of the construction drawings depicts the bottom FLSC liner installed directly on top of the primary leak detection outflow and instrumentation pipes on the FLSC side slopes. Please explain how this liner system configuration is considered in the liner leakage calculations.

29. Please provide leachate collection system filter fabric (geotextile) design calculations.

Appendix H - Technical Specifications, Rules 62-701.400(3), (7) and (8)

Please revise the Technical Specifications and/or other referenced application documents, as appropriate, to address the following comments and/or inconsistencies.

30. Please provide the Technical Specifications for "Concrete" referenced in Section 12 of the Construction Quality Assurance (CQA) Plan.

31. Section 02200 - Earthwork

- a. §1.04.A. The referenced Sections 2230 and 2240 in this section were not provided. Please revise this section or provide these specification sections, as applicable.
- b. §1.05.B. Please indicate who will provide equipment and labor to assist the CQA Consultant.
- c. §2.01.A. & 3.06.B. Please identify the borrow source for fill material for this project.
- d. §3.05. Please note that dewatering may require an Industrial Waste Permit from the Department. Please specify who will be responsible for obtaining any necessary dewatering permits from the Department.
- e. §3.07.A. Please specify that stones or ruts shall be no larger than 1", consistent with Section 7.4 of the CQA Plan.

32. Section 02240 - Geocomposite

- a. §1.04.A. The referenced Table 02740-1 is missing from this section. Please provide.
- b. §2.05. Please specify the storage limits for the geocomposite consistent with Section 9.2 of the CQA Manual.
- c. §3.02.B.1. The bottom layer overlap specified in this section is inconsistent with that specified in Section 9.5 of the CQA Plan.

33. Section 02270 - Geomembrane

- a. §3.03.C.5.e. Allowance for wrinkles of up to 4 inches of does not appear to provide for "intimate contact" as specified in this section. Please explain and revise this section accordingly.
- b. §3.03.C.5.e. Geomembrane installation shall not occur during non-daylight hours and shall not be approved by the Engineer. Please revise this section accordingly.
- c. §3.04.D.1. Please specify the geomembrane panel overlap consistent with Section 6.7.5 of the CQA Plan.
- d. §3.04.E.3. Please specify that seam will be aligned with no "fishmouths."
- e. §3.04.J.2. The sampling and testing methods specified in this section are inconsistent with those specified in Section 6.7.9.3 of the CQA Plan.
- f. Table 02770-1 Please specify the Oxidative Induction Time property for the geomembrane. The tensile strength (at break) property provided appears incorrect. Please verify and revise, as appropriate.
- g. Table 02770-2 Please specify seam shear strength properties that are at least 90% of the minimum yield strength for the geomembrane, in accordance with Rule 62-701.400(2)(d), F.A.C.

34. Section 16651 - Control Panel Fabrication

- a. §2.02. The reference to "two" FLSC in this section appears to be inconsistent with the four proposed in this application.

Appendix I - Construction Quality Assurance Plan, Rules 62-701.400(3), (7) and (8)

Please revise the CQA Plan and/or other referenced application documents, as appropriate, to address the following comments and/or inconsistencies.

35. Section 3 - Project Organization and Personnel

- a. §3.9. Please specify that the geosynthetics installer obtains samples as required by the CQA Plan, under the direction of CQA personnel.

36. Section 4 - Documentation

- a. §4.6. Please specify that copies of photographs referenced in Section 4.3 will be part of the Certification Report.

37. Section 6 - Geomembrane

- a. §6.7.2. No "alternate process" for seaming has been specified in the Technical Specifications. Please revise this section to eliminate this option or provide technical specifications for "alternate processes."
- b. §6.7.4. Please specify that seam will be aligned with no "fishmouths."
- c. §6.7.7. Geomembrane seaming shall not occur during non-daylight hours. Please revise this section accordingly.
- d. §6.7.8. Please provide technical specifications for spark testing.
- e. §6.7.9.5. Please specify that all five destructive test specimens shall pass laboratory CQA testing consistent with Section 02770-3.04.J.3. of the Technical Specifications.
- f. Table 6-1 Please revise this table to indicate that a minimum of one conformance test per 100,000 square feet of material shall be conducted for geomembrane/geocomposite interface shear strength.

38. Section 8 - Geotextiles

- a. §8.2. This section is inconsistent with Technical Specification 02720-2.05.C. that specifies that geotextile rolls shall not be stored for greater than 6 months.
- b. §8.3. This section is inconsistent with the Construction Drawings, which appears to indicate that geotextiles will not be anchored in the anchor trench.
- c. §8.6. Please revise Technical Specification 02720 to provide specifications for equipment ground pressure of geotextile overlying geomembrane as indicated in this section, as appropriate.
- d. Table 8-1 Please revise this table to correct the reference (5) typographic error.

39. **Section 9 - Geocomposites**

- a. §9.4. This section is inconsistent with the Construction Drawings, which appears to indicate that the geocomposite will not be anchored in the anchor trench.
- b. §9.5. This section is inconsistent with Technical Specification 02740-3.02.C., which specifies that adjacent geonet edges will overlap a minimum of 4 inches and Technical Specification 02740-3.02.B.2., which specifies that horizontal seams can be 1/3 up a greater than 10H:1V side slope.
- c. Table 9-1 Please revise this table to indicate that a minimum of one conformance test per 100,000 square feet of material shall be conducted for geomembrane/geocomposite interface shear strength.

40. **Section 10 - Pipes and Fitting**

- a. §10.1. Technical Specification 02715 does not appear to provide specification for FLSC gas system installation, as described in this section. Please explain and revise, as appropriate.

Please **respond within 45 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 45 days to develop, you should develop a specific timetable 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 4 copies of your response to this letter as one complete package with an original and two copies of all correspondence (with one copy sent to Ms. Susan Pelz). It is recommended that you may want to contact the Department to set up a meeting to discuss this letter and subsequent submittals. Please contact me at (813) 632-7600 ext. 385 to schedule the meeting.

Sincerely,

Steven G. Morgan
Solid Waste Section
Southwest District

SM/sgm

Attachments

cc: Ayushman Gupta, P.E., GeoSyntec Consultants, 14055 Riveredge Dr., Suite 300, Tampa, FL.
33637 w/attachments
Richard Tedder, FDEP Tallahassee, w/attachments
Fred Wick, FDEP, Tallahassee, w/attachments
John Morris, P.G., FDEP Tampa w/attachments
Susan Pelz, P.E., FDEP Tampa

2/22/07
JRM NOTES
B1/2

SANKOTA CENTRAL - LEACHATE STORAGE CONTAINERS - RFI #1

#3 FOUNDATION BEARING CAPACITY / SUBGRADE SETTLEMENT

- PERIMETER BEAM STABILITY CALCULATION PROVIDED ; FEELS THAT IT IS REDUNDANT TO PROVIDE A RESPONSE TO THIS COMMENT
- PERIMETER BEAM WILL HAVE GREATEST LOADING - OK
- WILL PROVIDE ADD'L LOADING CALCULATIONS

#110 - SHEET 4

- WILL BE PROVIDING ELEVATIONS OF ^{CONTROL} POINTS ON EMBANKMENT (SHEET 3) DRAWING TO MAKE IT EASIER TO INTERPRET DIVISION BEAM & SEPARATOR BEAM

(SHEET 6)

12a(i) - VENT

- SEM ASKED FOR DETAIL OF LINER w/ GAS VENT & w/o GAS VENT

"

- 12b(i) - GEOTEXTILE UNDER SUMP TO CUSHION SUMP EXHAUST ; TACK WOULD TO STAY IN PLACE DURING CONSTRUCTION ("BLANKET DRAIN OVER GRAVEL")

"

- 12b(2) - GEOCOMPOSITE DRAINAGE LAYER NOT ANCHORED WITH

- HYDROSTATIC FORCES OF FILLED LEACHATE CONTAINER WILL NOT CAUSE "DRAG"

(SHEET 7)

- 13a(i) - PERFORMANCE CALCULATION WILL BE PROVIDED TO SHOW HOLES WON'T BE CLOGGED

"

- 13b(i) - ORIENTATION OF X-SECTION ON PLAN VIEW DISCUSSED (ON SEPARATOR BEAM LOOKING DOWNSLOPE) - OK

(SHEET 10)

15b

- PUMPS NOT PLANNED TO BE IN 1" OR 2" LINDS SYSTEM ; PLAN SHEET SHOWS "STRAINER" WHERE PUMP WOULD BE INSTALLED IF ALARM INDICATES LATCHES NEED TO BE PUMPED OUT

#22 - CONVEYANCE PIPE STABILITY QUESTION

- PROVIDED LOADING ^{calculations} FOR 6-INCH PIPE ; CONSIDERED TO BE MORE CRITICAL THAN

4-INCH PIPE ; MAX. LOAD FOR 6-INCH PIPE INCLUDES TRAFFIC LOADING &

WEIGHT OF LOADING FROM FULL SHODDER. ^{WE} WILL LOOK AT EQUATIONS & SEE IF CAN CONCLUDE 4-INCH PIPE IS LESS CRITICAL

SARASOTA CENTRAL - FLEXIBLE LEAKAGE STORAGE

#25 PERIMETER BEAM STABILITY ANALYSIS

- WILL PROVIDE ANALYSIS FOR 8-FT WIDE BEAM
- 12-FT WIDE BEAM ANALYSIS NOT NEEDED, AS WILL GIVE SAME ANSWER; INTERNAL BEAMS NOT AS CRITICAL AS EXTERIOR BEAM

#26 SLIDING BLOCK METHODOLOGY REFERENCE COMMENT

- BASED ON STATICS (PHYSICS EVALUATION)
- WE WILL CHECK W/ IW SECTION FOR DAM DESIGN
- CAN REFORGE KOENIG ANALYSIS ALSO - O.K.

#28 LINER SYSTEM LEAKAGE CALC

- EVALUATED LEAKAGE OUT OF THE BOTTOM OF THE CONTAINER RATHER THAN ON SIDE BEAMS (OK)

COA PLAN

- ### #37F
- INTERFACE TESTING NOT NEEDED DUE TO HYDROSTATIC FORCES WHEN CONTAINER IS FULL
 - WHEN EMPTY, NO FORCES THAT WILL SLIDE MATERIALS DOWN SLOPE
 - WHAT INTERFACE FRICTION ANGLE WAS USED FOR ANCHOR TRENCH ANALYSIS (CONFORMANCE SAMPLE)
 - 1 TEST_A TO DEMONSTRATE THAT THE MATERIALS MEET THE DESIGN CRITERION

- RESPONSES W/IN 30 DAYS OF MEETING



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

Mr. Frank Coggins, Manager
Sarasota County Solid Waste Operations
4000 Knights Trail Road
Nokomis, FL 34275

December 13, 2006

RE: Sarasota CCSWDC Flexible Leachate Storage Containers Construction
Pending Permit No.: 130542-005-SC/08, Sarasota County

Dear Mr. Coggins:

This is to acknowledge receipt of your application dated November 9, 2006 (received November 13, 2006) prepared by GeoSyntec Consultants, to construct a flexible leachate storage container (FLSC) system at the solid waste management facility referred to as the Sarasota County Central Solid Waste Disposal Complex.

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

"More Protection, Less Process"

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

1. **Rule 62-701.320(8), F.A.C.** Please publish the attached Notice of Application and provide proof of publication to the Department.
2. **Rule 62-701.730(4)(b), F.A.C.** Responses to each of the items in John Morris' December 11, 2006 memorandum (attached) are required. You may call Mr. Morris at (813) 632-7600, extension 336, to discuss the items in his memorandum.
3. **Rule 62-701.410(2)(e), F.A.C.** Please provide foundation bearing capacity and subgrade settlements analyses for the FLSC in accordance with Rule 62-701.410(2)(e), F.A.C.

ENGINEERING REPORT (RULE 62-701.320(7)(d), F.A.C.)

4. **§1.1:** Please provide a copy of the pending ERP permit for the storm water management system modification at the facility.
5. **§3.2:**
 - a. The reference to the FLSC facility being built-up relative to the existing ground as shown on Sheet 3 of the permit drawing appears to be a typographic error. Please revise to reference Sheet 5 of the drawings.
 - b. Please provide the supporting calculations for the stated 300,000 gallon storage capacity of each FLSC.
6. **§3.3:**
 - a. Neither the perimeter drainage channel nor weir details on the permit drawings or this section show or explain how the impacted stormwater is pumped from the drainage canal to the impacted stormwater pipeline. Please revise this section and the permit drawings to address this discrepancy.
 - b. Please revise this section to explain how stormwater that accumulates on the FLSC top liner will be removed without damaging the top liner and revise the appropriate construction drawings accordingly to depict the stormwater removal mechanism.
7. **§4.5:** Since a leak in the primary and secondary sump indicates a leak in the FLSC container may be occurring, please provide an explanation and justification for pumping the leaked leachate back into the FLSC.

APPENDIX A - FDEP FORM 62-701.900(6)

8. **Rule 62-701.320(7)(b), F.A.C.** Application Form #62-701.900(6): Please address the following comments regarding the permit application form and provide a revised application form with the following information, where applicable:
 - a. **§B.1.** This application is for construction of the FLSC only. Please revise the narrative description in this section accordingly.
 - b. **§D.1.** The FLSC is a solid waste management unit and therefore the siting prohibitions are applicable to the FLSC. Please revise this section accordingly and address and confirm that the siting prohibitions in Rule 62-701.300(2), F.A.C. will not be violated by the proposed construction or operation of the FLSC.

Appendix B - CONSTRUCTION DRAWINGS (RULE 62-701.730(9), F.A.C.)

Please provide the following additional information and revisions to the facility Construction Drawings. The drawings will be reviewed in their entirety after the responses to this request for information. Some comments related to the drawings are difficult to explain, and should be discussed at the meeting requested at the end of this letter.

9. Sheet 2 of 13 - Site Development Plan

- a. The reference to Detail 12 being located on Sheet 12 is incorrect. Please correct this detail reference. Detail 11 is not located on Sheet 12 and does not appear to be provided in the construction drawings. Please provide Detail 11.

10. Sheet 3 of 13 - Base Grading Plan

- a. Please provide a table of the elevations at the control points shown on this plan sheet.
- b. Please explain the design rationale for having the crest elevation of the division berm 1 foot below the perimeter and separator berm crest elevation.

11. Sheet 4 of 13 - Final Grading Plan

- a. Please provide section details of the liner system at the interface between the division berm and the perimeter and separator berm.

12. Sheet 6 of 13 - Liner System Details I

- a. Detail 1:
 - 1) Please provide section details of the liner system configuration at the elevation of the liner system/gas vent, both without and without a gas vent.
 - 2) The GCL appears to be located outside of the 2'x2' anchor trench. Please verify this and explain this configuration.
 - 3) It appears that the bottom FLSC liner will remain exposed between the top/bottom FLSC extrusion weld and the anchor trench. Please verify this and explain this configuration.
 - 4) Please explain the significance of the 3' area identified at the toe of slope of the FLSC.
- b. Details 2 & 3:
 - 1) It appears that the bottom FLSC geomembrane liner and the primary geomembrane liner will be installed directly on top of the sump gravel. Please verify this and explain how damage to the geomembrane will be prevented and/or revise applicable details accordingly.
 - 2) It appears that the geocomposite drainage layers are not attached or anchored at their end point. Please verify this and explain how the geocomposite drainage layers will remain in place.

13. Sheet 7 of 13 - Liner System Details II

a. Details 4 & 5:

1) It appears that the perforated HDPE pipes are not wrapped within the gravel sump area. Please verify this and explain how clogging of the pipes by the gravel sump material will be prevented.

2) Please provide a detail of the perforated end caps.

b. Detail 7:

1) From Details 4 & 5, depending on where on the side slopes Section 7 is located, either perforated primary and secondary outflow and instrumentation pipes are installed on top of the geocomposite drainage layer or perforated outflow pipes and solid instrumentation pipes are installed directly on top of geomembrane. Please verify where on the side slope Section 7 is located and revise this figure accordingly.

14. Sheet 8 of 13 - FLSC Piping Layout

a. As depicted on this plan sheet, it does appear that impacted stormwater could be pumped into and out of the leachate FLSCs, as is indicated in Section 3.2 of the Engineering Report. Please explain.

b. Please revise this plan sheet to include the 4" level transducer pipe depicted on Sheet 10.

15. Sheet 10 of 13 - Leachate Management System Mechanical Flow Schematic

a. Please revise the technical specification to specify the 4" SDR 17 leachate transducer pipe depicted on this sheet.

b. The symbol, which appears to depict the submersible pump in the primary and secondary sumps, is inconsistent with the symbol for this pump on Sheet 9. Please revise to correct this discrepancy, as applicable.

16. Sheet 11 of 13 - Leachate Management System Process and Instrumentation Schematic

a. The "LAH", "MAH", and "FAL" identifications on this plan sheet are not included in the instrumentation identification table on Sheet 9. Please revise to correct this discrepancy, as applicable.

17. Sheet 13 of 13 - Miscellaneous Details

a. Please provide a detail showing how impacted leachate is transferred from the perimeter drainage channel to the impacted stormwater pipeline.

Appendix D - Conveyance Pipe Stability Calculation Package, Rules 62-701.320(7)(e) and 62-701.400(4)(a), F.A.C.

The calculations provided in Appendix D including several references to supporting documents that were the source of assumptions, referenced values, and equations utilized for the calculations. However copies of the relevant sections of many of those documents were not provided and therefore the Department was unable to verify the validity of the assumptions, values, and equations utilized in those calculations. Please provide copies of the relevant sections of all references utilized in each of the calculations. The calculations in Appendix D will be reviewed in their entirety upon receipt of the supporting references and the information requested below.

18. The pipe stability calculations do not appear to account for potential loss of strength due to pipe perforations, Please explain and provide revised calculations that account for pipe perforation, as applicable.

19. **Pipe Data:** Based on the inner diameter (5.349 in.) and wall thickness (0.602 in.) provided in Attachment 1 for a 6" SDR-11 pipe, the outer diameter reported in this and other sections of Appendix D (6.625 in.) appears to be in error. Please revise this section and the pipe stability calculations provided accordingly, where applicable.

20. **Wall Crushing:** Based on the compressive strength value (1600 psi) provided in Attachment 1 for HDPE pipe, the compressive strength value reported in this and other sections of Appendix D (1500 psi) appears to be in error. Please revise this section and the pipe stability calculations provided accordingly, where applicable.

21. **Wall Buckling:** The assumed values for Young's modulus and Poisson's ratio appear to be interpolated from the Selig reference provided in Attachment 2, assuming 90% standard Proctor compaction. However Specification 2200-3.07E. indicates that the general fill and subgrade will be compacted to 95% standard Proctor. Please explain this apparent discrepancy and revise this section and the pipe stability calculations provided accordingly, where applicable. Please explain the assumed "average value" for the "Empirical factor."

22. **Summary:** The construction drawings appear to indicate that the 4" SDR-11 HDPE pipes will be constructed adjacent to the 6" pipes within the FLSC. Therefore it does not appear that the 4" pipes "will be subjected to a substantially smaller loading stress..." Please provide pipe stability calculation for the 4" pipe.

Appendix E - Anchor Trench Design Calculation Package

23. **HDPE Geomembrane Material Properties:** The tensile strength utilized for the anchor trench calculations (90 lb/in) is inconsistent with that specified in Specification 2770-Table 2770-1 (72 lb/in). Please revise the anchor trench calculations or the referenced specification to address this discrepancy.

24. **Attachment 2 - Typical Interface Friction Values:** Please provide copies of the references sources for the assumed interface friction values provided in this Attachment.

Appendix F - Perimeter Berm Stability Calculation Package, Rule 62-701.410, F.A.C.

25. **FLSC Configuration:** This section indicates that the FLSC perimeter berm has an 8-foot wide crest while the Representative Cross Section shown in Attachment 1 and the perimeter berm stability calculations in Appendix F assume a 7-foot wide crest. The construction drawings show 8-foot wide crest on the perimeter berm and division berm and a 12-foot wide crest on the separator berm. Please revise this section, the calculations in Appendix F, and/or the construction drawings, as applicable based on the perimeter crest widths proposed for the FLSC.

26. **Method of Analysis:** Please provide a copy of the "sliding block methodology" reference utilized for the sliding block analysis.

27. Attachment 2 - Rotational Foundation Stability Analysis:

a. The slide analysis information indicates that the unit weight for the berm material was assumed to be 115 lb/ft³, while the Representative Cross Section in Attachment 1 indicates that the unit weight of the berm material is 120 lb/ft³. Please explain this discrepancy and revise the rotational stability analysis and/or Attachment 1, as applicable.

b. Please explain the "Hu" value and the rationale for the value assumed.

c. The assumed water table elevation of 17.5 NGVD in the rotational stability analysis appears to be inconsistent with the 16.5 NGVD water table elevation reported throughout the remainder of this application. Please revise the rotational stability analysis accordingly.

Appendix G - Liner System Leakage and Lateral Drainage Capacity Calculation Package, Rule 62-701.400, F.A.C.

The calculations provided in Appendix G including several references to supporting documents that were the source of assumptions, referenced values, and equations utilized for the calculations. However copies of the relevant sections of many of those documents were not provided and therefore the Department was unable to verify the validity of the assumptions, values, and equations utilized in those calculations. Please provide copies of the relevant sections of all references utilized in each of the calculations. The calculations in Appendix G will be reviewed in their entirety upon receipt of the supporting references and the information requested below.

28. Sheet 7 of the construction drawings depicts the bottom FLSC liner installed directly on top of the primary leak detection outflow and instrumentation pipes on the FLSC side slopes. Please explain how this liner system configuration is considered in the liner leakage calculations.

29. Please provide leachate collection system filter fabric (geotextile) design calculations.

Appendix H - Technical Specifications, Rules 62-701.400(3), (7) and (8)

Please revise the Technical Specifications and/or other referenced application documents, as appropriate, to address the following comments and/or inconsistencies.

30. Please provide the Technical Specifications for "Concrete" referenced in Section 12 of the Construction Quality Assurance (CQA) Plan.

31. **Section 02200 - Earthwork**

- a. §1.04.A. The referenced Sections 2230 and 2240 in this section were not provided. Please revise this section or provide these specification sections, as applicable.
- b. §1.05.B. Please indicate who will provide equipment and labor to assist the CQA Consultant.
- c. §2.01.A. & 3.06.B. Please identify the borrow source for fill material for this project.
- d. §3.05. Please note that dewatering may require an Industrial Waste Permit from the Department. Please specify who will be responsible for obtaining any necessary dewatering permits from the Department.
- e. §3.07.A. Please specify that stones or ruts shall be no larger than 1", consistent with Section 7.4 of the CQA Plan.

32. **Section 02240 - Geocomposite**

- a. §1.04.A. The referenced Table 02740-1 is missing from this section. Please provide.
- b. §2.05. Please specify the storage limits for the geocomposite consistent with Section 9.2 of the CQA Manual.
- c. §3.02.B.1. The bottom layer overlap specified in this section is inconsistent with that specified in Section 9.5 of the CQA Plan.

33. **Section 02270 - Geomembrane**

- a. §3.03.C.5.e. Allowance for wrinkles of up to 4 inches of does not appear to provide for "intimate contact" as specified in this section. Please explain and revise this section accordingly.
- b. §3.03.C.5.e. Geomembrane installation shall not occur during non-daylight hours and shall not be approved by the Engineer. Please revise this section accordingly.
- c. §3.04.D.1. Please specify the geomembrane panel overlap consistent with Section 6.7.5 of the CQA Plan.
- d. §3.04.E.3. Please specify that seam will be aligned with no "fishmouths."
- e. §3.04.J.2. The sampling and testing methods specified in this section are inconsistent with those specified in Section 6.7.9.3 of the CQA Plan.
- f. Table 02770-1 Please specify the Oxidative Induction Time property for the geomembrane. The tensile strength (at break) property provided appears incorrect. Please verify and revise, as appropriate.
- g. Table 02770-2 Please specify seam shear strength properties that are at least 90% of the minimum yield strength for the geomembrane, in accordance with Rule 62-701.400(2)(d), F.A.C.

34. Section 16651 - Control Panel Fabrication

- a. §2.02. The reference to "two" FLSC in this section appears to be inconsistent with the four proposed in this application.

Appendix I - Construction Quality Assurance Plan, Rules 62-701.400(3), (7) and (8)

Please revise the CQA Plan and/or other referenced application documents, as appropriate, to address the following comments and/or inconsistencies.

35. Section 3 - Project Organization and Personnel

- a. §3.9. Please specify that the geosynthetics installer obtains samples as required by the CQA Plan, under the direction of CQA personnel.

36. Section 4 - Documentation

- a. §4.6. Please specify that copies of photographs referenced in Section 4.3 will be part of the Certification Report.

37. Section 6 - Geomembrane

- a. §6.7.2. No "alternate process" for seaming has been specified in the Technical Specifications. Please revise this section to eliminate this option or provide technical specifications for "alternate processes."
- b. §6.7.4. Please specify that seam will be aligned with no "fishmouths."
- c. §6.7.7. Geomembrane seaming shall not occur during non-daylight hours. Please revise this section accordingly.
- d. §6.7.8. Please provide technical specifications for spark testing.
- e. §6.7.9.5. Please specify that all five destructive test specimens shall pass laboratory CQA testing consistent with Section 02770-3.04.J.3. of the Technical Specifications.
- f. Table 6-1 Please revise this table to indicate that a minimum of one conformance test per 100,000 square feet of material shall be conducted for geomembrane/geocomposite interface shear strength.

38. Section 8 - Geotextiles

- a. §8.2. This section is inconsistent with Technical Specification 02720-2.05.C. that specifies that geotextile rolls shall not be stored for greater than 6 months.
- b. §8.3. This section is inconsistent with the Construction Drawings, which appears to indicate that geotextiles will not be anchored in the anchor trench.
- c. §8.6. Please revise Technical Specification 02720 to provide specifications for equipment ground pressure of geotextile overlying geomembrane as indicated in this section, as appropriate.
- d. Table 8-1 Please revise this table to correct the reference (5) typographic error.

39. **Section 9 - Geocomposites**

- a. §9.4. This section is inconsistent with the Construction Drawings, which appears to indicate that the geocomposite will not be anchored in the anchor trench.
- b. §9.5. This section is inconsistent with Technical Specification 02740-3.02.C., which specifies that adjacent geonet edges will overlap a minimum of 4 inches and Technical Specification 02740-3.02.B.2., which specifies that horizontal seams can be 1/3 up a greater than 10H:1V side slope.
- c. Table 9-1 Please revise this table to indicate that a minimum of one conformance test per 100,000 square feet of material shall be conducted for geomembrane/geocomposite interface shear strength.

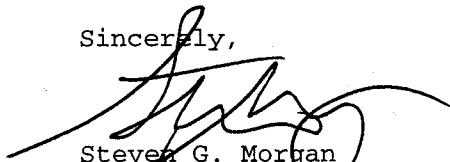
40. **Section 10 - Pipes and Fitting**

- a. §10.1. Technical Specification 02715 does not appear to provide specification for FLSC gas system installation, as described in this section. Please explain and revise, as appropriate.

Please **respond within 45 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 45 days to develop, you should develop a specific timetable 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 4 copies of your response to this letter as one complete package with an original and two copies of all correspondence (with one copy sent to Ms. Susan Pelz). It is recommended that you may want to contact the Department to set up a meeting to discuss this letter and subsequent submittals. Please contact me at (813) 632-7600 ext. 385 to schedule the meeting.

Sincerely,



Steven G. Morgan
Solid Waste Section
Southwest District

SM/sgm

Attachments

cc: Ayushman Gupta, P.E., GeoSyntec Consultants, 14055 Riveredge Dr., Suite 300, Tampa, Fl.
33637 w/attachments
Richard Tedder, FDEP Tallahassee, w/attachments
Fred Wick, FDEP, Tallahassee, w/attachments
John Morris, P.G., FDEP Tampa w/attachments
Susan Pelz, P.E., FDEP Tampa

Memorandum

Florida Department of Environmental Protection

TO: Steve Morgan
FROM: John R. Morris, P.G. JRM
DATE: December 11, 2006
SUBJECT: Sarasota Central Solid Waste Disposal Complex
Flexible Leachate Storage Containers, Pending Construction Permit #130542-005-SC
Environmental Monitoring Review Comments (RAI #1)
cc: Susan Pelz, P.E.

I have reviewed portions of the materials submitted to the Department in support of the referenced application for the construction permit associated with the proposed flexible leachate storage containers that were received on November 13, 2006. My review focused on the hydrogeologic and environmental monitoring aspects of the application. 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 information requests have been referenced to sections of the permit application 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 B – DISPOSAL FACILITY GENERAL INFORMATION**

1. **B.13.:** The "Yes" response on this item of the application form is inconsistent with the same item of the application form received September 20, 2002 that was associated with the renewal of the operations permit for the facility (permit #130542-002-SO). In the event that a Declaration to the Public has been filed with the Sarasota County Clerk's office that meets the requirements of Rule 62-701.610(5), F.A.C., please submit a certified copy of the declaration. In the event that a Declaration to the Public has not been filed for the facility, please submit a revised application form for this item that indicates a "No" response.
2. **B.17.:** Please provide the basis for the indication that the water table in the vicinity of the flexible leachate storage containers occurs at an elevation of 16 feet NGVD. In the event that this ground water elevation is based on the un-numbered figure included in Appendix C entitled "Monitoring Well Construction Details MW-13" (an approximate ground elevation of 20 feet and depth to water measurement at the time of well installation), please submit additional characterization of the occurrence of ground water at well MW-13 including but not limited to: surveyed top of casing elevation to the nearest 0.01 foot NGVD; surveyed ground surface elevation to the nearest 0.01 foot NGVD; depth to ground water surface below the top of casing measured to the nearest 0.01 foot; and, total well depth below the top of casing measured to the nearest 0.01 foot. Please also submit the details of the well development activities conducted at well MW-13 to demonstrate there is a good connection with the surficial aquifer and that the resultant ground water level measurements are representative of site conditions.

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

3. **M.1.a.:** Please note that sufficient hydrogeological information in the vicinity of the proposed leachate storage containers shall be required to support future modification of the existing monitoring plan for the facility to accommodate the operation of these leachate storage containers. As no routine ground water level measurements are conducted at the portion of the facility where these proposed leachate storage containers are located, the collection additional information is required to supplement available information. Please conduct ground water level measurements at all existing monitor wells, piezometers and staff gauges listed in permit #130542-002-SO and at new well MW-13 at least at a monthly frequency and prepare ground water surface contour maps for each set of water level data to demonstrate the direction of ground water flow. Please submit revisions to Section 3.4 of the "Engineering Report" to specify the direction of ground water flow at the proposed leachate containers determined from these supplemental water level measurements. Please also submit a revised application form for this item that refers to Section 3.4 of the "Engineering Report."

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4. **M.1.c.(6):**

- a. The indication in Section 3.4 of the "Engineering Report" that well MW-13 is 12 feet deep and is screened from 7 to 12 feet below grade appears to be inconsistent with the un-numbered figure included in Appendix C entitled "Monitoring Well Construction Details MW-13" which indicates well MW-13 is 10 feet deep and is screened from 5 to 10 feet below grade. Please review this apparent inconsistency and submit revisions, as appropriate. Please also submit a revised application form for this item that refers to Section 3.4 of the "Engineering Report."
- b. Please note that Rule 62-701.510(3)(d)4, F.A.C., requires the following: "Wells monitoring the unconfined water table shall be screened so that the water table can be sampled at all times. The applicant shall provide technical justification for the actual screen length chosen." The suitability of well MW-13 to meet the requirements of the cited rule will depend on the construction details (requested in comments #2 and #4.a.) and the results of supplemental water level measurements conducted at the facility (requested in comment #3). It is understood that changes to the monitoring plan are not part of this construction permit application but would be associated with a future application for minor modification of permit #130542-002-SO to authorize the operation of the proposed leachate containers. **This comment is presented for informational purposes and does not require a response.**

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

62-110.106(5). Notices: General Requirements.

Each person who files an application for a Department permit or other notice as may publish or be required to publish a notice of application or other notice as set forth below in this section. Except as specifically provided otherwise in this paragraph, each person publishing such a notice under this section shall do so at his own expense in the legal advertisements section a newspaper of general circulation (i.e., one that meets the requirements of sections 50.011 and 50.031 of the Florida Statutes) in the county or counties in which the activity will take place or the effects of the Department's proposed action will occur, and shall provide proof of the publication to the Department within seven days of the publication.

62-110.106(6). 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 receipt of an application for permit to construct a flexible leachate storage container (FLSC) system, subject to Department rules, at the solid waste management facility referred to as the Sarasota County Central Solid Waste Disposal Complex, located at 4000 Knights Trail Road, Nokomis, Sarasota 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, 13051 North Telecom Parkway, Temple Terrace, Florida 33637-0926.

Memorandum

Florida Department of Environmental Protection

TO: Steve Morgan
FROM: John R. Morris, P.G. *JRM*
DATE: December 11, 2006
SUBJECT: Sarasota Central Solid Waste Disposal Complex
Flexible Leachate Storage Containers, Pending Construction Permit #130542-005-SC
Environmental Monitoring Review Comments (RAI #1)
cc: Susan Pelz, P.E.

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

3. **M.1.a.:** Please note that sufficient hydrogeological information in the vicinity of the proposed leachate storage containers shall be required to support future modification of the existing monitoring plan for the facility to accommodate the operation of these leachate storage containers. As no routine ground water level measurements are conducted at the portion of the facility where these proposed leachate storage containers are located, the collection additional information is required to supplement available information. Please conduct ground water level measurements at all existing monitor wells, piezometers and staff gauges listed in permit #130542-002-SO and at new well MW-13 at least at a monthly frequency and prepare ground water surface contour maps for each set of water level data to demonstrate the direction of ground water flow. Please submit revisions to Section 3.4 of the "Engineering Report" to specify the direction of ground water flow at the proposed leachate containers determined from these supplemental water level measurements. Please also submit a revised application form for this item that refers to Section 3.4 of the "Engineering Report."

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4. **M.1.c.(6):**

- a. The indication in Section 3.4 of the "Engineering Report" that well MW-13 is 12 feet deep and is screened from 7 to 12 feet below grade appears to be inconsistent with the un-numbered figure included in Appendix C entitled "Monitoring Well Construction Details MW-13" which indicates well MW-13 is 10 feet deep and is screened from 5 to 10 feet below grade. Please review this apparent inconsistency and submit revisions, as appropriate. Please also submit a revised application form for this item that refers to Section 3.4 of the "Engineering Report."
- b. Please note that Rule 62-701.510(3)(d)4, F.A.C., requires the following: "Wells monitoring the unconfined water table shall be screened so that the water table can be sampled at all times. The applicant shall provide technical justification for the actual screen length chosen." The suitability of well MW-13 to meet the requirements of the cited rule will depend on the construction details (requested in comments #2 and #4.a.) and the results of supplemental water level measurements conducted at the facility (requested in comment #3). It is understood that changes to the monitoring plan are not part of this construction permit application but would be associated with a future application for minor modification of permit #130542-002-SO to authorize the operation of the proposed leachate containers. **This comment is presented for informational purposes and does not require a response.**

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

Florida Department of Environmental Protection - Enterprise Applications

Query Coll Rpts Rfnd Exit CRA Window

ORACLE

Cash Receiving Application - Collection Point Log Remittance

CL AREA **SWD** Logged Total **CRAF006A \$1,000.00**

Collection Point Log Remittance

Remittance ID **700739** Type **CP** Received Date **11/13/2006** Status **RECEIVED**

System Receipt **682620** PNR Check # **00900900** Amount **1,000.00**

SSN/FEID Name **SARASOTA COUNTY BOCC**

First Middle Title Suffix

Address1 **4000 KNIGHTS TRAIL ROAD**

Address2

City **NOKOMIS** ST **FL** Zip **34275**

Country Short Comments **SO 130542-005**

PAYMENT(S)

Payment ID	Distribution	Object	Code/Description	Payment Amount	Reference#	Appl	Fund*	Status
77447	SWD		002240 SOLID WASTE COM	1,000.00				

COMMIT FREQUENTLY **\$1,000.00** Payment Total

Press <TAB> to accept Collection Point or enter FRA

start In... 4 L... Do... Wi... 10:58 AM

Florida Department of Environmental Protection - Enterprise Applications

Permits Events Payment FIESTA PA Data Entry Site Facility ME Party Affiliation Lot Help Exit Wi

ORACLE

Permitting Application - Permit Detail and Log Permit

SITE Permit

Site Name **SARASOTA CO CENTRAL COUNTY COMPLEX CLASS I(LF1)** Site # **0139542**

County **SARASOTA** Comments **IN** RPAs **IN** # Cases **0**

Project

Permit # Project # **005** Received **11/13/2006** CRA # **269630**

Permit Office **SWD (DISTRICT)** Agency Action **Pending**

Project Name **LEACHATE STORAGE FACILITY** Desc

Type/Sub/Des **SC** **08** **OTHER** COE #

Logged **11/14/2006** Issued Expires OGC

Fee **1000.00** Fee Recd **1000.00** Dele Override **NONE**

Related Party

Role **APPLICANT** Begin **11/14/2006** End

Name **COGGINS, FRANK** Company **SARASOTA COUNTY**

Address **4000 KNIGHTS TRAIL ROAD**

City **NOKOMIS** State **FL** Zip **34275** Country **U.S.A.**

Phone **941-861-1570** Fax Email

Processors

Processor **MORGAN_S** Active **11/14/2006** Inactive Events

start In... 4 L... Do... Wi... 10:58 AM

**Southwest District
Permitting Application**

Susan

New Site

Site Name:		
Site ID:		
County:		
Type/Subcode:		
Fee submitted:	() correct	() incorrect
Total Fee Required \$ _____ Need \$ _____ Refund \$ _____		

Existing Site

Site ID: <i>130542-005</i>		
Project Name: <i>leachate storage facility</i>		
Type/Subcode: <i>SC 08</i>		
Fee submitted:	<i>\$1000</i> <input checked="" type="checkbox"/> correct	() incorrect
Total Fee Required \$ _____ Need \$ _____ Refund \$ _____		

Applicant Information

Name: <i>Frank Ceggs</i>	
Role: <i>Applicant</i>	
Company: <i>Saints & Co</i>	
Address: <i>ON file</i>	
City: <i>ON file</i>	Zip Code:
Phone:	

Fee verified by: *PELZ*

Application Assigned To: *Morgan* Date: *11/14/06*

9 November 2006

Ms. Susan Pelz, P.E.
Florida Department of Environmental Protection
Solid Waste – Southwest District
13051 North Telecom Parkway
Temple Terrace, Florida 33637

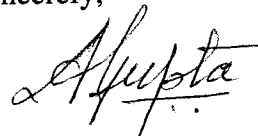
Subject: Permit Application for a Flexible Leachate Storage Container Facility
Central County Solid Waste Disposal Complex
Sarasota County Solid Waste Operations
Sarasota County, Florida

Dear Ms. Pelz:

Transmitted herewith are four copies of the subject permit application package, which was prepared by GeoSyntec Consultants on behalf of Sarasota County Solid Waste Operations (Sarasota County, Florida). This permit application package includes a Solid Waste Permit Application and Permit Drawings that support the permit application. Two full size and two half size sets of the Permit Drawings are included.

A check in the amount of \$1,000 is also enclosed with the Permit Application. An application for the Environmental Resources Permit is being prepared and will be submitted to FDEP separately. If you, or your staff, have any questions or need additional information, please feel free to contact the undersigned.

Sincerely,



Ayushman Gupta, P.E.
Senior Engineer

Enclosures

copy: Frank Coggins, Sarasota County

**Dept. of Environmental
Protection**

NOV 13 2006

Southwest District

